A
System Analysis
& Design
Reader

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Table of Contents

Dedication

First and foremost of all, I want to dedicate this book to God, who has helped me throughout the times I am making all of this. I also want to dedicate this book to my family, to my mother who has always been there to cook food for me while I'm very busy doing all these paper works, to my brother and father who has always been there to give a helping hand when I don't understand some things. Lastly, I dedicate this book to the special person in my heart, Aldrich, who has been always there to support me and give me strength with everything I do.

Preface

I am an IS student, and I didn't expect that I will go through many challenges as I go through this course. I learned how to do Use Cases and Use case narratives. I read a whole book for the whole term. I made book reviews, and we created our SAD paper. I went through a lot, meeting the deadlines and submission of papers, and at the end of this term, I didn't realized that I already created a book, out of my hardwork. Hope you learn something from this book and hope you enjoy it!

Chapter 1: The Systems Development Environment

This book focuses on modern day approach on Systems Development and Design. It mainly emphasizes the nature of Systems development, the people responsible for creating and maintaining the systems and how it works.

Information systems analysis and design is an organizational process whose goal is to create, develop and maintain computer-based information systems. Before, the main focus of systems development is on the process of systems, but the modern day approach applied today focuses on data and information. This book also provides a real life situation as an example that will serve as a guide for students on how the system flows. Diagrams and drawings are also shown, so that it can easily be understood by students. Charts are also provided so that some definitions are easily understood. In this chapter the roles of people in systems development are discussed. It is also discussed here, how systems analysts works and what are the skills that a systems analyst need to develop. The end users of the systems are also explained. Modern day approaches are explained in this book. At the end of the chapter Key terms are provided so that terms will be easily understood by students. Review questions and Exercises are also provided to test the understanding of the students.

This book provides information that the students need regarding Systems analysis Design. This book also contains modern day approaches on systems development and design. It is a good reference book for students because it provides detailed information on systems analysis and design.

Chapter 2: Succeeding as a Systems Analyst

In this chapter, it focuses on how to become a successful systems analyst. What are the skills needed to become an effective systems analyst and a brief summary of System and its parts.

Skills needed to for a Systems analyst

- Analytical skills
  -it is the most important skill for a systems analyst. It is the ability to see the problem and find solutions to solve that problem.

- Technical Skills
  -It is the ability to know and understand and know how the computer, databases, operating systems, technologies and information systems work.

  -A systems analyst must be technical because they need that skill to create and design systems for companies.

- Management Skills
  - It is the ability to lead and organize a team. Most of the systems analyst work as a team and one is assigned as a project managers, so you need to have the skills to manage people to create good results.

- Interpersonal Skills
  - This is one of the most important skill that a system analyst need to have. It is the ability to talk to people in a clear and effective way. They serve as a link for those who need computers and those who understand computers, so they need to have good communication skills.

System and it's parts
"A system is an interrelated set of components with an identifiable boundary, working together for some purpose."

Parts of a System
- Components
  - it is a part that is incapable of being smaller or it is the simplest part.
- Interrelated Components
  - it is a component, wherein each and every part is important, if one is removed, then it will not work.
- Boundary
  - it is that line which sets it apart from the environment.
- Purpose
  - it is the goal of the system.
- Environment
  - It is the outside part of the system.

- Interfaces
  - it is the point of contact where the system gets connected.
- Input
  - it is something that is put in to the system
- Output
  - it is the result shown in the system.
- Constraints
  - these are the limitations or capabilities that a system can perform.

Chapter 3: Managing the Information Systems Project

In this chapter, it focuses on how to manage the Information Systems Project. This chapter also focuses on Project management process, the stages it undergoes from the creation of program until to the stage of maintaining it.

Project Manager

- is a system analyst who has the skills in management, leadership, technical and customer relationship. He is the one manages on all the aspects of a systems development project. A continual environment change and problem solving is always experienced by the project manager.

Functional Areas in a Company

- ❖ Manufacturing
- ❖ Sales
- ❖ Orders
- ❖ Accounting
- ❖ Purchasing

Project Management Process:

- ➤ Initiating the Project
  - in this stage, the project manager creates the initial plan and establish management procedures for the project. He also creates a team for the project. He will see how complex the project is, how large, the scope of it and he will establish procedures to support the activities that he has to do. In this stage, the project managers started coordinating with the customers.

- ➤ Planning the Project
  - In this stage, this is where the real planning of the whole project will start. In this stage, the project manager will describe the scopes, alternatives and feasibility of the project. The division of the task of the other managers, will fall in this stage. Estimation of the resources that will be used for the project is also in this stage. In this stage assessing the risks are also made. Lastly, in this stage, baseline of the Project Plan is set here.

- ➤ Execution of the Project
  - In this stage, the Baseline of the Project Plan is executed and will start to creating. In this stage, the project manager, monitors the Project progress. He will also manage any changes in the Baseline project plan. The execution of the plan, goes in this stage. The status of the project will be monitored by the project manager, and will provide solution in any problems.

- ➢ Closing down the Project
  - • This is the last stage of the process, wherein the project is already finish and will come to an end. In this stage what were usually done, were reviews and monitoring, if the project is ready and is successful. Customer contract is also discussed. The proof that the project is successful, is the customer contract, you must be able to close a contract with a customer and have an understanding both parties will really prove the success of the process.

Chapter 4: Automated Tools for Systems Development

The focus of this chapter is the evolution and the usage of automated tools to support the information systems development process.

CASE (Computer-aided software engineering)
- these are automated software tools that systems analysts use to develop information systems.

Objectives of CASE
- Improve the quality of the systems developed.
- Increase the speed with which systems are designed and developed.
- Ease and improve the testing process through the use of automated checking.
- Improve the integration of development activities via common methodologies.
- Improve the quality and completeness of documentation.
- Help standardize the development process.
- Improve the management of the project.
- Simplify program maintenance.
- Promote reusability of modules and documentation.
- Improve software portability across environments.

Components of CASE
- **Upper CASE**
- **Lower CASE**
- **Cross Life-cycle CASE**

Upper CASE
– these are the case that supports the information planning, project identification and selection, initialization of the project, planning, analysis and design phases of the SDLC. These mainly supports the initialization of the project

Lower CASE
- They are created to support the implementation and maintenance of a project.

Cross life-cycle CASE
- it is a CASE that supports activities that occurs across multiple phases of the SDLC.

General types of CASE Tools:
- Diagramming tools
- Computer display and report generators
- Analysis tools
- Central repository
- Documentation Generators
- Code Generators

Chapter 5: Identifying and Selecting Systems Development Projects

This chapter focuses on ways to identify and selecting projects. It also focuses on planning the project and planning in information systems.

Identifying and Selecting Systems Development Projects
- It is the first phase of SDLC project, wherein the senior manager, a business group, IS manager, or a steering committee can handle the project.

- The project must result to benefits for the organization.

The Process of Identifying and Selecting IS Development Projects

1. Identifying potential development projects
2. Classifying and ranking projects
3. Selecting projects for development

- *Identifying Potential Development Projects*
  This is the initial stage, wherein the top managers or CEO identify the strengths and weaknesses of a certain project. The project will also be identified by individual departments of business units.

- *Classifying and Ranking IS Development Projects*
  In this second activity, it focuses on classifying the relative merit of the potential project, if it can bring any benefits for the organization. It is usually done by top managers, steering committee, business Units and IS development group.

- *Selecting IS Development Projects*
  This is the final phase, where in project is already selected. In this phase, the potential project will be developed. It is a very important and ongoing activity.

Characteristics of Alternative Methods for Making Information Systems Identification and Selection Decisions

- **Top Management**
  - It has a greater strategic focus, largest size in project and the longest duration in project implementation.

- **Steering Committee**
  - It has a cross-functional focus, and they also has greater organizational change and they made larger and riskier projects.

➢ **User Department**
  - It has narrow nonstrategic focus and they have faster development.

➢ **Development Group**
  - It has focus on existing system focus and they have fewer development delays.

Chapter 6: Initializing and Planning Systems Development Projects

This chapter focuses on Planning and making the first move in systems development life cycle.

Process of Initiating and Planning IS Development Projects
The process of SDLC is the same, but there is planning and initiation is added, for they are the pre-project step in the life cycle.

- ➢ Project Identification and Selection
- ➢ Project Initiation and Planning
- ➢ Analysis
- ➢ Design
- ➢ Implementation
- ➢ Maintenance

- o Project initiation- it focuses on activities that can support the organization of conducting the planning.

- o Project planning- it focuses on assessing the information systems. It clearly defines what you are going to do in the whole processes of the project.

Elements of Project Initiation
- Establishing the project inititation team
- Establishing a relationship with the customer
- Establishing the project initiation plan
- Establishing management procedures
- Establishing the project management environment and project workbook.

Elements of Project Planning
- Describing the Project Scope, Alternatives, and Feasibility
- Dividing the Project into manageable Tasks
- Estimating Resources and Creating a Resource Plan
- Developing a Preliminary Schedule
- Developing a communication plan
- Determining Project Standards and Procedures
- Identifying and Assessing Risk
- Creating a Preliminary Budget
- Developing a statement of work
- Setting a baseline project plan

Statement of Work
- is a document prepared for the customer, how will the project will go and the work required to complete the project.

Chapter 7: Determining System Requirements

This chapter focuses on determining what are the needs of the system and techniques used in requirement determination.

Characteristics in Determining Requirements:

➢ Impertinence
➢ Impartiality
➢ Relax Constraints
➢ Attention Details
➢ Reframing

▪ Impertinence
- it is where you question everything including the processes of the transactions.

▪ Impartiality
- It is where you find the best solution to solve the problem.

▪ Relax Constraints
- Eliminate those that are infeasible and assume that anything is possible.

▪ Attention to Details
- A fact must fit every fact, and a there will come a time that an ultimate system can fail.

▪ Reframing
- It is about innovation and looking at the organization in new ways.

Deliverables for Requirement Determination

➢ Information Collected from conversations or observations from users
➢ Existing Written Information
➢ Compute- based Information

➢ **Information Collected from conversations or observations from users**

  - interview transcripts, questionnaire responses, notes from observation, meeting minutes.

➢ **Existing Written Information**

  - business mission and strategy statements, sample business forms and reports and computer displays, procedure manuals, job descriptions, training manuals, flowcharts and documentation of existing systems, consultant reports.

➢ **Compute- based Information**

  - results from Joint Application Design sessions, transcriptions or files from group support system sessions, CASE repository contents and reports existing systems and displays and reports from system prototypes.

Chapter 8: Structuring System Requirements: Process Modeling

This chapter focuses on one tool that can be used to represent gathered information. This chapter also focuses on data flow diagrams.

Data flow diagram – it is a processing model, wherein it is a picture of the flow of data between external entities and processes and data storage within a system.

Data Flow – it is the movement of data, from one system to another system.

Data Store – it is a data at rest may take physical representations as their form.

Process – actions performed on the data which can either be transformed, stored or distributed.

Source/sink – It is the place where the data originated and/or its destination. It can also be called as external entities.

Context Diagram – it is an overview of an organizational system that shows system boundaries, external entities that interacts with the system and the major information flows that undertakes within a system and the entities.

Four Types of Data Flow Diagrams

➢ Current physical

➢ Current logical

➢ New logical

➢ New physical

Characteristics of Data Flow Diagrams

➢ **Consistency** – it is the extent wherein the information contained on one level of a set of nested data flow diagrams can also be seen on the other levels.

➢ **Timing**

➢ **Iterative Development**

➢ **Primitive DFD-** it is stopping decomposing processes.

Data Flow Diagramming Rules
➢ The inputs to a process are different from the outputs of that process.
➢ Objects on a Data Flow Diagram have unique names.

Chapter 9: Structuring System Requirements: Logic Modeling

This chapter focuses on techniques for modeling process decision logic. The first part is about Structured English. Second is about Decision Tables. Third, is how to model logic using decision trees. Lastly, is for you to decide when to use structured English, Decision tables and decision trees.

Logic Modeling
- ➢ It involves representing the data shown in data flow diagrams.
- ➢ It represents the internal structure and functionality of processes shown at data flow diagrams.

Deliverables for Logic Modeling
- ❖ Structured English representation of process logic.
- ❖ Decision table representation
- ❖ Decision tree representation
- ❖ State-transition or table
- ❖ Sequence diagram
- ❖ Activity diagram

Modeling Logic with Structured English
It is a modified form of English that is used to specify the contents of DND. It relies on action verbs and noun phrases and it doesn't contain adjectives or adverbs. It can be compared to pseudo code, but their difference is that it is more of a spoken language, wherein pseudo code is more of a programming language. It is simple enough for a user to use this technique, especially if they don't have knowledge in computer programming. As long as they know the processes, and the steps it undergoes, they can do it.

Ex.

```
BEGIN IF
        IF Quantity-in-stock is less than Minimum-order-quantity
        THEN GENERATE new order
        ELSE DO nothing
END IF
```

Modeling Logic with Decision Tables
It specifies the possible conditions for the decision and the resulting actions through a matrix representation of the logic of a decision.

3 Parts of Decision Tables

- ❖ **Condition stubs:** It is part of the decision table that lists the condition relevant to the decision.

❖ **Action stubs:** It is part of a decision table that lists the actions that result for a given set of conditions.

❖ **Rules:** It is part of a decision table that specifies which actions are to be followed for a given set of conditions.

Modeling with Decision Trees

It is a graphical representation of a decision situation in which decision situation nodes are connected together by arcs and terminate in ovals. Wherein arcs are used for each one alternative on a decision and ovals are used for the action that is the result of all of the decisions made on the path leading to that oval.

Chapter 10: Structuring System Requirements: Conceptual Data Modeling

This chapter is all about conceptual data modeling and entity relationship diagrams.

Data modeling – it develops the definition structure and relationships within the data of an information system.

Conceptual data Model – it is a representation of organizational data whose purpose is to show as many rules about the meaning and interrelationships among data as possible.

Entity-Relationship data model – is a detailed logical representation of the data for a business area or organization.

Entity-Relationship diagram – E-R model is normally expressed through entity-relationship diagram.

Entities – it is a person, place, object, event or concept in wherein the organization wishes to maintain in the user environment.

Examples of entity:

- Person: Employee, Student, Patient
- Place: Store, Warehouse, State
- Object: Machine, Building, Automobile
- Event: Sale, Registration, Renewal
- Concept: Account, Course, Work Center

Attributes – it is a property or a characteristic of an entity. What it does is that it describes the entity that is of interest the organization.

Examples of attributes:

- Student: student_ ID, Student_Name, Home_address
- Automobile: color, weight, horsepower

Candidate Keys and Identifiers

Candidate Key – it is an attribute that uniquely identifies each instance of and entity type.

Identifier - it is a candidate key that has been selected as the unique, identifying characteristic for an entity type.

Chapter 11: Selecting the Best Alternative Design Strategy

This chapter focuses Design Strategy, which is the process after the analysis of a system. In this process, you will turn all the information you gathered into an idea and the idea into a design.

Design Strategy – it is a way in developing the system. It includes the functionality of the system, platform of the hardware and software, and method of acquisition.

The Process of Selecting the Best Alternative Design Strategy

- Divide requirements into different set of categories
- Enumerate different potential implementation environments
- Propose different ways to source the sets of capabilities for the different implementation environments.

Desired Features – these are equivalent to essential features that users can't live without but can be used to select between design strategies.

Features might include:

- Data Kept in system files
- System Outputs
- Analysis to genereate information in system outputs
- Expectations on accessibility, response time or turnaround time.

Factors of Constraints

- A date when replacement of system is needed
- Availability of financial and human resources
- Elements of current system that cannot change
- Legal and contractual restrictions

Outsourcing- it is a process wherein an organization runs a computer organization for another organization.

Criteria for Choosing off- the- shelf software
- Cost
- Functionality
- Vendor of Support
- Viability of Vendor
- Flexibility
- Documentation
- Response time
- Ease of installation

Chapter 12: Designing Database
This chapter focuses on Database, what is database, purposes of database, and the design of database.

Database – it is a shared collection of related data designed to meet information needs of organizations.

Five   Purposes   of   Database

- ❖ Structures the data in stable structures that limits redundancy.
- ❖ Develops a logical database design that reflects the actual data requirements that exists in forms.
- ❖ Develops a logical database design from which we can do physical database design.
- ❖ Translate a relational database model into a technical file and database design that balances several performance factors.
- ❖ Choose data storage technology

Two Steps in File and Database Design
- ❖ Develop a logical database model
- ❖ Prescribe the technical specifications for computer files and databases.

Four Key Steps in logical Database Modeling and Design:
- ❖ Develop a logical data model for each known user interface using normalization principles for the application.
- ❖ View integration, which is combining normalized data requirements from all user interfaces into one consolidated logical database model.
- ❖ Translate the conceptual E-R data model for the application.
- ❖ Compare the consolidated logical database design with the translated E-R model and produce one final logical database model for the application.

Inputs that Make Key Physical Database Design Decisions
- ❖ Choose the storage format for each attribute from the logical database model.
- ❖ Select stored record by grouping attributes from the logical database model into physical records.
- ❖ Arranging related records in secondary memory
- ❖ Selecting media and structures for storing data to make access more efficient.

Relational Database Model – it is representing data through the use of sets of related tables or relations.

Relation – it is a named, two-dimensional table of data.

Properties of Relation
- ❖ Entries in cell are simple
- ❖ Entries in a given column are from the same set of values
- ❖ Each row is unique

Chapter 13: Designing Forms and Reports

This chapter focuses on designing forms that is functional and is easy to use. Form and report design is the key for successful systems.

Form - it is a business document, containing some predefined data and often includes some areas where additional data are to be filled.

Report – it is a business document containing only predefined data.

Three sections of design specification
❖ Narrative Overview
❖ Sample Design
❖ Testing and usability assessment

General Guidelines for the Design of Forms and Reports

❖ Meaningful Titles – there should be clear and specific titles describing the content and use of form or report.

❖ Meaningful Information – information should be provided in a manner that is usable without modification.

❖ Balance the Layout – information should be balanced on the screen or page

❖ Design an easy navigation – clear movement that is forward and backward should be shown.

General Design Guidelines for Usability of Forms and Reports

❖ Consistency – there should be a consistency when it comes to the use of terminology, abbreviations, formatting, titles and navigation within and across outputs.

❖ Efficiency – text and data should be aligned and sorted for efficient navigation and entry.

❖ Ease – outputs should be self-explanatory and not require users to remember information from prior outputs to complete the task.

❖ Format – there should be a consistency with the information between input and output.

❖ Flexibility – information should be viewed and retrieved in a manner most convenient to the user.

Measures of Usability

- ❖ Time to learn
- ❖ Speed of performance
- ❖ Rate of Errors
- ❖ Retention over time
- ❖ Subjective satisfaction

Paypal

Paypal, Co-founder, Max Levchin's main goal is to provide security for handheld gadgets, and it ended up as a money transaction service on the web.

The company Paypal, went through a lot of things before it become one of the most popular company in money transaction on web. From the article I read, I learned many things, especially the work of a programmer. I learned that those startup projects will not be achieved if you are not a perseverant person, because programming those codes and checking bugs and errors for the system really takes a lot of effort and time to create. Max Levchin stay up for 5 days without sleep to finish the program he made for a company whose worth is 4.5 million dollars. Another lesson that I learned from Max Levchin is that you have to be prepared for the possible problems and face the problems that can occur. During their problems with frauds, he, did his best to solve this problem, and it serves as a challenge to him. Instead of giving up on this problem, he find ways, to solve the problem, together with 20 investigators, they tried to solve the problem, and they did it successfully. Lastly, the lesson I learned from him is that, as a system analyst, he has the courage to take risk and to make things happen. From what they thought as an impossible thing to happen, they make things possible. He made a trial and error on the things on what people want and what people need. His main goal is to create a security for handheld devices, but then, they started to create a demo for money transaction on web, and people start liking it. So, they killed the security for handheld devices, and developed the money transaction on web. He was courageous enough to launch it to public, even though it is the first time that people are going to use it. He also took the risk to investigate the fraud and he become successful.

Through Max Levchin's hardwork and dedication in his work, they made Paypal one of the most popular money transaction service on the web, and without each and everyone's help on the company, they wouldn't make it possible

30

Hotmail

Hotmail started off as a solution to the problem of sending e-mails. It's founders namely Sabeer Bhatia and Jack Smith couldn't access their e-mail accounts because it is firewall and they found this solution, which become phenomenal to the world.

The initial plan of Sabeer Bhatia is to create a program they called the Javasoft. But out of a simple problem, they found out a new and interesting project, which is sending e-mails via web, which is the Hotmail. I learned from him that you should take risks to make a project successful. Jack Smith and Sabeer Bhatia are both working at Apple during those times and one has to quit the job, which Jack Smith did so that they can focus more on Hotmail. It is also a risk for them during those times, because they lack funds and no one wants to fund them, because of many reasons of investors such as, "they are still too young" and "will the project work?". I also learned from them not to give up once you foresee something really great will happen in your project. If you knew that people will like it, don't give up on it. I learned from them, that even though they don't have funds, they don't gave up looking for investors who will invest in their project, because they knew that it will be really usable for people. Luckily, they found an investor, which is the Draper Fisher Jurvetson. I also learned that to become successful in these fields, you must know how to plan and make a really good decision. Sabeer Bhatia had a problem before in their funds, and they only have money for one week operation of their system, and they called their investor DFJ, they agree to fund them but they don't agree to make the value higher, so Bhatia agreed, because he thought that it is the best solution to fund their project.

31

Hotmail didn't start off smoothly and encountered a lot of problems. it is considered a one of the first free webmail service in the world wide web and through the great ideas and management of it's founders, it become successful and a lot of people used it.

Apple Computer

Apple computer, was founded by Steve Jobs and Steve Wozniak. Steve Wozniak started making computers just for fun, and he never thought that this little hobby of his, can earn a lot of money, but as well as make a big mark in the history of personal computers.

Apple started of when Steve Wozniak decided to make a computer of his own. He can't afford to buy one, so, he assembled his own computer by using a home TV set and a $60 worth keyboard. He was working at Hewlett Packard making calculators during that time, so he is really inclined in hardwares and electronic chips. With that first computer, he was able to create Apple I, the first personal computer made, which can be used at home or at office; which became Apple II, which was really popular to people, Apple III and lastly, the Apple Computer. What I learned from Steve Wozniak is that, in startups you have to be resourceful and wise with the things you buy. He is resourceful in making the computer, he only used the available materials, and the materials he bought are very cheap. Like the first computer he did, he only used a TV set and a keyboard, and because of his resourcefulness and creative mind, he was able to create a computer. Not only that it was cheap, it also has less components, which makes it simpler and easier to manage. That's also the reason why many people bought Apple computers, for they are cheap and usable. The second thing I learned from him is that you really need to have the patience and do the trial and error, because Steve Wozniak can't really do programming. So what he did is that he tried learning BASIC on his own. He created a table for the syntax used for coding as a guideline and started creating them and making combinations. Lastly, when you're in startups you have to be open and innovative. You have to open new technology to people. Such as providing new features for the computer, and not sticking to its first feature. Just what like apple did. They created the apple computer and after that they allow people to put their own cards in the computer, they add many features that's why people like to use it.

Steve Wozniak left Apple and gave the his share of stocks to 5 people who he said helped them, and sold the other stocks to 40 of their employees at a low cost. Steve Wozniak remains being humble despite having the skills and power to become millionaire, and that's a really worthwhile thing to do. Apple indeed was a huge success that up to now, people uses and keeps on loving it. It has really has proven itself throughout the years, even though they encounter a lot of trials, they have proven themselves to be one of the best.

Excite

Excite started, when Joe Kraus, together with Graham Spencer and 4 of their friends, decided to make their own company. They don't know what will it be like, but all they wanted is to make something interesting.

Excite is a search engine like Google, and it became the fourth most popular search engines. But before they achieved that, they encountered a lot of problems. First, no one wants to fund their project, because it's a startup and most search engines during their time don't last long, for investors thought that search engines don't have use. I learned from Joe Kraus that in startups, you will start your company with you paying all the expenses until the time you get someone to finance it. So you should spend your money wisely. There was one incident when Joe Kraus spend $300 for a photocopier, he got the money to buy that from their capital. Joe Kraus and Graham Spencer had a fight because of this, but later on Joe Kraus realized that it is his fault, because they didn't use the photocopier that much. I also learned from them, that in startups, you also need some connections, because if you don't have connections with famous people, there is a little chance for your product to be known. You also need connections so that they can guide you, what does your product need and they will also help in promoting and getting funds for your product. Joe Kraus had a big opportunity, when they are introduced to Bob Cringely, because Cringely introduced them to many known people who helped them in their journey to make profit and make Excite popular. Lastly, I learned that in startups, you need to keep on fighting and never give up. If you didn't get it, that doesn't mean that you already lose the fight, keep on trying until you get it. There was an incident wherein Excite got the opportunity to have a tie up with Netscape. They bet $3 million, for the deal. Unfortunately, they didn't get it, but they didn't gave up and on the next day after the bidding, they returned at Netscape to talk to them. Luck strike, because MCI, the company that Netscape chose to tie up with, couldn't provide service on time, so they decided to give it to Excite.

Excite is a webportal and search engine, who encountered a lot of problems, but succeeded, and is considered as one of the pioneers in search engine. What started out as a small company at a garage, ended up as a huge company that earns a lot of money.

Software Arts

Software Arts is the company who produced the VisiCalc, an electronic spreadsheet. It is created by Dan Bricklin and Bob Frankston in 1979.

Dan Bricklin together with Bob Frankston started VisiCalc, when Bricklin started studying at Harvard Business School. Because he is using a spreadsheet, he thought of an idea to create an electronic one, and after so much hardwork, he succeeded and made the VisiCalc. What I learned from him is that in startups, it's very difficult to start when you are alone. You really need help from other people, and you need to trust them. Like in the case of Bricklin and Frankston, they are arguing most of the time, but in the end, they keep on depending on each other. Also, Bricklin said that in doing a start up with a friend, you should not compete, who is much greater, or who did much work, as long as you are helping each other, nothing is impossible. Another thing I learned from him is that while you are on the process of developing the startup, there are still learnings. You need to learn some things that you don't know, but it is needed for the system to run, then you will study it. Bricklin spent so many hours to learn some of the programs that he needs for the spreadsheet to run smoothly. He also put himself in the shoes of the user, on how he can make them easily understand on how the system works. Lastly, I learned from him, that in startups, the keyword to every success is Hard Work. They spent so many hours, coding and debugging the system. It is very difficult for them, because computers during their time are not that user friendly; there are still many lacking components in them. Also, in their spreadsheet, it does not only contain tables and columns, but there are formulas in it, so it really took hardwork to make it work, which becomes a success.

VisiCalc is really the first electronic spreadsheet made, and it was really a success. But not all who become successful, will be successful all along, with this company, they decided to sell it to Lotus. But even though the company Software Arts didn't last that long, they still left a mark in the history of Information Technology, and what they made is still remembered and used, until now.

Lotus Development

Lotus 1-2-3 started off, when Mitchell Kapor together with Jonathan Sachs made an improvement on VisiCalc. Lotus 1-2-3 is an improved version of VisiCalc. They first tried it on the Apple II. It is capable to handle larger spreadsheets compared to VisiCalc. It also has an integrated charting and graphs, as well as a database, which is more convenient to use compared to VisiCalc.

Mitchell Kapor, one of the founders of Lotus was taking up a business course at a business school during their time and he doesn't have the least bit idea on how to program. But this idea struck him, which he thinks can really change life and change the course of technology. He is a person who has full idea but doesn't have that much talent in programming. Good thing that his partner Jonathan Sachs is really good in programming. So, he has the idea, Sachs programs his idea. Before he started making his company, he was part of the company Software Arts who did the VisiCalc. But due to some issues and misunderstanding, he left the company. He felt that he was really not wanted in a company, because he was not a computer genius and the people in the company thought that because he doesn't have the necessary skills as a programmer, they look down at him and he felt that he was a pest in the company. He once raised a suggestion at the people in Software arts about adding a statistics and graphs function at the VisiCalc, but they weren't interested, because they thought, from a person who doesn't do well with codes and doesn't have management skills, it will just not work. So they turned down his suggestion. I learned in this that sometimes those people that are looked down by big companies, they are the once who make big and become successful and sometimes they end up buying the company who looked down at them. After he left Software Arts, Mitchell Kapor was able to star his own company because he got money after leaving Software Arts. A big turnaround in their startup career happened when IBM, which is according to him, the "real" computer came out. The spreadsheets that they made before was only for Apple II computers, so they decided to make a spreadsheet for IBM, which become successful. For in Apple II, it contains an 8-bit microprocessor, unlike the IBM who has a 16-bit microprocessor which is much larger compared to Apple II. They take full advantage of using that memory of the IBM computer, which is what they did as a database for the spreadsheet. What started as a company with only 25 people, it grew bigger and as time passes, it already has 1,000 people working in it. What I learned from him, is that most companies are really practical and sometimes it comes to the terms that they don't treat their employee well. Just like what he experienced during his stay in Software Arts, he decided to create a workplace wherein the people are treated well. He wanted to turn it to a workplace wherein people will want to work there and will be motivated to do good in their company. So a really good workplace for employees is one of the elements you needed to have a successful company. Employees will be more progressive if they have a good workplace and the people there respect and acknowledge their ideas. I also learned that in startups, you should really practice good decision making. For when your product started to become big and is making money, it is very serious money and you are talking a huge amount of

money. Kapor already made a lot of mistakes in making decisions, he got the wrong person to replace him in the company, he made some wrong decisions in running the company, and he admitted that he regretted it, but he learned from those mistakes and he used it so that it will not happen again. Kapor is quite a coward and is afraid to try different new things. He is also afraid to take risks. Most of the paths he has taken are risk free, that's why most of his decisions brought mess in their projects. I also learned from him that when you are doing a startup, your commitment to change and create something new, and to your product, should be there. For in startups it is really not easy to do, and requires a lot of patience and dedication before you can achieve success.

Lotus 1-2-3. became a program and the first spreadsheet used for IBM, and it really surpassed the VisiCalc. And it really deserves to be called a killer application, for it really brought a great change in the world of software development. We will not have the spreadsheets we are using today if it is not for this application. What started out as an idea, ended up as a huge program that really helped us a lot.

Groove Networks/ Iris Associates

Ray Ozzie, the founder of groove networks, worked on one of the earliest collaboration application, the PLATO notes. He decided to create his own collaboration application, so he formed a group in his house, most of his people were his brother and other friends. Lotus funded his idea of starting a collaboration application and later, founded Iris Associates.

Groove was a collaborative application made by Ray Ozzie. A collaborative software/ application are soft wares whose aim is to provide convenience to different organizations by allowing multiple users to work collaboratively on computer files simultaneously. Some of the examples of collaborative applications are emails, text chats and wiki. Groove is a collaborative program whose aim is to make the work in an organization efficiently. It helps teams work dynamically and effectively. According to Ray Ozzie, he wanted to create a program that enables people to *"dynamically assemble in a virtual environment, share documents and their thoughts in order to get work done very quickly and then disassemble"*. Ray Ozzie wants to create a program that will really make a boom and will really show that we are already in the age of future. I learned from him, that in startups, you have to foresee what your product will end up, or what will it look like, because if you have the result in your mind, you are more motivated to create that product. Groove's creation was not based on technology, but instead was based on the needs of its potential end users. So it is a very challenging task for Ray Ozzie, for he really has to make scenarios that fit the needs of the users of this program. While they are on the process of creating Groove, there is a certain algorithm for synchronization and it is really a challenging job for them, so they were not really sure if they will be able to make it. I learned from them that you really have to work hard and never give up until you finally reached your goal. If you give up, you will lose the fight. I also learned in this startup as well as other startups that you really need to develop a good skill in decision making for when you already start something, you cannot go back. Like with what they did in choosing a programming language, they are choosing between Java or C++. It is really a tough decision and you really have to decide very carefully for once you started the project, you cannot back out.

I also learned that in startups, uncertainty is always there. You don't know if the project you are making will become successful or not. You don't know it people will accept it or not. You don't know you will earn money or not. During their time, Ray Ozzie didn't really know if Groove will really become successful, because during their time technologies like groove are extremely difficult to sell in the enterprise. First, it is still new to the people and in the industry. Second, people don't see it as something that is profitable, so a few people invest in it. Building something that is really new to end users is very challenging to market rather that building the product itself. So it really requires a lot of effort and patience to market and produce the product in startups. According to Ray Ozzie, some people got out of uncertainty by being comfortable in their little box, and I think that's what he did. Division of labor is an example of that.

I also learned from him that in successful startups you don't have to always work alone and you need to have a BELIEF. You have to trust and hire people who also have the same vision as you. You also have to hire people who will do their best to accomplish something good. You need to have a belief that you will be able to create something that will have a great impact and change the world. Lastly, I learned that in startups, you don't have to do it just for money. It should have to be about your goal or mission but not for money. Like what Ray Ozzie did, he did it because he really want to make something that can really change the world, not for money alone.

Groove has really proven itself throughout the years and many things happened as time goes by. Groove has proven itself as a very helpful application or software for organizations, and it also gave way to the creation of other innovative programs. As of now, Microsoft markets Microsoft Groove, with the same name as the Groove.

Pyra Labs/ Blogger.com

Blogger was founded by Evan Williams on the year 1999. The first project that they focused on is the Pyra Labs but as time passes many people started noticing Blogger and that's the time that they focused on Blogger. Evan Williams dropped out from college and started playing along with the internet for years. Blogger is one of the many who started the to set standards in the world of blogging.

Evan Williams' first plan is to build a web-based project management tool. But in didn't end up doing that. He also studied web development by himself. He knew himself that he was going to start a company. But before he started creating his own company, he worked for a few years at Intel and HP. He really has great dreams, he has this vision of having his own company, earning money and making softwares that are really cool. The idea of Williams is to create a project information system wherein it enables users to help them organize their work and personal information. Together with Meg Hourihan, they started developing the Pyra lab. They are actually making 2 projects during that time, the first one is the Pyra labs and the second is the Blogger. Blogging during their times is being develop and people start knowing about this thing. The idea of Williams on blogger is that he wants to make it easier for people to put it in their website, by just typing some informations on the form and then it will be put in their websites. Evan Williams has problems on focusing on things. He always has this big idea but he will end up not finishing the project. So they made a huge decision that is to choose between the two projects, between the Pyra Lab and Blogger. They were already 7 people during that time. He doesn't want to stop Pyra Lab, because it is really important to him and that is something that he woudn't want to give up, because it is already running. They also encountered a lot of problems while doing the Pyra Lab. They have problems with organizing the information of the users. Blogger is just a mini application of Pyra Lab, but they really so great potential in this project. So, they end up choosing Blogger. Blogger wasn't intended for the masses, because it is initially designed for web geeks. You need to know how to create a website so that you can use this. But still, it is much simpler compared to others and people started using it. I learned in this startup that the simpler your product or program is, the more people will use it. Because not all people has technical skills and many people are already using computers, so an interface principle known as user familiarity should be used in making a program. They also have a hard time developing Blogger. They don't have resources and they weren't sure if they will have a profit if they continue doing this. I also learned in this startup that when you do something, you first have to think of the end users. Blogging during their time is a very common thing, but what makes Blogger become noticeable is that it gives power to everybody to express what they feel and voice out their ideas.

As the Blogger started getting popular and acquiring more users, they encountered a really big problem. Blogger is not making money and they are already debating on how to deal with this. They make an improvement for Blogger but they aren't earning money and many people are logging in and they can't handle them

anymore. So it ended Meg leaving the company together with all the 7 other people working there. They are always having a debate, because they are not understanding each other and they have different opinions in everything. I learned that in starups, you really have to find a partner who has the same language as you do, so that you can understand each other more and will be able to work more harmoniously. Williams make the Blogger run by his own. He got money to make it still run by posting a message in Blogger that he really needs money for hardware and people started donating money. After that, more luck came, Google contacted him and he started to work for Google, because Google bought it. He hired a new team to work for him. I also learned that in startups, you have to be optimistic, because it is not easy to do a startup and you have to be optimistic to be motivated and keep on doing and trying until you become successful. Being optimistic in startups is the key to success. I also learned from him that you have to have the strength to reject the ideas given by other people, because you have to choose what is best. According to him, if everyone agrees, then you're not original anymore.

Blogger and its founder Evan Williams, went through a lot of trials before they got what they have now. By the year 2002 he was able to release the Blogger Pro, wherein users have to pay to remove the advertisement. It was really a simple but effective way to earn money. Blogger has really proven itself throughout the years and now, millions of people are using this Blog. What turned out to be as a simple idea boomed into something as great as this and it will really leave a mark in the history of Information Technology

Yahoo

Yahoo started off as a collection of research papers by Jerry Yang and David Filo. A small collection of links turned into a very big thing, and people started asking them to add categories. From there Yahoo become the most popular website on the world. The founders of Yahoo are Jerry Yang, David Filo and Tim Brady.

Yahoo started off as a list for the thesis project and ended up as a huge website. Tim Brady, one of the co-founders of yahoo, decided to gave up his Masteral degree so that he can focus more on promoting and developing the "product". Yahoo was first installed at Stanford University, but later on, they moved out, because Yahoo is becoming bigger which can crash the servers at Stanford. So they have no choice but to move out. They didn't have that much problem to start, because the found funding for the project. Sequoia offered them $1 Million for the project. What I first learned in this case study is that servers are being sold, and the greatest way to earn money on the web is through advertisement. I also learned that even though during their time, Microsoft has really great power when it comes to Information Technology. They have the power to do everything they want to do, the can accept or reject a proposal, because during those times, they are already a powerful company. I also learned that one of the strategy used by Yahoo, is that they not only provided a full text website, but a site with pictures on it, not like what the other competitors are doing. I also learned that Yahoo is not a search engine. I thought before that Yahoo is a search engine like Google. But I was wrong. What Yahoo is actually doing is that on the search engine, they provide people with links that bring them to another website. People search and Yahoo find them in their directory but if they didn't find anything, they put the users to what they call as falloff searches that they have with other companies. What I also realized is that when you really want and you like doing something, you tend to be good at it. One example is Tim Brady. He was a business student, but ended up as a software developer. One of the reasons why Yahoo becomes successful is that they really have what you can call a team. They are friends and they really trust each other. They also enjoy their work. Even though they were all awake for hours, they are still enjoying and laughter can still be heard coming from them. Another thing about this team is that even though they encountered problems, it doesn't last long, for they are not egoistic people and they talked about and wouldn't defend dumb ideas because it was their idea. I also realized that internet is a really open, wide and complicated. You cannot put boundaries to it. It is like a universe with no endpoint. Until today, it is still a very huge network and people just can't put an end to it. I also learned that controlling pornography was already an issue before, and until now, is still an issue. They were difficult to control for they are so many. There was a time, when Yahoo tried to control them, by filtering them, but it was not a success, so they have no choice but to remove all of the websites that contains porn. I also learned that Yahoo was also one of the websites to put news on the front page. It just started when they put a news headline at the website as a way of serving the public, but it turned out good, and they were able to buy Reuters.

I also learned from Tim Brady that in startups, you must know yourself. Know your strengths and weaknesses. You also have to be involved in what you are doing and what you already started. You don't just do startups because you want to earn money. You do it for the right reasons, which is to help people.

Yahoo was indeed a great company and one of the most popular and commonly visited website. It just started out as a list and turned into a huge website. It was added at the NASDAQ 100 which made the founders very proud. It has been a long journey for Yahoo, and nowadays, it is still growing and will continue growing to serve the people around the world.

Research in Motion

Research In Motion is the first company to produce wireless technologies. Its founders are Mike Lazaridis and Doug Fregin. Mike Lazaridis was still an undergraduate on the year 1894 at University of Waterloo. RIM is one of Canada's most admired technologies and it came to public on the year 1997.

Lizaridis have a great opportunity during his high school years. For their school provides advanced learning. Their class is divided into two, those who were in the shop program and the other one was honor roll students. At the honor roll class, the students learn everything about science and they apply what they learn through the shop class. During their high school years, they can already do many things regarding electronics. Lizaridis and Doug started learning computers during their high school years. When he entered college, he became more interested in learning about the wireless technology. Their school has a computer, wherein they have to use punch cards, and the Internet before is also called the ARPANET. Just a few weeks before his graduation, he dropped from college. For the reason that he already started his company, which is the RIM, and they got a contract for that company, and there are too many works to do that he has to do that. His exposure during high school helped Lizaridis a lot, for he was to able to foresee what is a possible thing to happen in the future. He had a contract with General Motors worth $600, 000, which is developing a Local Area Network. So they have to start from scratch until they were able to make it work. I learned here that before, computers use disks to boot, and its really amazing how things are different from before. Nowadays, when you boot, it is already automatically, for it is already installed in your computer. They started recognizing wireless technology on a conference at Japan on the year 1987. I also learned that even though during those times, wireless technology was already in use. I thought wireless technology was discovered during 90's. I also learned that in developing a program you need to have a lot of faith and you need a vision. A vision and faith that it will happen, and that you can accomplish that vision and promote it so that you can fund what you first developed. As a young undergrad, he already landed a contract. He achieved that success, because according to him, you need to know how to you use the machine and you are comfortable with them, and the main objective of your product is that it should help people. Blackberry is their product, which is a wireless technology, and it was being used in NASA. NASA used them to coordinate to their people during hurricane season. But one time, Sean O' Keefe, former director of NASA, experienced something really good, which really helped the company. He was carrying his blackberry home, and he received an email, he started answering the e-mail, and when he look up for it, it was an astronaut on the space station. After that happened, the NASA still uses blackberries, but they are using it already to communicate to the International Space Station. Blackberry is a system that works properly and is very secure, and on the year 1997 it become a two- way e- mail terminal.

RIM is a company that first brought people and let people experience wireless technology. For during their time, wireless technology is very expensive, and through them, people experience wireless for the first time. What started out as their teacher's dream, turned into reality. Nowadays, there are already wireless technologies, such as cellphones. If not for them, we will not be able to know and experience what wireless technology is. It is a lot of thanks for them, and they really change the course of technology, through the development of wirelss technology.

Marimba

Marimba is a software distributing company. It first started off as a mysterious company, because no one knows what this company is all about. It is co-founded by Arthur van Hoff, a part of the Java development team at San Microsystems. Together with his fellow developers, Sami Shaio and Jonathan Payne, and Kim Polese (Java Product Manager), they started creating the company.

Arthur van Hoff started the company, with no idea, what will their start-up be. What he did is just he find a small office, put desks and a fax machine. They started the company, with their own money, at around $25, 000 each. Their first project is a user interface builder. They have this idea, because they were part of the Java team and they come to understand that Java is an interesting model, but it lack tools. So they decided to do it. But unfortunately, another team already making it, same as them, and a few weeks later, they were able to sell it to Netscape, which later became the JFC, or Swing, the Java toolkit. So they stopped it, and started with a new one. Good thing is that, they haven't spent a lot of time yet for that product. They are already known by media during those times, and they still have no product. Nobody has a clue what they are doing, and that strategy helped them to get many deals. But it also has a disadvantage. Kim Polese, who is their CEO, becomes the main focus of media. So instead of letting people know, what the company is all about, the focus is on Kim Polese who is their CEO. They finally decided to become a software distribution company. Wherein they don't sell softwares, but instead, they let the users subscribe to it and get automatic updates for it. I learned that during those times, updating is not automatic. We are now used to automatic updates by Microsoft, and we didn't know that during their times, updates is a very different thing to do. People during those times didn't easily grasp the idea of subscription-based software distribution, because it is something very new to them. But later on, little by little, people started to understand what this is all about. One of the big success of Marimba are the Morgan Stanley and Bear Stearns. They really need the software, or else it will not work and they have thousands of traders all over the world, which really gave them a lot of income. I also learned that any person can run a company up to 100 people. You just need to have intelligence and good intuition. Managing people and motivating teams need a different kind of skill. It cannot be easily learned or acquired. Lack of experience usually happens, if somebody in the company, cannot make decisions. According to van Hoff, many people are doing startups, because it is fun and they have the hopes to get rich. Many people are also afraid of doing startups because in start ups you have to risk your job and your income to start. I also learned that in a company, you also have to see the needs of your employees. There came a time at Marimba, when employees kept on leaving the company. For the reason, that they didn't buy espresso machine which is a necessity for the employees during those times. I learned that in a company, the workplace should make the employees happy, and the place, where they feel that they are valued. In a company, you are a team and if the team is not united and does not work together, they team will fall.

The company Marimba went through a lot through the years, and it has made a huge success from its unique strategy. But unlike almost all the successful start up companies, this company was disbanded. Arthur van Hoff left Marimba on the year 2002 and started his own startup, Strangeberry. 2 years from that, Marimba was sold to BMC software, on the year 2004.

Gmail

Gmail is a web-based email system just like yahoo and it started up as a project within Google. It was created by Paul Buchheit, who is the 23rd employee of Google. He is also the one who created the AdSense, a program that allows ads to run in Google. Buchheit is not the founder of Google, but he has contributed a lot in Google.

Paul Buchheit, is a person who likes doing many different things and has a lot of ideas. Sometimes he has an idea but it doesn't go anywhere. But even though he's like that, he has great and innovative ideas that can describe the word "change". During his college years, before you can check or use your email, you have to get back to your dorm. He had this idea, wherein the people can check their email anywhere they go. So he thought of a web-based email. But it led to nowhere. I learned that before it is very difficult to access your email accounts. Unlike nowadays, you just needed an internet and you can easily access your email. Buchheit created the web-based email, also known as gmail, by using the codes from Google Groups. He created the code for just one day. He thought that it will not work, but it worked. AdSense, the program he also created, was also created on a Friday. It is a content-targeted system. It is my first time hearing about this. I never knew that this kind of thing exists at Google. Besides AdSense, there are also other features that Gmail have which other companies don't have. They have autocomplete, wherein the user will not have a hardtime to remember entering email addresses, for the computers know them and it is saved at their database already. It is a first in email, because only Google has it.

People have hard time accepting Gmail, for they are really uncertain that it is really possible. One of the reasons is that Google is a search engine; they only do web search, and web-based email is new to them. According to Buchheit, when people uses new systems, they feel uncomfortable. That's why many people during their times were afraid to use Gmail. But as they learned how to use it and as it's popularity grows, more and more people use it.

I can say that Gmail is really a breakthrough when it comes to e-mail, because of this, it is now possible to access email easily. Google is only a search engine and people have hard time accepting that web-based email and that Google has an email service. It also went through a lot of problems before it achieved its success. It has once a problem when it comes to memory, because Gmail provides users with a large memory, and it is a very complicated system for them to fix. I also learned that it is a little bit different from search, because in search the users will just have to type what they want to search, the Google will search the results and the users will just choose a result. If the data is gone, they can do the same process and the information is still there. But in email, it is a lot different thing. In email, the data of the user is kept on the database, and if it is gone, you cannot recover it anymore. I also learned that in

startups, it is not just a matter of luck, an idea should be there, and luck is only a factor. You also need to have the courage and take the risk to implement that idea. Gmail, is still one of the most popular email service available and from a small group of people it has dramatically increased its popularity and lots of people are using it nowadays. It has really proven itself through the years and it will prove itself more in the years to come.

WebTV

Steve Perlman is the cofounder of WebTV, a TV that looks like a monitor and has Web in it. He is also a hobbyist whose interested in software, hardware, networking, and material science, so he's good at those things and can make many things from what he's interested at. He thought of an idea wherein the Web would look as good as a computer monitor but on a Television. He was also responsible for bringing colors to Mac. For many years, he's interested in making an interactive television. Interactive in a sense that its not only changing channels, but going beyond that and when people have access to its content.

WebTV started off encountering a lot of problems, there was the idea, but he didn't know how to create the content of it. So they have this cyclical problem, according to him which is *"Nobody would buy the devices because there was no content, and there was no content because the devices weren't out there"*. He is also thinking of creating a low cost system for the interactive TV. Perlman has really great ideas when it comes to user interaction. He once thought of video games that can work online. What he did is that instead of using a second controller, they will just link it to a dial up connection and then two players can play. I learned that creating a systems and understanding it is very complicated and requires technical knowledge.

WebTV got its huge opportunity when Sony decided to give them contracts for the WebTV, but they should abide by their conditions. They will have to be exclusive for 1 year and with Sony brand, this is their most awaited deal, but Sony backed out and they didn't got the deal. And because of that, they are encountering a lot of problems, and the employees didn't know that they are losing great money. Many investors are waiting for them to fall down, and then they will take them, for their product, WebTV has a really great potential. But later on, they got the deal, not only with Sony, but as well as Philips.

WebTV has many features that is new to people. First is that it is an interactive TV which is the same as the computer monitor. It also has a program guide together with the video content on the TV. I learned from this story that back then, there were no program guides on TV. During their times, it is a really big deal to have a program guide, because it is a first for them. There is also a function that can record the video can be recorded and can be playback. People could also go to websites by just typing the URL. They also created an integrated Japanese language support.

WebTV has been successful and it went through a lot of problems, but still it is a company that is standing tall. For the reason that its founders have a good relationship and they are bound together. They are really working hard in good times and bad times. They also never doubted that they will succeed. They are really optimistic that they can

really do it. They also have a common vision which can make them as well as the employees feel stable. I also learned that when you have a vision of creating something that people really love, it is really fulfilling. I think that is one of the factors why Web TV succeeded.

TiVo

Mike Ramsey co-founded TiVo together with Jim Barton on the year 1997. Creating network servers for homes was their original plan. But they narrowed the idea and instead created a DVR(Digital Video Recorder) and was launched on the year 1999. TiVo gave the people the opportunity to control the Television. They can pause live tv, skip commercials, schedule recording of tv series and many other things.

TiVo started off as an idea and it was implemented. Ramsey is interested in using computing technology to do entertaining things and very different from what people are used to do. Barton on the other hand has a good technical background wherein he started to work on a video-on-demand system that SGI was doing with Time Warner. This really makes them a good combination. Ramsey had a hard time looking for VC for TiVo, because they are a service company, and VC's don't invest at service companies. But then they got investors, namely Geoff Yang of Redpoint and Stewart Aslop, because they understand the craziness of the product and they can really see that it really has a potential, and it can really earn a lot of money. Their initial plan is to create a home server network design, but they changed it for it is so flamboyant, and they needed to create a simple design that is really functional. They needed to create a design that is simple enough that consumers can understand and know how to use it.

Many people mistakenly thought that TiVo is a VCR, but it is not. It is more sophisticated compared to a VCR, because it uses hard disk, so you can simultaneously record and playback shows. You can also pause live TV. It is also cheaper compared to other products. Playback and record, pause, fast-forward and rewind are possible to do through the help of media switch. I learned that it needed a device like this so that it can function. When you look at a device that has this function, you will think that it is easy to do, but in fact, on the inside of that device is a very complicated structure. Also in program guide the data has to be accurate, because people are waiting for this and rely on this and if it is not accurate, they will not be able to watch the shows they are waiting for. It is also in a database and there are many programs a day, so it is difficult to manage. I was also amazed when I learned that video editing before costs millions unlike now, you just have to install a program and you can edit videos. I also learned how the program guide was transmitted to TiVo. Their first plan was to use the TV signal, but they realized that TV signals have only limited amount of coverage. So they decided to use the telephone line to transmit signals for TiVo. There is also a feature which is called the Season Pass, which looks out for the tv show whenever it's broadcast. It will not get you repeats but the real ones, new episodes you are looking. What really fascinates the people or the consumers is pausing the live TV. At first people doesn't want to believe it will work, but when they tried it, it really worked and the wondered how that happened.

TiVo launched on the year 1999 and after their launch, many competitors have been claiming that they were the first to do a DVR. Their very tight competitor is Replay

and they have been an unhealthy competition. Over the years they earned a lot of money, not only millions but billions, because of their killer application that can pause live TV. TiVo has been through a lot and it all started from this great idea which turned out to be a really big one. It's creation has been a breakthrough in the fields of entertainment and its innovation has really helped people a lot.

Viaweb

Viaweb, a software created to build online stores was created by Paul Graham and Robert Morris on the year 1995. It is a web based online store builder for small businesses. Viaweb allows the users to create their own homepage, for selling their goods. It's like their making their own website, but they have the choice to use ready made layouts, or you can create your own. There are no technical skills required, that's why it is user friendly.

Before Viaweb started, they created a start up that puts art galleries online, which they called Artix. They decided that if they could write software that can generate art galleries, then it can be turned into an online store. But the problem was, art galleries don't want to be online and users didn't want to use that, so it failed. They also have self funding to start off their project, and they did it at the apartment of Robert Morris. Their idea of doing a web based software started when they thought of running it on the server. They finally get their first funding at around $100,000 from what they call angel investors. By the year 1995, their software is already running, and they thought that catalog companies would use it, but they didn't appreciate it, because for them, internet and web is so complicated that they hate it. So what became their users were people selling specialty products. Finally, small businesses liked their software and people started using their software. But some people still don't understand how their software works and most of them are still confused. They still thought that the software was a client software, wherein you have to install it in your computer by downloading it. What they don't know is that it is web-based, wherein the software ran on the server. So it is available online and you don't need to download the software to use it.

On the year 1998, they were acquired by Yahoo and many changes happened after that. First, the name Viaweb was changed into yahoo store. It came to them that Viaweb will be gone forever, and that what makes them sad. But according to Graham, they made startups to sell them, so he doesn't need to be emotional. The employees of Viaweb also became the employees of Yahoo. They were scattered to different departments, for Yahoo, it is the best thing to do, but for them, it is a really terrible thing to happen. As of now, Viaweb is called Yahoo Store and it's still growing and more users are using it.

I learned that this kind of software exists. I never knew before that there is a software that can build online stores easily. I also learned that one of the best strategy to use when you are not a business person, is telling the truth. According to them, by telling the truth, you don't need to remember everything that you said. I also learned that

In startups you need to spend as little money as possible. So that you can earn more money. Also do everything as cheaply as possible. I learned that in making interfaces, you have to prioritize the design of the interface. Viaweb has good graphic design, that's why people are convinced to use the software, because they based it, on how the site looked, not on how it works. This software is a really helpful software that helps people, especially those who have small businesses to sell and promote their product at the same time, via, web.

del.icio.us

Joshua Schachter created del.icio.us in 2003. Del.icio.us is a collaborative bookmarking site that started off as a thing that Schachter made for his use. Del.icio.us is a collection of links or favorites wherein you can keep them and save them. It is like your personal storage of links on the web. They are also the first to use Tag, a keyword or words that describes your bookmark.

Schachter created many projects over the years, that is the reason why he learned many things and he applied those things he learned to del.icio.us. His first project is Memepool, which is a blog and they put "Send us an e-mail. Give us good links". People started putting links and Schachter wrote it. As time passes, he collected more links that he found and links that were sent to him. He already had a huge pile of links, and he had a hard time sorting them. So he created a comment that can describe them with one or two words, and that is where the first tag started. On the year 2001, he created Muxway, which is similar to del.icio.us. But the difference is that it is a single player version. Where in no else could use it or edit it, except for the one who put the links there. But the site is visible. By the year 2003, he started making del.icio.us which is a multiplayer, wherein the people can click the link and they can use it. According to Schachter, one of the reasons why del.icio.us was successful, because it is not a venture to start with, he just build the product, and that's it. He also didn't have problems with competitors, because they have already disappeared, because of tagging, no one can beat del.icio.us. They finally got VC, which is the Union Square Ventures and Amazon, but they didn't started with a huge amount of capital, because Schachter didn't want to do so.

Some of the turning points of del.icio.us the Schachter considers is that first, he is learning something new every week. Getting funding for the project, quitting his other job and going full time, and selling the project, are parts of it. Before, Schachter is working on Morgan Stanley, and he only a lot 15 mins in making his project del.icio.us is included. But he decided to quit his job, when del.icio.us is growing its population.

Schachter learned many things from his previous projects, wherein he applied it to del.icio.us. He keeps this idea of journal of stuff. One of his projects, he called it Bookbook, is a geomarket for distributing books. It is so hard to use and didn't succeed. You don't need to log in and create your data, a URL will be provided for your data. When he created it, it is very decentralized, that's why he learned from this and applied what he learned to del.icio.us.

I learned many things from this case study. First is that I knew about del.icio.us. I never heard of it before, and it is a really helpful site. Even though it only provides links, you can still explore many sites and it is really helpful. For you can go to sites you have never been before. It can also be used for research, because there are many links for many different categories. I also learned that Joshua Schachter is the one who created tagging. I also learned about tagging. It is very helpful especially in searching. It is much easier to find what you are looking for, because of Tags. I also learned that in making a

product, you always have to question everything about it. You have to screen and question every single aspect of it, to yield effective results. Also, assume that there will be something wrong about the product, so that you can foresee what you can do, and plan it, so when it comes, you will know what to do. Lastly, I learned that relying on execution and failure, or being successful in your ideas, can help you come up with a better idea.

Del.icio.us has been successful, and it has already many users by the time it started. It encountered some problems, but they got over it and becomes really successful. But by the year 2005, del.icio.us was acquired by Yahoo with the amount of 30 million dollars. Del.icio.us is still running, and it still has growing popularity, because of its simple yet useful links.

Bloglines

Mark Fletcher, the founder of Bloglines and ONElist is a software engineer at Sun Microsystems. He founded a free email list service, which is the ONElist on the year 1997. But on the year 2000, ONElist was acquired by Yahoo and they renamed it eGroups, which became a part of the Yahoo Groups. By the year 2003, he created a web based aggregation service, which is what he called Bloglines. Bloglines is a free service that can be used for searching, subscribing, creating and sharing, news, feeds, blogs and rich web content.

ONElist was created by Fletcher and he decided to sell it to Yahoo. After that, he decided to create a project, which is Trustic, an anti-spam company. But he realized that it is not a very fun thing to d, because there were always complaints from users. It's either that they don't enough block or spam or that they block the favorite emails of users. So he just decided to stop doing it. During those times, desktop based aggregator programs are coming up, wherein you have to download and install it in your computer. But it is not applicable to Fletcher, because he's always moving around and always go to different places. That's what brought an idea to him. He decided to create a web based aggregator, which what he called Bloglines. It was brought out on June 2003, and his friends helped him in marketing his product. He also brought some people he worked before at ONElist, but he is the only person working full-time.

Fletcher decided to do a different thing this time, instead of getting funds from VC, he decided to do self funding for himself. His starting capital is around $200, 000 dollars. He encountered many problems with VC during his time in ONElist. He decided to get VC for ONElist before, because he doesn't have any choice. The population is growing and he needs money. Unlike in Bloglines, there is only a small number of users, that's why you needed only small money to maintain it.

Some of the problems that he encountered is that people don't know what blog is, and it is very difficult to explain. If people don't know blog, they will also have a hard time understanding aggregator program. But the press helped them to explain to people what aggregate software do. Most of their users are reporters, that's the reason why they don't have problems with the press. Another problem was that competitors start showing up. One of the closest competitor that they had was NewsGator, it is also a web based aggregator, but they were able to manage.

I learned many things from this case study. First is that I learned about Bloglines, I've never heard of it before, it is a good website, wherein many people can share not only what they feel, but they can also see news. I also learned about the website archives.org, it is a very good website, where classic documents are available, online. I also learned is that in solving a problem chances are that people are also having the same problem that you have. I also learned that in consumer-based Internet

companies, users are very important, everything else can be copied, but users can't be copied. Lastly I learned that it is very easy to add features in your program, because users would start sending you an email, suggesting what they want, and if you do it, they will feel that they are valued and that you are listening to them, which makes them loyal to you. Every success of a startup, comes from the idea and the users.

Craiglist

Craiglist was founded by Craig Newmark on they year 1995. It started off as an email listing to publicize events. He then turned it into a website from being a mailing list and added categories. On the year 1999, he decided to turn his hobby into a real business.
Craiglist is a local classified and forum for more than 500 hundred cities and 50 countries around the world. Some of its categories are Jobs, Housing, Goods and local activities.

Craiglist started off as a hobby by Craig Newmark, which is sending out notices on cool events to people using CC list. People then started suggesting some other things to be put in the website, such as jobs or stuff that are for sale. At first, they wanted to make it a nonprofit, but they it will not workout, for there are many legal constraints on nonprofit. On the year 1997, one of the PR of Microsoft was sent to them, to propose about banner ads, but they turned it down, for the reason that they believe that it was a really dumb thing to do. The company expanded and they feel like they can really stand up alone already. By the year 1998, people started asking about to whom they are charging money to. Finally, Newmark decide to charge money on land lords or apartment brokers for rental listings. They are the ones who asked Newmark to charge them, so that they can avoid sleazy brokers, and at the same time, improve the quality, which makes them more legalized compared to the other brokers. Newmark funded craiglist without taking any money from any investors, because they initially planned to start a nonfunding and didn't feel the need to look for investors.

Craiglist is a free and open community, I can say, it is for the reason that users or people have the power to decide. The rules and policy on the site are dictated by the community, and they are really outspoken, for they really voice out and give their feedbacks. The external features are also based from the users, they have the power to suggest what they want and Newmark will make it.

There are many things that I learned from the story of Craiglist Newmark. I first learned about Newmark. His commitment to the company, makes him more confident and gave him no doubts that he will succeed. I also learned about the site craiglist.org, which is really useful to people, it is a classified ads on the web, which make searching easy. I am also amazed with how the company started with a self funding, and then they start charging money to rent brokers. Many company wanted to acquire them, but they simply refuse. It is one of the sad thing in startups, many of the startups are being sold to other company, unlike this start up, it is still standing and is not acquired by any company. I also learned that you have to trust your instincts, wherein you can know if the person you are talking to is a trustworthy person or not. Lastly, I learned from him, to trust the users, give them the power to help you, and let them become part of the company, for your success can also depend on them.

Craiglist is a very helpful site, and it is initially a self funding company, but it didn't encountered that much problems. They also let the people help them develop the site.

Ebay acquired 25 percent stake in the company, but they are not a property of Ebay, they can still run on their own Craiglist.org, is still running and there are already many users viewing this site. It has proven itself, and hope that it will continue to grow in the years to come.

Flickr

Ludicorp was founded by Caterina Fake and her husband Stewart Butterfiel on the year 2002. The first product that they created is Game Neverending, which is a massively online multiplayer game, where the users can interact through instant messaging or IM. They also added a new feature, which is a chat environment with photo sharing. With this feature, Flickr started, as a photo sharing community and it becomes really popular that it surpassed the Game Neverending.

Caterina Fake and her husband Stewart Butterfiel started off their company ludicorp, when Butterfiel decided to create a company with Fake, and they decided to name it Ludicorp, which came from the word "ludus" which means play. They both have backgrounds with web design and development, which is the reason why they don't have any problems in programming. They first started off with their new project which is the Game Neverending, which is just a web-based game, a typical massively multiplayer game, and a CD-ROM based game. But the game also focuses on social interactions, it is like an online community, where users can form groups and interact with each other through instant messaging. Neopets is the inspiration behind Game Neverending, for you can see market in it, and at the same time, the users can interact with each other.

Flickr started off not as a product, but as a feature. It was created as their side project while they are developing Game Neverending. It was launched on February 2004. They decided to create a little IM or instant messaging community, wherein the users can share their stuffs. They also added a feature where they can share photographs. It is an instant messaging, wherein you can drag and drop pictures in your desktop and let people see what the other people are also looking at. They also added the feature tagging, which makes searching easier. The users will just put one or just a simple phrase to describe their picture and it will serve as a keyword for easy searching. Flickr is different from other photo related sites, is that the photo sites offer you to buying prints but it doesn't allow you to share pictures unlike flickr, which is free and at the same time allows users to share pictures. Flickr got a positive response from people, but it growth to masses is slow compared to Game Neverending. But as time passes, many users already knew about the site and the population increased.

I learned many things from this story. I first learned about flickr which is the first online photo sharing community. I went to this site and I discovered many pictures which is really helpful and at the same time entertaining. I also learned about Caterina Fake which is the first female startup founder, which I read in this book. I also learned from her that up to now, there are still discrimination among women in the fields of startup and the women really has to prove that they can do it twice the effort of men. There are still discrimination and many people didn't know it. I'm amazed with the ability

of Caterina Fake for she is a woman and yet, she created such a useful site that many people loves. Lastly I also learned that you have to be optimistic with your goal and no matter happens don't falter.

Flickr is one of the best online photo management and sharing application. It was acquired by Yahoo on March 2005. It is still running and they have a feature where you can directly search to yahoo through yahoo search. Flickr is a very useful site and it has proven itself and it is still proving it self up to now.

WAIS, Internet Archive, Alexa Internet

WAIS also known as, Wide Area Information Servers, was founded by Brewster Kahle on the year 1993. He was an employee of Thinking Machines, but he decided to leave his company so that he can focus on WAIS. It was one of the earliest forms of search engines. It started off when Kahle decided to create an internet publishing system. He decided to create it in California, because one of his mentors said, "Go someplace where people don't think your crazy". It is for the reason that they will understand you and they will support your idea. Also in California, the people there are dreamers, they really want to create something new and that is useful to people. That's why they don't have a hard time staying in that place. They also put up the first publisher on the net. WAIS is first created web services to people. But WAIS is then sold to AOL. He tried working at AOL but it was very difficult.

A year after WAIS was sold, Kahle created Alexa Internet, and Internet Archive. Both Alexa and Internet Archives are non profit. Alexa is a site whose purpose is to guide users about traffics and .NET and collects various sites for users. It is also a navigation system for the internet. It was founded by Brewster Kahle and Bruce Gilliant at San Francisco. Alexa is a site that collects everything and it would be donated at Internet Archive. Alexa was initially a self funding and finally it got a funding of around $1 million on the year 1996. They let the company grew and then they sold Alexa to Amazon.com.

I learned many things from this story. It is not only a startup, there are many features here that is the firsts. First, I learned about the toolbar, Alexa was the first to offer about toolbar, which really guides the users around the .Net. I also learned about the Collaborative filtering which is also a first, in which, you show related links to the people. You can see what other people also viewed which is related to what you are already viewing. It also become one of the features of Amazon, in which when you clicked a book, there is a recommendation wherein it shows what other people bought which is related to the book you bought. I also learned about Internet Archives which is a very useful site for reaserchers, and historians, for there are many classical files stored in this site. It is very useful because you can find classical documents stored in this site and you can retrieve them. With the help of Alexa, Internet Archives runs. Alexa is the one who catalogs the library and Internet Archive builds the stuff. I also learned from Kahle, that when you made a product or services for the users, do it to make them happy and it is useful to them. Don't do it just for money, because if you keep on doing things just for money, at the end of the day when you already have many money, you will lack ideas.

From WAIS to Alexa and to Internet Archives, Brewster Kahle has proven himself throughout the years and he did many firsts, that really took internet to the next level. He created many things that is really useful to many people, and it will be there and will never leave.

Adobe Systems

"If you want to shoot a duck, you have to shoot where the duck is going to be, not where the duck is." It simply means that when you are creating something, think of what it might become, not on what it already is. It is the quote that Charles Geschke, believed in, and helped him achieved success. Charles Geschke is the the Cofounder of Adobe Systems. He was an employee at Xerox PARC, together with John Warnock. They made a project that allows the mainframe computer to talk in a printer, which they called Interpress. When they decided to create a new project, which creates a network between computers and printers and lets them interface. But Xerox told them that it will take seven years before they can launch the product. Which makes Geschke and Warnock leave the company and started their own company. From that point on, their journey towards success began.

After leaving their company, they decided to create their own company and they got funded by Bill Hambrecht. They got the name Adobe from Adobe Creek, which is a creek behind the house of Geschke. They made their first project which is the PostScript. PostScript is a software that allows users to print text, picture, and graphics, which is really a breakthrough during their time in printing technology. It really did well that Microsoft and Apple decided to join hands to defeat this product, and it really became a huge challenge for them. Apple and Microsoft are two large companies and there is a really small hope in winning these two. The reason why Adobe won is that they have good planning and strategy, and they are more advanced on the product. They already knew a lot about the product and they can really explain that to the customers. They also knew what the users need and what they want. They knew where to lead the customers, that's why they succeeded. Lastly, their reason for success is that they instill in their employees that they need to create projects that are innovative and creative in ideas and concepts, which gave them more of the edge. The success of Adobe is continuing, they were able to create a new product, which is the Acrobat and there came the acquisition of Macromedia. They are a company who creates softwares like Photoshop, which allows users to edit pictures and create graphic designs. It allows people to create good designs even though they are not skilled in drawing and designing.

I learned many things from this story. I learned that Adobe started of as a company that focuses on printers, but later on, it focused on creating softwares, basically used for printing, and some were created to edit and enhance pictures, like the Adobe Photoshop, which is the most commonly used by people. Especially people who loves art, and also through the evolution of art, digital art was created through the help of this Photoshop. I also learned that in order to succeed, you must listen to your users, but you don't need to do all what they want. You also need to know what are their needs, so that you can give them what they need. I also learned from them to be passionate in something that you are doing, if you don't like what you are doing, you better stop what you are doing, because it will lead you nowhere. Lastly, I learned from them that when you are already successful in your product, don't stop doing or creating other products, because life goes on and technology is a fast cycle. Every minute and

every day, there is a new technology created, that's why you have to continue what you are doing, not only for yourselves but also for the good of the customers.

Adobe is a very helpful company, and many people are already loyal and are using their products, especially graphic designers. They also gave the opportunity for ordinary people, to create extraordinary things, which make them very successful and popular, throughout the years.

Open Systems, Hummer Winblad

Ann Winblad is the Cofounder of Open Systems and Hummer Winblad. She started an accounting software company, which she called Open Systems on the year 1976. On the year 1989, she cofounded Hummer Winblad Partners, is the first venture who focuses on software.

Ann Winblad started off her career as a college, wherein she was given the opportunity to study. Her father is only a teacher and her mother is a nurse, and she has 4 siblings, which makes it a little harder to go to college. But she was given the opportunity, when schools picked students with top SAT scores and grades, which also let her not take prerequisites. This opportunity allowed her to go to other classes, like accounting and computer science classes, where she learned many things. She also got a double major, in mathematics and business accounting. But even though she already learned many things, she still felt naïve, for the reason that, during their time there is no internships and they don't have international travel. Even though she felt naïve, she still felt empowered, for she things that she is equipped. After she finished college, she worked at Federal Reserve Bank, wherein she studies her masteral during at night and on Saturdays. She then became the second woman who had a Masters degree at Federal Reserve Banking. Finally, she got somewhat bored of what she was doing in their company, so she decided to create a company, with other 3 colleagues.

She started her company, as a consulting company, but her startup is that she doesn't know exactly what she will do. She got funds from her savings and she was forced to borrow $500 from her brother, because she was short. They became focused then, when they were chosen under the Request for Proposal bid, to build a student accounting system for a vocational school. They learned many things, especially about managing during the building of the project. After they did that project, they decided to create an accounting system for smaller computers. Their knowledge at computer science really helped them to restart their company. There might be many competitors, but they stand firm for they have this market share, which is 100 percent available to everyone.

I learned many things from this story. I was first briefly introduced in the world of business, wherein it is not all about earning money. I learned from Ann Winblad that you need to have experience and skills to be able to do something great. I also learned from her, is that the business leader's role is how to teach and not tell. This is also applicable to students. It is like a teacher's role, which is to teach them to do something, but don't tell them how it is done. They have to figure it themselves. Lastly I learned that in order to succeed, you need to have tactics, and when you form tactics, you can form strategy and you need to have that, to know where you are and what is the stand of your company, and how you can make your company successful.

Open Systems was sold six years after it was created by her cofounders at around $15 million. As of now, Ann Winblad is considered one of the most powerful woman in venture capital and she has proven herself through the projects that she made

37 Signals

David Heinemeter Hansson helped 37 signals to transform from a consulting company to a product company on the year 2004. He wrote Basecamp, the company's first product, which is an online project management tool. He also created, one of the most popular web tools, which is the Ruby on Rails.

37 signals, was a web design shop and it was founded by Jason Fried, on the year 1999. Thru the creation of Basecamp, from a consulting company, it transformed to a product company. Basecamp was launched on February 2005 and it started off as an internal tool to help them manage their client work, so it was not prioritized. Basecamp was basically one step ahead of e-mail. They only picked simple things at Basecamp was a project weblog, milestone tracking, file and to-do list sharing. It was used by people for all kinds of projects, like managing weddings and home improvement projects. They didn't spend any money in advertising when they launched. They still earned money, through subscription of users. On your first sign up, you can avail to manage a single project for free, but if you want to use it again, you can avail of the paid version which allows you to manage 3 projects. So it goes like this, from not paying anything up to paying. Also users have the chance to see whether if they really like to use the product or not. They can use Basecamp for two months, and if they don't want to, they can cancel easily. Another of the success of Basecamp in advertising is that they post it on Signal vs. Noise, a blogsite that they created, to show some previews of Basecamp. Through this, they were also able to communicate with other companies. They also gives major updates 30 days after their launched of the product. Also, their strategy of releasing fewer softwares at a time has given them success. They decided, that they should release fewer softwares, so that the users can appreciate it more.

Ruby on Rails was created by Hansson, which is a layer of software that can be used to create open source web framework. He also created it so that it can allow him build Basecamp and drive this project in a way that he wanted it. He just figured out that he needed tools that can allow him to keep the constraints he has. Ruby on Rails was created out of an environment who focuses on the productivity. He encorporated Basecamp with Rails, wherein there is a tool in Basecamp that can also be seen on Rails. A few months after Basecamp was released, Ruby on Rails was released.

I really learned a lot from this story. I first learned that as a programmer, create a program that is simpler and that is open for everybody, because that's what makes the users love your product. I also learned from them that you don't need to always launch a new product for the company. I also learned from them to keep on doing what you are doing and don't stop. When you already created something and it became successful, you should not stop in developing it, do your best to show to the people that it is still alive. Lastly, I learned from them that you have to be innovative, and make products that the customers really needs. I also found that their secret in success, is that they make sure that each launch is not the end.

37 signal ha proven itself through Basecamp and Ruby on Rails. Ruby on Rails is really useful and it became the most popular among web developers. It won the Hacker of the year award at OSCON in 2005. It has really proven itself, and as of now it is still running and many users kept help but love it more.

ArsDigita

ArsDigita was founded by Philip Greenspun in 1997. It grew out from photo.net which is a famous photography website. He released the software under an open source license and was soon deluged by requests from big companies for custom features.

It started off when Greenspun created photo.net, wherein he created a community where people asks and answers questions about photography. What he did is almost the same like SAP, which is a toolkit for building corporate accounting systems. But the one he did is a toolkit for building an Internet application. What he did is a free open source thing that makes things general and is easy to install. Big companies started calling and wanted them to do the software, so they decide to form a group and create a company. The toolkit become more and more popular and customers keep on wanting it more. According to him, people keep on creating things based on the specs, and not what the customer wants. They also tried to help programmers to develop an independent professional reputation. He also has a dream that there will come a time where programmers can become real engineers. Wherein they will not just rely to the specs given to them and do it, but the have the chance to talk to their customers and they can tell what they want and they can design for them. He doesn't want programmers to sit at the corner, and do what they are told them to do. In programming, it is not only a matter of coding, but also a matter of designing.

They were doing well with their company until they accept VC money. Their first choice, is a VC that is not popular, but gives them the rights to manage the company. The second choice, is a company that is popular, but doesn't allow them a total rein over the company, and they chose the latter. They encountered many problems. Just a few weeks after they signed a contract the VC decided to hire a new CEO and that CEO, hired his friend as a CFO. Both of them haven't managed a company yet, and it is their first time managing a company, which causes a disaster. The CEO doesn't know how to manage a company and the CFO doesn't know how to deal with numbers. Greenspun, already told it to the board, but nobody wants to listen to him. They also fired him after he said that. So he decided to file a lawsuit against them. While he was not at the company, the company already experienced, a great loss in profit and they realized that the cause of that is the CEO, so the VC fired the CEO. Finally, Greenspun reclaimed the rein of the company. He stopped managing the company and just became a shareholder in the company.

ArsDigita is still running and is still growing its popularity. Greenspun is still a part of the company, and he's doing some projects there.

I learned many things from this story. First is that, programmers should not just code what it is given to them, but design products based on the customer wants and needs. I also learned that there is really a great risk in accepting VC money and it can result to a lot of problems. Lastly, I learned that in hiring people, you should not hire them, because they are close to you, you should hire people who are qualified to do the job.

Fog Creek Software

Fog Creek Software was founded by John Spolsky and Michael Pryor, who were friends on Juno Online Services, on the year 2000. They initially don't have any specific software on mind, but later on, they decided to make a software company, wherein the programmers can be the stars. They also became popular, because of Joel on Software, which is a blogsite that teaches people about software.

They started having this Philosophy of making the programmers the star of their company, when he realized that there are a lot of companies hiring incompetent people, who got really high salaries, but doesn't get work done.

Fog Creek Software got started as a consulting company, and Spolsky and Pryor rented an apartment that can serve as their office. Spolsky left Juno Online Services and while he's on a vacation, started writing Joel on Software. On November 2000 the market disappeared, and there is already no profit in consulting. They saw that there will be no more market in consulting and they didn't have that much problem in changing their field from being a consulting company to a software company, because they only hired a few consultants and they really want to become a software company. The first program that they created is FogBugz which is an internal bug-tracking application, which later on they began selling. They had this plan of creating a family of three applications that work together. But the other 2 applications didn't work out. In spite of the failures of the 2 applications, they decided to launch FogzBugz. Through FogzBogz, they have enough money to keep going on their company. They also didn't take money from investors; they got money from Spolsky's savings. After launching FogzBugz, they decided to launch another product, which is part of the family they wanted to create for software, which is the CityDesk. While FogBugz is growing and growing, this product was not successful, for the reason that, they misinterpreted some things and it was not a big hit. FogzBugz kept on increasing prices and kept on adding features and they really get many customers. Email bugs of customers can be spam filtered automatically, and they can also set dates. They were a simple company, because they will really not give up, and as long as they can eat and pay their external obligations, they have the confidence that they will survive.

Spolsky observed that in most companies, they don't have a pleasant working environment, which is very crammed and crowded. He also didn't like the way the employees were treated, especially developers. According to him, developers didn't get that much respect from companies. They were not considered as hotshots at organizations. Working in an unpleasant environment, according to Spolsky is not a fun thing to happen. So he made a change. He created a very good working place for employees which encourages them to work more, and to attract more employees.

FogzBugz is a complete management system which helps managing teams and help teams to communicate. Fog Creek Software also has 2 other softwares, which are, the Fog Creek Copilot, which allows users to help their friends or relatives to fix their computer problems via internet. The other one is the CityDesk, which is a website

editing program. Fog Creek has Proven itself through the years and many users keep on using it for its reliability.

I learned many things from this story. First I learned about the strategy of most companies nowadays, is creating a blog and advertising their product in their blog. I also learned that in order to create a good company, you must provide a good workplace, which can result to good productivity. I checked on the website of Fog Creek, and I saw that they really had a huge and very nice workplace, wherein employees would want to work in that company. Lastly, I learned from them that developers weren't treated as big people in the organization. What I thought that they accept large respect, but what really happening is the other way around. I hope that this will change and organizations will come to realize that developers can do so much, which can come to the point that they can change the world.

TripAdvisor

TripAdvisor is an online travel site that allows users to post their comments on the place that they went to. It was founded by Stephen Kaufer together with Langley Steinert, Nick Shanny and Thomas Polka on the year 2000. They launched TripAdvisor on October 2000. His philosophy is to create a travel site that provides unbiased and useful information for travelers.

The idea on TripAdvisor started off when Kaufer and his wife tried to look for a place where they can spend their vacation. They go to a travel agent who gave them a hotel to stay in and an island to visit. Kaufer started researching about the place and the hotel. He found many websites that gets reservations for this hotel, but they don't have the info if this hotel is good or not. They do not have previews of this hotel, which is very important so that guests could know whether if the certain hotel is their preference or not. After some thorough research he found a chat room and he found out that the island they were recommended to was not safe. So they change to another travel agent and recommended a hotel. From the brochure, he can see that the hotel is really beautiful. He researched again and he later on found out from the comments of the people that the hotel wasn't that good. He then spent a couple of days researching about the real scoop of the hotel. His wife then suggested to him to create a search engine wherein people can find what they are looking for when it comes to traveling. A search engine where unpublished and unbiased opinion of a certain place, location and something to do can be found. He decided then to start a company. He gathered his friends and they stayed at his late's wife software company, as an office. Their plan is that they will become a search engine just like Google, but their main focus is on travel, destinations, hotels and attractions. Their difference from other websites is that they are going to book you on a hotel like other booking sites do, but they will provide you an opinionated information about that hotel, if that hotel really passes your preferences or not. They also really worked hard for this website; it requires a lot of research. They'd find articles from the New York Times, Boston Globe, LA Times and local newspapers. They manually check websites for free access of back issues of travel magazines. Another thing that is good about their website is that it is not keyword-based. You can find the relevant topic and everything about that topic. It doesn't matter if the article mentions something, it doesn't search for word by word, but it searches the content of your search. As the site keeps on growing articles was flooded by user reviews that their visitors generated. They also began earning money, because they sell their databases to travel portals and online travel sites. By the middle of September 2001 they had problems regarding funding. He thought of creating a Banner Ad. But he realized that Banner Ad was not their business model. But from that Banner Ad, an idea struck him. Wherein they will create a link at TripAdvisor, to Expedia, and they will post a teaser text that will advertise Expedia. When the user clicks that link, it will bring them to Expedia's booking page. That was a very good idea and they approached Expedia and they told them that they want to advertise their 50,000 hotels on TripAdvisor. Expedia didn't agree that easily, and they told them to prove it. So they prove it and they run the advertisement for free for the past few months. Finally they accepted the offer

and they paid them $10,000 for licensing them. Comments from the users who already went to that place helped a lot in making the site useful and unbiased. This is the factor that helped them to become successful.

TripAdvisor is still a running site today, and it already attracts 30 million users a month. It is a website that was created to really help the users, not just for money, but really providing useful information for them.

There are many things I learned from this story. First I learned about the site TripAdvisor. I am a person who wants to travel, and this site is really helpful for I can really find information on the place where I will be going, places to visit and hotel accommodations. It is all packed in one and you can also see comments of users which can really make you decide if you want to go to that place or not. Second I learned from this story is that when you do a startup and your startup is already successful, do not spend so much money, because you will never know what will happen to you, if you will lack funds or what, so you have to spend as little money as possible. Lastly, I learned from Stephen Kaufer that you should not be too attached to your vision, because it can change on the course of your startup. You should be ready for the changes when it happened and do not be disappointed and face it.

Hot or Not

Hotornot.com, is a website whose purpose is to rate a person's attractiveness or what they so called "hotness". It was founded by James Hong and Jim Young which initially was just for fun. It was launched on the year 2000. The site spread so fast that they easily got many users clicking on their site.

Their idea on hotornot started when Hong together with his brother and Young where drinking and Young said that he met a hot girl which was a perfect ten. An idea popped into Hong's mind, wherein a user can post a picture and people would rate that person's hotness from 1-10. It was initially made just for fun, so they don't rush in doing this program. They had the idea one Monday and they finished coding it by Thursday. It was not that hard for them, because whether this site fails succeed or fails, they won't lose a thing. Finally they launched it, and they put their pictures so that people can rate it. He then sent 40 emails to their friends and he went rollerblading at a big office park to tell them about their site and by the end of the day they got 40,000 hits.

As the site is growing, problems began occurring. The first major problem that they encountered was that there are many users, and their bandwidth is small, which causes traffic. Their system is also slow, and it's going to cost them $150,000 for the bandwidth per year. So they thought of a way to keep the site running. First what they did is that they get rid of the picture which is their biggest problem. So what they did is that they let Yahoo host their pictures. What they did is that they created a Yahoo geocities account and they'll FTP the pictures to it. Finally it solved the problem, although they lost some users.

After solving the problems with bandwidth, they decided to sign up for an ad network, but they encountered another problem. People kept on posting porn and naked pictures on the site. They have this motto that up to now they are still keeping which is "Fun, clean and real". So the solution they find was to get moderators that will monitor the ads. Their first moderators were Hong's parents, but porn pictures keeps on coming and he doesn't want his parents to see them anymore, so he thought of another plan. So he decided to create a community for moderators to public. You have to write an essay and apply to get into this community. The responsibility of the moderators is to reject pictures that were inappropriate, looked like an ad and had contact info. And people started sending them emails that they are meeting people. The idea Meet Me started from these people's emails.

Meet Me is a feature of hotornot which is like a dating site. It allows people to meet people. The user has to be active, and what they need to do is to post an ad and wait for emails from people. So they start having business from meet me system. They charge $6 per month so you can become part of the meet me system.

Hotornot is a site that is still running and is still an independent company. It has already many users and millions of users are going there a day. It has proven itself throughout the years. What turned out to be a site just for fun, became a site that earns money.

There are many things I learned from this story. First is that I learned about file hosting. I don't know the concept of file hosting and FTP before, but after reading the article, it became quite clear to me. Second, I learned from Hong that if you earned a money, spend that as if it is your own money, and you have none, so that you can spend it wisely. Lastly, I learned from him that there is no right path. You have to figure out things for yourself, because not everything you plan can happen.

Tickle.com

Tickle.com was founded by James Currier on the year 1999. It was first called Emode.com. It was created after Currier took a personality test on one of his classes on Harvard Business School. He is a person who has interests on media and social sciences, that is why tickle.com was made. After Tickle.com was bought by Monster on the year 2004, he created a new project which is a technology greenhouse for developing 4-6 consumer Internet businesses simultaneously, which is Oogalabs.com.

The main reason he created this startup was that he doesn't see a site where people can know more about themselves and a site where people can know more about each other. His idea to create a site where people can know more about themselves gave him the motivation to create this site. There are many media websites, but none of them gives the users the opportunity to know more about themselves as well as connecting with what other people thinks. It is a site that is entirely new, because a user will have to answer tests and at the end you will get a result which indicates what kind of person you are. People love this site and keeps on using this site, because the results comes from psychologists and experts. It is also a site, where most of the participation comes from the users, they can post quizzes or tests for other users can answer. Users can also rate the quizzes and tests. They can also post their comments on the said quizzes or tests. It is also fun to use, and it is really helpful because people can know more about themselves. What people wanted about this site is that it is a site where people can find out more about themselves and they can also relate to the results that they got. It created an impact in the world of dotcom, for it is the first site that gives users tests and provide them results coming from experts, which is more personal. It gave the users the space to know more about them not about the people who are already know. It was influenced by other site such as iVillage.com and Women.com, which are media sites that gives users information about certain topics. While Broadcast.com, is a popular site during that time which is a radio on web, it was obtained by yahoo and it became yahoo radio. It also influenced the startup, because it gave Currier the motivation that these sites are being acquired for millions but they are providing senseless services to users. It is also a site for the masses for anyone can use this site. As long as you have internet access and an email address, which almost everybody has, you can take the tests in this site. This site is also useful and can really help people get more understanding about them.

If I were in the founder's shoes, I would say that instead of selling my startup, I will continue and develop it. I will also provide a demo wherein a user can answer a sample test and get a result, so that they can find out if it is a really good site. I will do the same with hiring experts and psychologists, for they can really understand the user's thinking and behavior and it is more reliable.

I learned many things from this story. I learned that Tickle.com is a site that provides self-discovery and social networking service. It is a place where people can

interact and know about themselves. I also learned Tickle.com is a very interesting site because it allows users to take tests and know about themselves, as well as creating quizzes for other people to answer.

Tickle.com is a site that allows users to experience self-discovery as well as share their thoughts on certain experience. They can also be helped by experts and psychologists to support the tests that they created. It helped many people and will continue helping in the years to come.

Firefox

Mozilla Firefox was founded by Blake Ross and David Hyatt. They didn't plan to make firefox as a startup, at first it was just a side project but later on, people started liking this project, so they continued developing it. After the success of Firefox, David Ross together with Joe Hewitt, they created the Parakey, which is a web based computer interface, and it has the ability to do everything that an OS can do.

Ross decided to create Firefox, due to the experience he has with browser while he was working as an intern on Mozilla. During the time of his internship, the project of Mozilla is Netscape, and they are really doing their best to revive it. From what he observed, the culture of Netscape doesn't focus on users. There were Search buttons everywhere and advertisement scattered on the page, which is really a mess. So together with David Hyatt, they decided to create a browser that is user friendly and is easy to use. What they created Mozilla Firefox is really something new, but it got its influence from Netscape.com. The improvements they want to put on Netscape that they can't apply, they applied it instead on Firefox, which is that time, just a side project of them. It turned out that Mozilla Firefox is the proposed system from Netscape. Netscape is difficult to use so they had this vision of creating a browser which is small, simple easy to use and will be loved by the masses. Mozilla Firefox became a sudden hit and people love using it, because it is a user friendly browser and it is for free. All you need to do is download the browser from the site. The reason why the people loved the browser, it that it is a tabbed browser, which allows the people to view multiple websites in one window. These are the characteristics that make the Mozilla Firefox unique from other browser. It is also a simple, fast and reliable web browser. It is also for free, that's why people love this browser. Another thing is that Mozilla Firefox can be used by anybody, even from third world countries, for this browser is really made to serve the masses. All you need to have is a computer and an internet access so that you can download it and it is for free, so anyone can avail of this service. If I would be the founder, I would get the user's opinion through comments and suggestion, so that I can know what I can improve in the system. I will also do the same with creating a website like the Spread Firefox, which can really promote the browser that I created.

I learned many things from this story. I learned that Firefox was the first browser to have tabbed features. This gave the users the ease to open many sites at one window, and it is more convenient and can lessen confusion. I also learned of the marketing community of the Mozilla Firefox that the founder created, the Spread Firefox.com, whose aim it to promote their product through the spread of word, from the users and other people who visited it. I also learned that there are other browsers available besides Internet Explorer and Mozilla Firefox.

Mozilla also focuses their attention to Firefox and Thunderbird until today. Mozilla Firefox has proven itself through the years, and many people keeps on loving and using their browser. It is proven, because according to the website Spread FireFox.com, Mozilla Firefox got a place in the Guinness book of records with most number of downloads within 24 hours. There are also 8, 002, 530 people who downloaded Firefox 3.0.

Six Apart

Six apart was founded by Mena and Ben Trott, who are a married couple. They got their name six apart from the number of days between their birthdays. Mena and Ben Trott are together, since they were in highschool, which makes them apart from the outside world. They have been focused on each other, and it resulted to them having no friends. Mena Trott wanted to have friends so in her desire to have friends, she wrote her personal blog which is Dollarshort, so that she can meet new friends online, and it grew rapidly.

Typepad and Movable Type was created due to the dissatisfaction that Trott got from blogging softwares available during their time. It was their dream, since they were in highschool, which is to become a web design company and that is their motivation, to create their startup. They first created the Movable type, which has a professional blogging tool, that other blogging site doesn't have. It makes blogging more fun, because you can customize it. But you still need knowledge about coding using HTML, CSS or movable type tags. There is no graphical template available. So they created Typepad, which is much easier to use. It has a graphical interface which allows users to customize their blogs by clicking on the templates available. Users can also upload pictures and albums in their blogs easily. People kept on using typepad, for it is much easier to use. Users don't need technical knowledge to use this service. Typepad is created for people who just want to blog. It takes blogging to another level.   This startup has a huge impact on internet for it brings blog to a much higher level which makes bloggers love more. Blogging become more fun, and other websites also uses their services. Mobile blogging also become available, which makes blogging more accessible to users.

What makes their services different is that, it allows users to create their blog, which looks like their own site. It also allows users to customize their blog. Which is not done before with other blog services available and it is also offers blogging tools for the convenience of users.

If I were in the co-founder's shoes, I would not change licensing the software from time to time, because changing often would confuse the users. I would still do the same thing which is promoting the my services on my blog which is already popular. By doing this, many people would view my service, which what happened in their blog. I will also think for the benefits of the users. I like what they did with movable type and Typepad. They created alternatives for people. If the user doesn't know about html, CSS or coding, they can user movable type. But if the user doesn't know anything about coding, they can use typepad which is applicable for people who doesn't have knowledge when it comes to coding. They can just click and drag the items that they want to put in their blog. It is also possible in Third World Countries, for it is web-based, and anyone who has internet access can use their services. It is simple and user friendly which makes it easier for other people to do blogging and enjoy blogging at the same time. It also allows users to add photos and albums. It's services like the movable type can be used by businesses and companies, to create and manage sites.

I learned many things from this story. First I learned that most websites that contains blog uses Typepad, an example of that is friendster. I also learned that when you are creating something, it can be used by everybody. Like what they did, they created Movable Type, which can be used by bloggers with technical skills and Typepad, which can be used by people without so much technical knowledge.

After the flourishing successes of Movable Type and Typepad, they created another application which is Vox (formerly known as Comert) which is a free social blogging service, which is launched on the year 2006. Movable Type and Typepad are still running. Friendster uses Typepad for their blogs and last July 2008, Steve jobs announced that Typepad will be available for iPhone.

Lycos

Lycos started its journey on the year 1995, with the creation of a search engine technology created by Michael Mauldin. It was then sold to Dan Nova, who happens to be the friend of Bob Davis, who became the founder , CEO and the first employee of the company. He is not a part of Lycos anymore, for he is currently the managing general partner of the venture capital firm, Higland Capital.

Bob Davis worked as the VP sales for an old line technology that sells memory for big IBM mainframes, which according to him was a very unexciting job and he was not happy at all with his job. So when Dan Nova called him and they talked socially, Dan Nova said that he is putting a deal on the technology on Carnegie University, which was the search engine, and he doesn't have a CEO, Davis said he wanted to become the CEO. From there, they started developing the search engine. They started making this startup, because they know that the search engine that Michael Mauldin created, can go a long way and that it can be turned into business. The problem that they found was the search engines available are difficult to use, because it cannot found exactly what they are looking for. While the Lycos search engine can track what you are looking for. It is also an improvement of the search engine, for there are more features added. People kept on using this startup, for the reason that it is very easy to use, and it gives people a glimpse of what internet can do. It can sort of give them an introduction how internet works. It served as the internet on training wheels. It also became the fastest IPO in the NASDAQ ever and it can be considered a huge impact on internet. Evolution of search engines became a very huge impact on internet, unlike directories, which is used before that they have to track information, before you can find what you are looking for, unlike search engines that when you type a word, you can see what you are looking for and other relevant topics. It is unique for it combined search engine and media. It also hosts sites, and it also allows users to build their own site. It also provides search and navigation, as well as tools for blogging, web publishing and hosting, video sharing, social networking, games and email.

Lycos can be considered the proposed system for the search engine technology created by Michael Mauldin. It is also one of the original search engines created and the first to change the course of searching and internet. It can also be considered as a proposed system for Yahoo, because during their time, yahoo is using directories instead of search, wherein you really have to find what you are looking for by clicking until you find what you are looking for.

This startup is very easy to use that whatever your age is you can still use it. It is easy to use, and it is also considered as a media site. Wherein, most of its features allows media access easily. You can create your own website without any technical knowledge. Users can also play games and upload a complete playlist of videos. Lycos also hosts sites which allows more accessibility for people.

Lycos was first sold to Terra Networks and after a few years, it was sold to Daum Communications Corp. which is the 2nd largest internet portal in Korea. It is still running and it has added more features. It has gameville, which allows users to play online. It also has Lycos Mix, which allows users to compile their videos in one playlist, and it allows multiple users to view videos and chat simultaneously. Lycos has proven it self through out the years and it is still thriving to give users the service they are looking for.

Alliant Computer/ Shareholder.com

Alliant Computer Systems was a company building parallel supercomputers. Building machines that uses multiprocessing system to achieve high performance that can rival the fastest single-CPU machines that can be transparent to developers, was the the goal of this company. It was founded by Ron Gruner, Craig Mundie, and Rich Andrew on the year 1982. Gruner left Alliant computer on the year 1991 and created a company of his own.

Before Gruner left Alliant Computers, he worked in Data General on the year 1969 and he left on they year 1982. His background focuses on computer design. After he left Data General, together with two other co-founders, he started Alliant Computer Systems. The system that they created is a very complicated system and it took them three years before it was launched. According to him, High-performance computers are commodities and they are late when it comes to the next generation of computers. More computers faster than their computer is coming out, personal computers and workstations, and they started having problems, and Ron Gruner has misunderstanding with the other decision makers, and that's the reason that makes him retire and leave the company.

After leaving Alliant Computer, he decided that he wanted to shift his career from focusing to computers to being an entrepreneur. According to Gruner, he wanted to build a business that had a recurring revenue stream and from that idea, a couple of things happened until he come up with shareholder.com. Before he come up with shareholder.com, he has three things he wanted to do, before he started establishing the company. First, he wanted to devote 98 percent of his time to his customers. Second, he wanted to start with a small amount of capital that gives opportunities for other companies. Lastly, he wanted to establish a company that will be solely owned by him. He finally decided to go into the fields of shareholder communications. Before, when stock had a bad hit, companies would receive many phone calls, because during their time, e-mails are not yet available. Also, in the early 90's companies were still used to sending printout reports on stocks. He wanted to create a technology that can connect the shareholders, so that the can communicate, through that vision, shareholder.com was born. This startup was a solution for printout reports or reports from phone calls, through shareholder.com, it is much easier for stockholders to be informed in their stocks. This startup has contributed a lot in the history of internet, for it showed the association of technology to business and finance and opened a new way to do financing and share holdings. This startup is also possible for third world countries for this uses internet, and businesses uses this type of application so that they can communicate easily and get informations about stocks. This is the a first during their time, for it uses internet to allow shareholder communications, it is somethins that is never done before, and because of its success, other companies, that offered almost the same services popped out like CCBN who became their arch rival. Even though there are many competitors that popped out, they still have proven that they cannot be shattered by these companies.

90

As of now shareholder.com is still running and it was sold to NASDAQ on the year 2006. After their creation of shareholder.com and the acquisition of NASDAQ to shareholder.com, he created Vallex Fund on January 8, 2008, whose aim is to encourage and invest in new companies focused in improving the efficiency and effectiveness of litigation system.

I learned many things from this story. First I learned about shareholder communications, which can also be considered an important factor in a company. Second, I learned that when rough time come, don't panic but do something and turn that negative situation to your advantage. Lastly, I learned that when you make a software or a technology, it must suit the people you made it for.
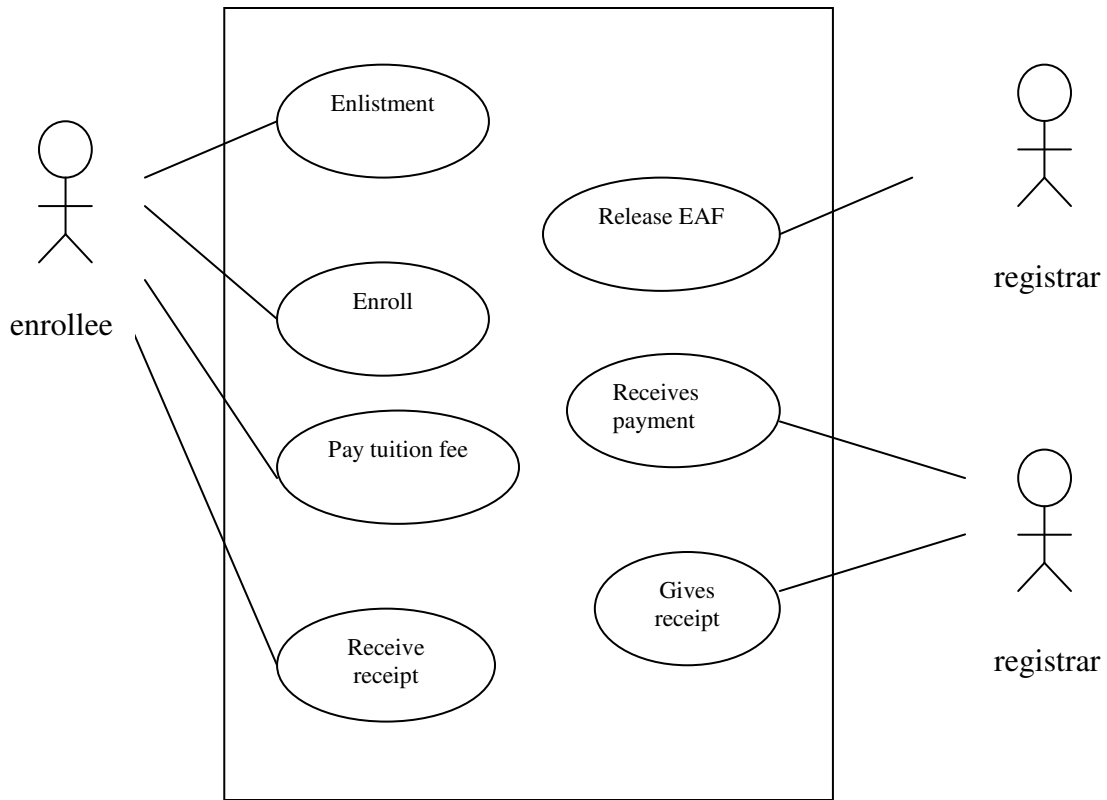
Enrollment at CSB

Identification Summary

Title: Enrollment at CSB

Summary: This use case shows the enrollment system at De La Salle-College of Saint Benilde.

Actors: Enrollee, Registrar and Cashier   **Version:** V.1

Creation Date: May 4, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

Preconditions:

1. Enrollee must enlist before enrollment
2. Enrollee must have an EAF
3. Enrollee must have money to enroll
4. Cashier must have receipts

Main Success Scenario:

1. The Enrollee enlisted for the subject he/she wants.
2. The Enrollee gives the EAF to the Cashier.
3. The Enrollee pays the tuition fee at the cashier.
4. The Enrollee receives the receipt.

"Alternate Sequences:

A1: Enrollee forgot his/her EAF

A1.1 The Enrollee can reprint his/her EAF at the registrar.
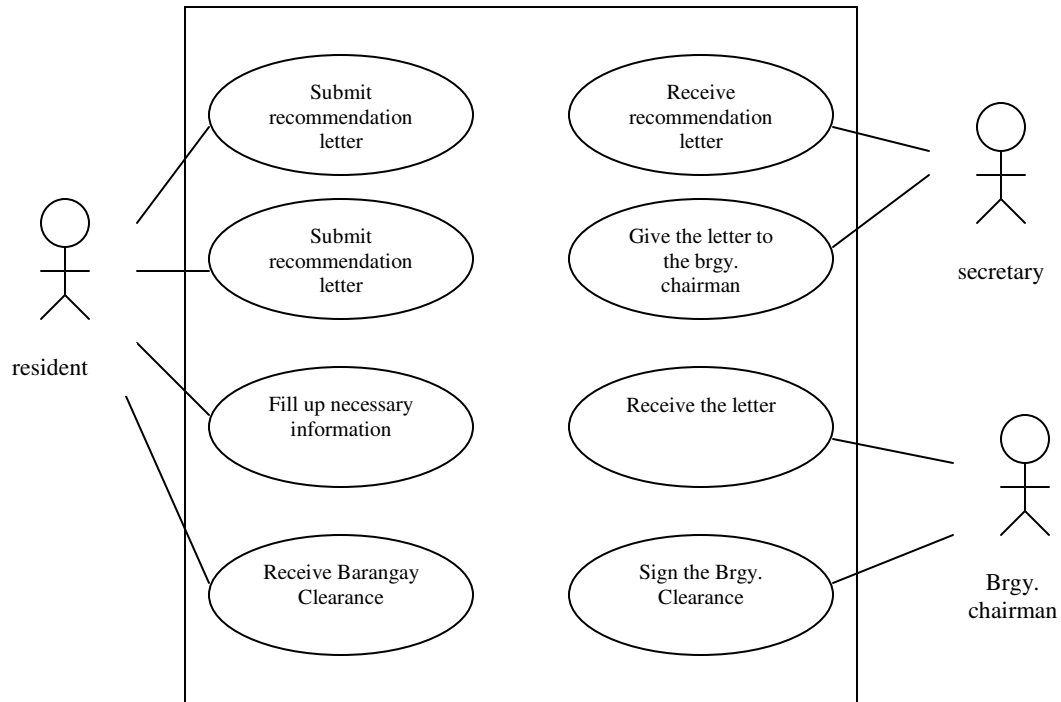
Getting a Barangay Clearance

Identification Summary

Title: Getting a Barangay Clearance

Summary: This use case shows the procedure in getting a barangay clearance.

Actors: Resident. Secretary, Brgy. Chairman **Version:** V.1

Creation Date: May 12, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

Preconditions:

5. Resident must have a recommendation letter.
6. Resident must know where their Barangay Hall.
7. Resident must have a valid ID.
8. Secretary must ready the clearance certificates.

Main Success Scenario:

5. The Resident submits the recommendation letter.
6. The Barangay Chairperson signed the Barangay clearance.
7. The Resident got the clearance.

"**Alternate Sequences:**

A1: Resident is only living in an apartment

A1.1 The resident needs to submit a letter approved by the landlady or Landlord.

Error Sequences:

E1: The resident has criminal records

E1.1 The Barangay Chairman will not sign the clearance because the resident did something that is against the law and has been jailed. Use case fails.

E2: The Barangay Chairman is not at the office

E2.1 The Barangay chairman is the one responsible for signing the clearance if he is not around, no one will sign the clearance. Use Case fails.

Postconditions:
1. Recommendation letter will be kept by the secretary for records.
2. The number of clearance certificates will be lessen.

UI(User Interface) Requirements (optional)
- Recommendation letter
- Valid ID
- Personal Appearance

Non-Functional Requirements (optional)
- The Barangay Hall are closed on holidays, so people are not there as well as the Barangay Chairman.
- The resident living in an apartment, should have stayed there for at least 6 months to get a barangay clearance.
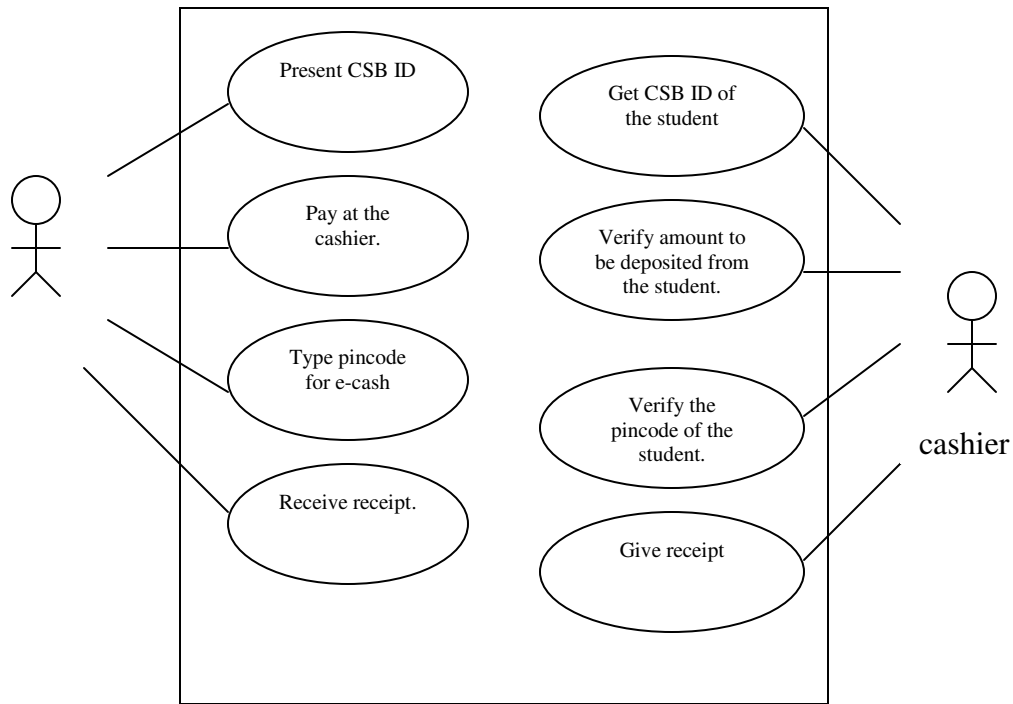
Opening an E-purse account

Identification Summary

    Title: Opening an E-purse Account

    Summary: This use case shows the steps in opening an e-purse account at De La Salle College of Saint Benilde.

    Actors: Student and Cashier **Version:** V.1

    Creation Date: June 18, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

        9. Student must be enrolled at CSB.

        10. Student must have a valid CSB ID.

        11. Student must have money to open the account.

        12. Cashier must have receipts.

    Main Success Scenario:

        8. The student presented the ID at the cashier

        9. The student pays for the account.

        10. The student put the password.

        11. The student opened an e-purse account.

    "Alternate Sequences:

        A1: Student typed a pincode less than 6 or more than 6 characters

        A1.1 There will be an error message and the student has to type the
            pincode again.

    Error Sequences:

        E1: The student doesn't have a valid CSB ID

            E1.1 The student cannot open an account unless he/she presented a valid CSB
            Id as a proof that he/she is enrolled. Use Case failed.

        E2: The System of the accounting office is down.

            E2.1 The money deposited and the records of the student will not be

<div align="center">Recorded. Use case fails.</div>

Postconditions:

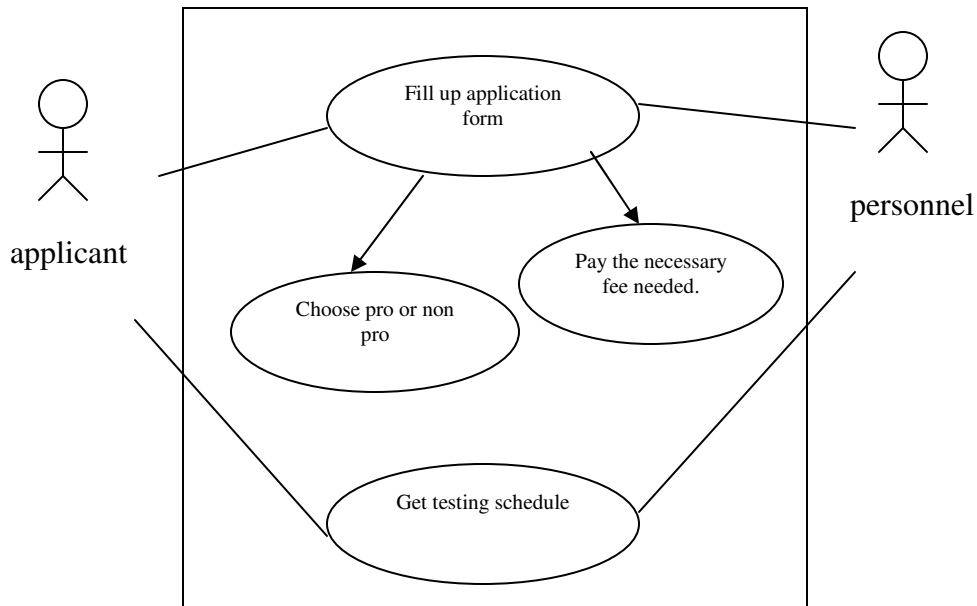3.   The account of the student is recorded.

student   The pincode is saved.

5.   The number of receipts will lessen.

UI(User Interface) Requirements (optional)
-    Valid CSB ID
-    Money

Non-Functional Requirements (optional)
-    You can only put an amount ranging from 50- 2500 pesos. Beyond that, will not be accepted by the cashier.
-    The accounting office opens at 9 am and closes at 5 pm.

Getting a Civil Service Eligibility Exam

Identification Summary
    Title: Getting a Civil Service Eligibility Exam
    Summary: This use case allows the users to get a civil service exam.
    Actors: Applicant and City Hall Personnel   **Version:** V.1
    Creation Date: June 26, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events
    Preconditions:
        13. Applicant must be a Filipino Citizen.
        14. Applicant must have a valid ID.
        15. Personnel should have application form for the applicants.
    Main Success Scenario:
        12. The applicant fills up the application form.
        13. The applicant submits the application form
        14. The Personnel checks the form.
        15. The applicant gets the proof for testing and testing date.
    "Alternate Sequences:

        from
        1a: The applicant forgot to fill out some part of the form.
        2a: fill out the incomplete parts.
        Go back to 2

        from
        3.a: There are errors on the applicant's answer on the form.
        4.a: correct the errors.

Error Sequences:

    from

    1b: The applicant is not a Filipino Citizen.

    2b: Use case fails

    from

    1c: City Hall is closed

    2c: use case fails

Postconditions:

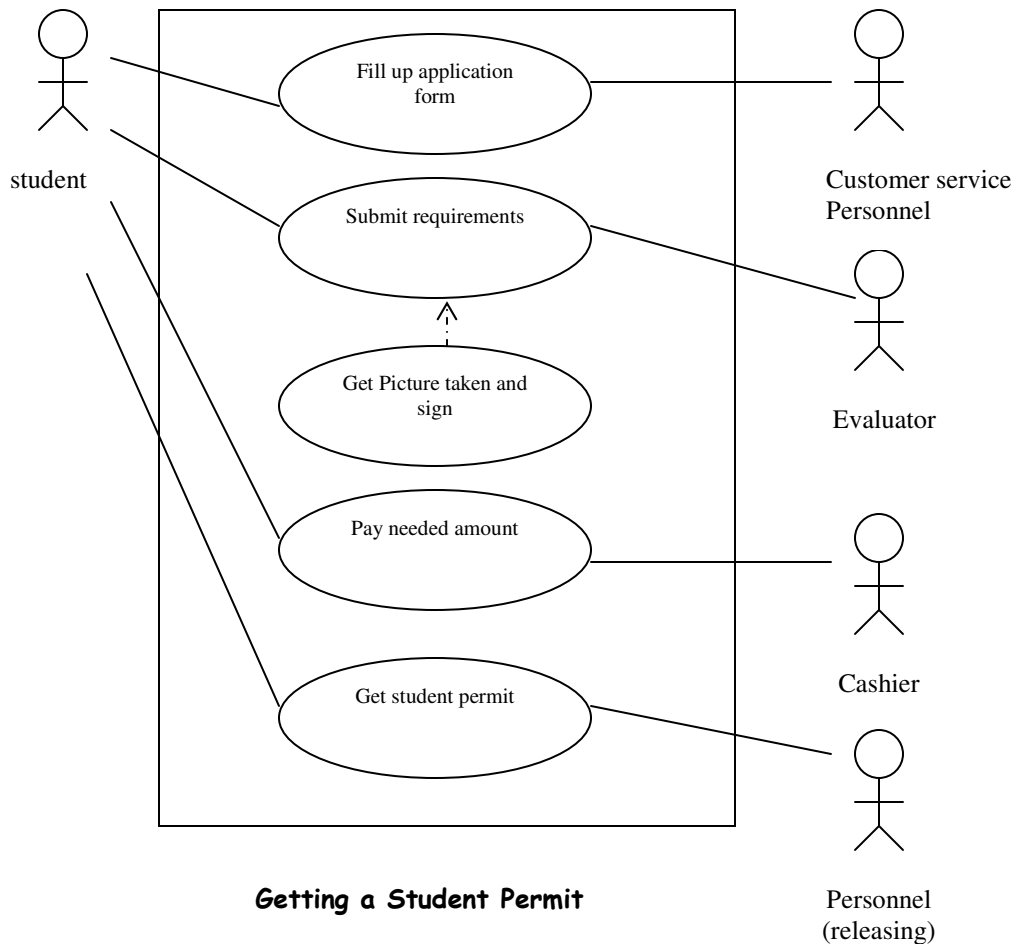6. The application form is filled out by the applicant.
7. Application forms for Civil Service Eligibility will lessen.

UI(User Interface) Requirements (optional)

- Valid ID
- Money
- Application form (input)

Non-Functional Requirements (optional)

- Availability: City Hall is opened only during office hours.
- You can only take the test on the date and time given.

Getting a Student Permit

Identification Summary

Title: Getting a Student Permit
Summary: This use case allows the users to get a Student Permit at the LTO.
Actors: Student, Customer Service Personnel,   **Version:** V.1
Evaluator, Cashier, Personnel (releasing)
Creation Date: June 26, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

Preconditions:

16. Student must have birth certificate
17. Student must have money
18. Student must 18 years old
19. Customer Service Personnel must have application forms

Main Success Scenario:

16. The student fills up the application form.
17. The student submits the application form.
18. The Evaluator checks the form.
19. The student signs and get picture taken.
20. The student pays for the amount needed.
21. The student gets the permit together with the receipt.

"Alternate Sequences:

from

1a: The student is below 18 years old

2a: present parent's consent

Go back to 2

from

2b: The student forgot to fill out some part of the form.

3a: fill out the incomplete parts.

Go back to 2

from

2.b: There are errors on the student's answer on the form.

3.b: correct the errors.

Go back to 2

from

3a: the student forgot to sign

4a: sign

Go back to 3

Error Sequences:

from

1b: The student doesn't have birth certificate.

2c: Use case fails

from

1c: LTO office is closed

2d: use case fails

from

1d: student doesn't have money to pay for the fee.

2e: use case fails

Postconditions:

1. The application form is filled out by the applicant.
2. The record of the student is kept on the database
3. Application forms for Student permit will lessen.

UI(User Interface) Requirements (optional)

- Birth certificate
- Money
- Parent's consent (if less than 18 yrs old)
- Application form (input)
- Student permit (output)
- Receipt (output)

Non-Functional Requirements (optional)

Availability: LTO is open only during office hours.
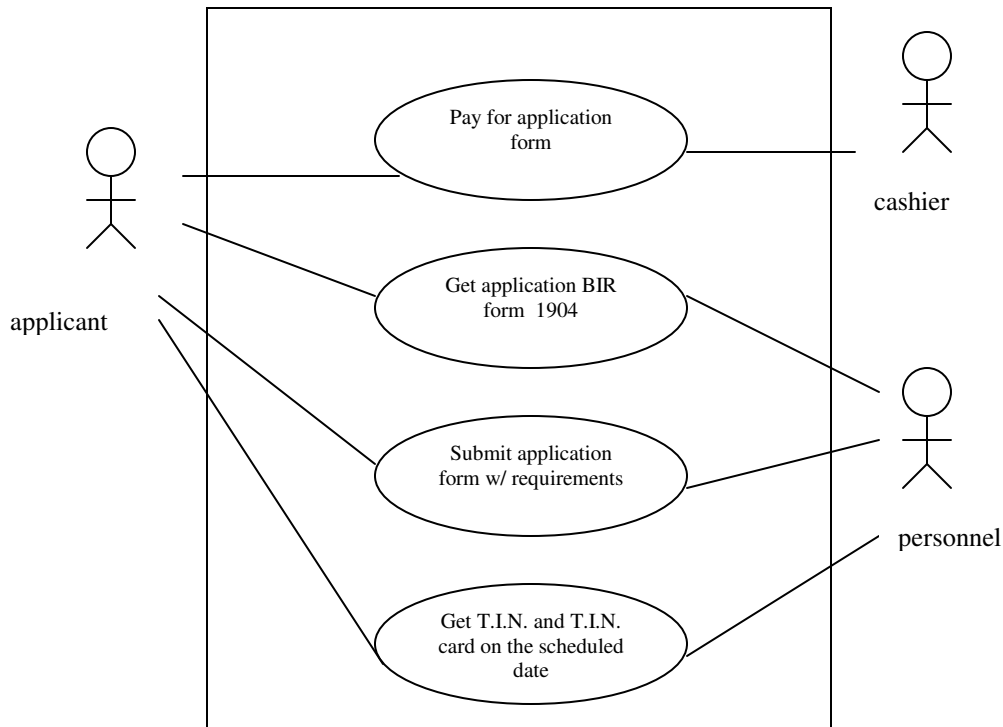
Getting a Tax Identification Number (T.I.N.)

Identification Summary

    Title: Getting a T.I.N.

    Summary: This use case allows the users to get a T.I.N.

    Actors: applicant, cashier, personnel   **Version:** V.1

    Creation Date: July 10, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

20. Applicant must be a resident of the area.
21. Applicant must have a birth certificate
22. Applicant must have at least one valid ID with the applicant's name, address and birth date.
23. Applicant must be a one time tax payer.

    Main Success Scenario:

22. The applicant fills up the application form.
23. The applicant submits the application form.
24. The applicant pays for the application form.
25. The applicant gets the schedule for the releasing of T.I.N. card.
26. The applicant gets the T.I.N.

    "Alternate Sequences:

      A1 :
      from
      1a: The applicant cannot go to BIR

101

2a: use eTin

Go back to 1

A2:

from

2b: The student forgot to fill out some part of the form.

3a: fill out the incomplete parts.

Go back to 2

Error Sequences:

E1:

from

1b: BIR office is closed

2c: use case fails

E2:

from

1c: The applicant is not a one time tax payer

2d: use case fails

E3:

from

1d: applicant doesn't have money to pay for the fee.

2e: use case fails

E5:

from

2f: the applicant doesn't have one of the requirements needed

3a: use case fails.

E6:

From

4a: the applicant didn't get the schedule

5b: use case fails.

Postconditions:

8. The application form is filled out by the applicant.
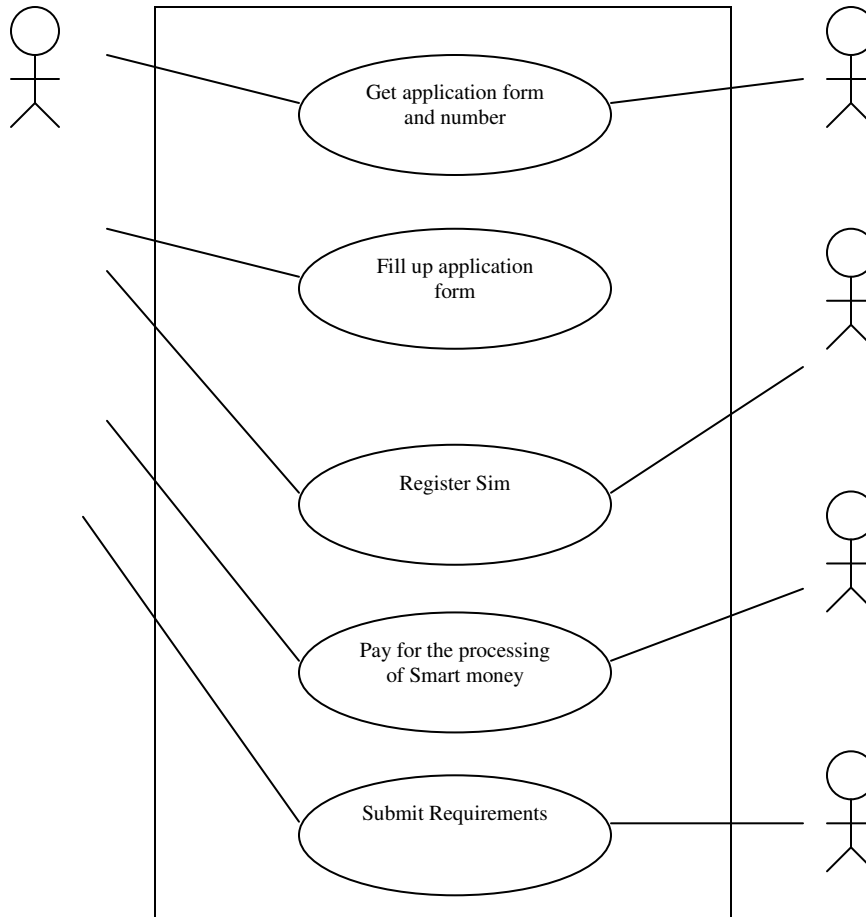9. The record of the applicant is kept on the database.
10. Application forms for Student permit will lessen.

UI(User Interface) Requirements (optional)

- Birth certificate
- Money
- Valid ID with applicant's name, address and birthdate
- Application form (input)
- T.I.N. card (output)

Non-Functional Requirements (optional)

Availability: BIR is open only during office hours.

Applying for Smart Money

Identification Summary

    Title: Applying for Smart Money

    Summary: This use case allows the users to apply to get Smart Money.

    Actors: subscriber, smart telecom system, cashier, Customer Service officer, personnel

    Version: V.1

    Creation Date: July 17, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

        24. Applicant must be a smart subscriber.

        25. Applicant must be above 11 years old.

    Main Success Scenario:

        27. Applicant registers Sim card.

        28. Applicant inputs 6 digit code.

        29. Applicant receives a confirmation message.

        30. Applicant gets application form and number.

        31. The Personnel inputs the name of the subscriber.

        32. Applicant fills up the application form.

        33. Applicant pays at the cashier

34. The cashier transfers the number of the subscriber to customer service.

35. Applicant submits the form with the requirements at the customer service

10. Card will be delivered in your address.

"Alternate Sequences:

A1 : Cannot register sim card.

from

1a: The applicant doesn't have a load.

2a: Load cellphone

Go back to 1

A2: Wrong input of code

from

2b: applicant typed a code less than or more that 6 characters.

3a: type a code exactly 6 characters.

Go back to 2

A3: Number was not transferred at customer service

from

8a: applicant forgot to ask the cashier to transfer his number to the customer service.

9a: get a new number from the personnel.

Go back to 8

A4: Delivery of smart money card

From

9b: Applicant doesn't want the card to be delivered

10a: Applicant will pick up the card.

Go back to 9b.

Error Sequences:

E1:

from

1b: User doesn't have a cellphone

2c: use case fails

E2:

from

3b: The applicant didn't receive the confirmation message.

4a: use case fails

E3:

from

4b: applicant didn't get number.

5a: use case fails

E5:
from
8b: the applicant doesn't have a valid ID.
9b: use case fails.

Postconditions:
11. The application form will lessen.
12. The record of the applicant is kept on the database.
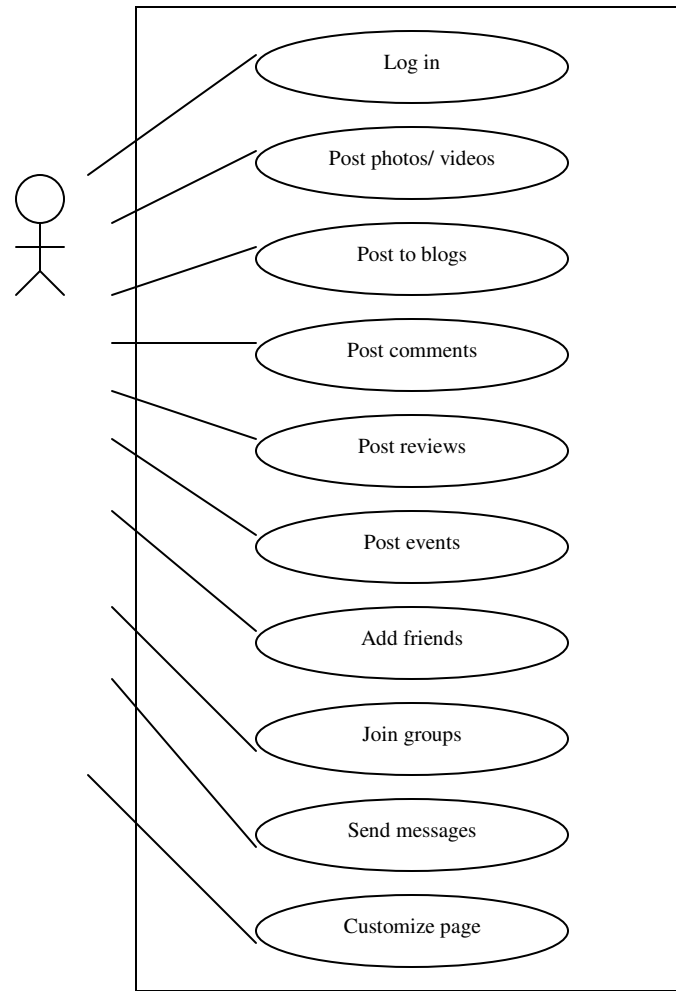13. Receipt will lessen.

UI(User Interface) Requirements (optional)
- Valid ID
- Money
- Parent's Consent (for applicants with ages 7- 11 yrs old)
- Application form (input)
- Smart money card (output)
- Receipt
- Cellphone with Smart Sim card

Non-Functional Requirements (optional)
Smart Wireless is open until 9 pm only.
You should be a smart subscriber to avail Smart Money

Multiply.com

Identification Summary

      Title: Posting to journal or blog in multiply.com

      Summary: This use case allows users to post blog in multiply.com

      Actors: user   **Version:** V.1

      Creation Date: July 17, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

      Preconditions:

            26. User must have a multiply account

            27. User must have internet connection.

      Main Success Scenario:

            36. User logs in at multiply.com

            37. User goes to post to blog

            38. User edits title.

            39. User edits body.

            40. User edits tags.

            41. User saves and publish blog.

      "Alternate Sequences:

A1 : Incorrect password or username
from
1a: User cannot log in because of incorrect password or username
2a: type a correct password
Go back to 1

A2: Left an empty space
from
2b: user forgot to edit title
3a: fill out title.
Go back to 2

Error Sequences:
    E1:
    from
    1b: Site is under maintenance
    2c: use case fails

    E2:
    from
    1c: User still haven't verified his/her multiply account.
    2d: use case fails

Postconditions:
14. The blog will be published at the site.
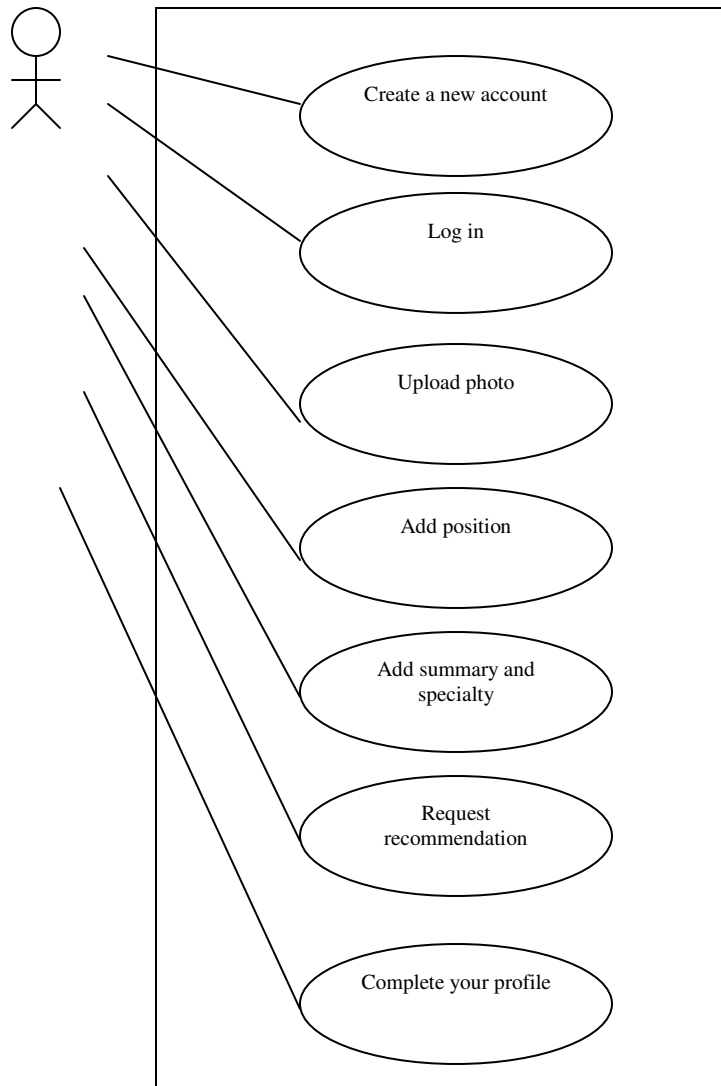15. The saved entries of the user will be kept at the database.
16. friends of the user will be notified of the update.

UI(User Interface) Requirements (optional)
- internet connection
- computer

Non-Functional Requirements (optional)
Availability: multiply.com is undergoing site maintenance during midnight.

Linkedin.com

Identification Summary

    Title: Completing Profile at linkedin.com

    Summary: This use case allows the users to complete their profile and reach 100%.

    Actors: user

    Version: V.1

    Creation Date: July 24, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

        28. User must have an email address.

        29. User must have internet connection

    Main Success Scenario:

        42. User creates an account at linkedin.com

        43. User activates account.

        44. User uploads photo.

45. User adds education.
46. User adds position.
47. User adds connection.
48. User adds summary.
49. User requests for recommendation.
50. User approves recommendation.

"Alternate Sequences:

A1 : Incorrect email address.
from
1a: The user put an incorrect email address.
2a: input correct e-mail address
Go back to 1

A2: Cannot activate account
from
2b: user doesn't receive confirmation message for the account.
3a: ask for another confirmation message.
Go back to 2

A3: Format of photo is not accepted
from
3b: user put a photo whose format is not accepted
4a: convert photo.
Go back to 3

A4: User's school is not on the list
From
4b: User's school was not on the list
5a: Click others and type the school's name.
Go back to .

A5: The company name is not on the directory
From
5b: Company of the user was not at the list and therefore has to add additional info to add the company.
6a: Type company's website, choose industry and choose size.
Go back to 5.

A6: Recommendation cannot be sent
From
8a: The user cannot send a recommendation to connections.
9a: send another recommendation
Go back to 8.

Error Sequences:

E2: Site is under maintenance
from
1c: User cannot sign up for linkedin.com
2c: use case fails

E2: Recommendation was not accepted
from
8a: User cannot accept recommendation and an error message " this recommendation is not available"
9a: use case fails

Postconditions:
17. The user's record will be saved at the database
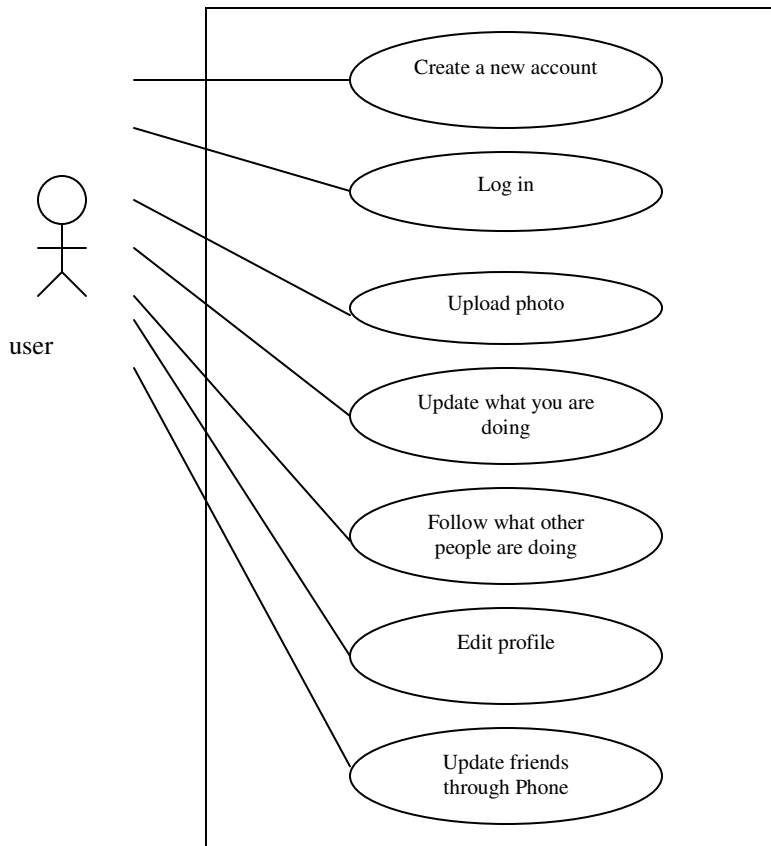18. The user reached 100%
19. The account of the user was activated

UI(User Interface) Requirements (optional)
- Internet connection
- Computer

Non-Functional Requirements (optional)
You should have connections for you to be able to request recommendations.

Twitter.com

Identification Summary

    Title: Updating "what are you doing?" in twitter.com

    Summary: This use case allows the users to update "what are you doing?" in
              twitter.com

    Actors: user

    Version: V.1

    Creation Date: August 7, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

        30. User must have an email address.

        31. User must have internet connection

    Main Success Scenario:

        51. User types a message on "what are you doing?"

        52. User updates "what are you doing?"

    "Alternate Sequences:

        A1 : Cannot access twitter.com
        from
        1a: The user doesn't have an email address.
        2a: use your mobile phone to post "what are you doing?"

111

Go back to 1

Error Sequences:

E2: Site is under maintenance
from
1b: User cannot update "what are you doing?" in twitter.com
2b: use case fails

E2: Recommendation was not accepted
from
1c: User exceeded the limit of characters that can be typed.
2c: use case fails

Postconditions:
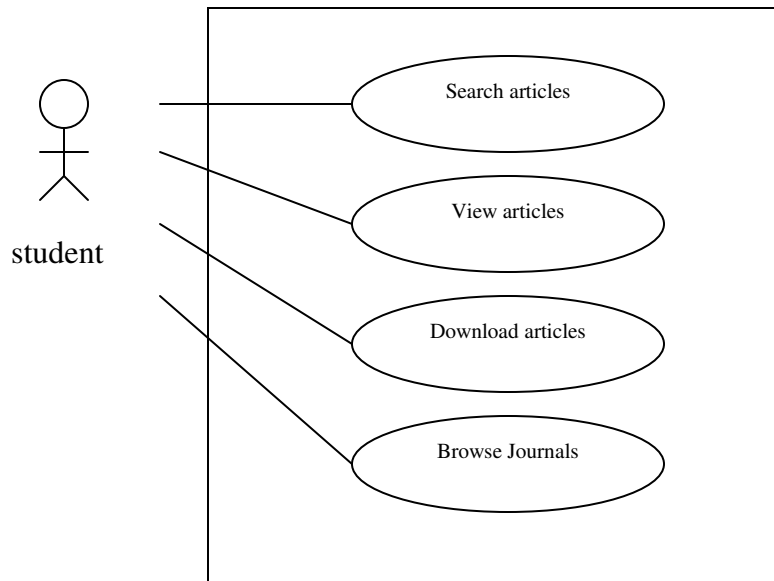20. The users update will be published and seen by other users.
21. The users update will be recorded on the database.

UI(User Interface) Requirements (optional)
- Internet connection
- Computer
- Cellphone

Non-Functional Requirements (optional)
Usability: it is user friendly site and anyone can log in to this site as long as you have an email address

Emeraldinsight.com

Identification Summary
      Title: Downloading pdf files on Emerald
      Summary: This use case allows the users to download pdf files on emerald journals.
      Actors: student
      Version: V.1

      Creation Date: August 13, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events
      Preconditions:
            32. Student must be a CSB student
            33. Student must be logged-in in their CSB account.
            34. Student must have computer access.

      Main Success Scenario:
            53. Student clicks emerald on the online subscription from the CSB website.
            54. Student searches for the article he wants.
            55. Student views the article in pdf format.
            56. Student saves the file.

     "Alternate Sequences:

            A1 : Student cannot view the article
            from
            3a: The student doesn't have pdf reader.
            4a: download pdf reader application
            Go back to 3

      Error Sequences:

E2: Cannot download article

from

3b: Student cannot download the article for it is can be only downloaded by subscribers.

4b: use case fails

E2: Site of CSB is down

from

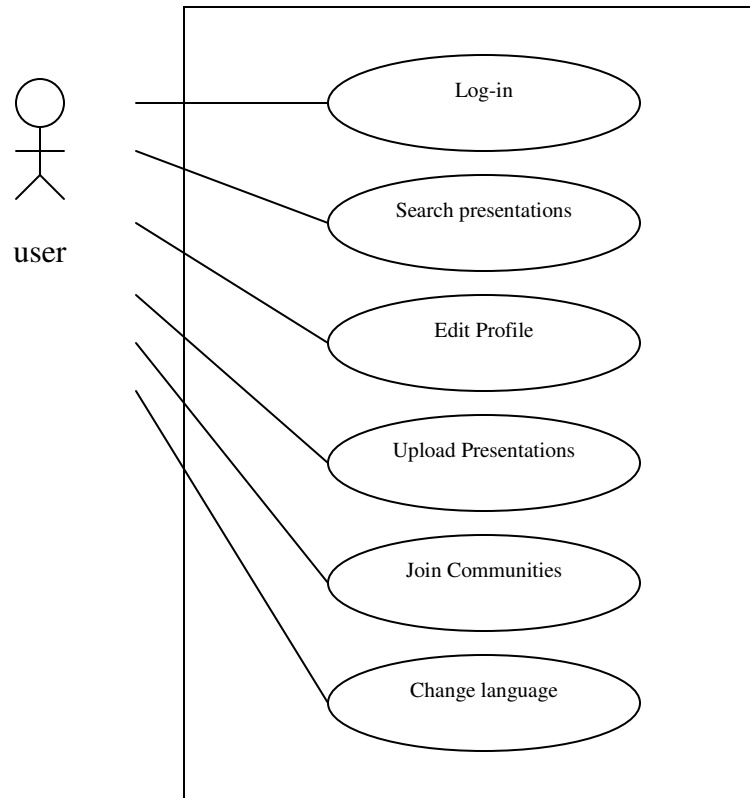**1c:** Student cannot log in an therefore cannot enter Emerald

2c: use case fails

Postconditions:

      22. The student views the articles

UI(User Interface) Requirements (optional)

- Internet connection
- ID number and password
- Pdf reader

Slideshare.net

Identification Summary

    Title: Uploading presentations on slideshare.net

    Summary: This use case allows the users to upload presentations on slideshare.net.

    Actors: user

    Version: V.1

    Creation Date: August 19, 2008   **Person in charge:** Marie Angelie Alcoriza

Flow of Events

    Preconditions:

        35. user must have an internet access

        36. user must have a computer

    Main Success Scenario:

        57. User clicks upload file button.

        58. User clicks single upload.

        59. User adds title.

        60. User browse files.

        61. User clicks upload.

   "**Alternate Sequences:**

      A1 : User wants to upload in bulk

      from 2

115

2.1: The user wants to upload files in bulk.

2.2: click upload in bulk

Go to 3

Error Sequences:

A1 : Incorrect file format

from 4

4.1: The user cannot upload the file for it has a different format

4.2: use case fails

Postconditions:

23. The user's file will be published

UI(User Interface) Requirements (optional)

- Internet connection
- Microsoft powerpoint or any application that reads ppt presentations.

Appendix 1 (SAD Paper)

Bank of the Philippine Islands
España corner Moret St., Sampaloc, Manila

Company Background

    Company Overview

        Bank of the Philippine Islands is a Banking Service that has many branches that is located almost everywhere in the Philippines.

<u>Mission</u>

WE BELIEVE in the central role that private enterprise plays in economic development.

WE BELIEVE that our corporate mission is to be the leading private financial institution in the Philippines in terms of professional competence, service quality, responsible corporate citizenry, and overall growth and stability; and to be an established ASEAN financial institution with a creditable worldwide outreach.

WE BELIEVE that we have a responsibility to manage the business for the maximum benefit of our customers while adopting the highest standard of integrity; to offer the widest possible range of financial services that is responsive to their needs; and to adopt an objective attitude towards change and innovation, ever mindful of improving service quality and operating efficiency.

WE BELIEVE that we have a responsibility to develop the potential of our employees to the fullest by providing an environment conducive to their personal and professional growth; and to foster a value system held in common throughout the institution in order that we may all share a coherent sense of purpose and direction.

WE BELIEVE that we have a responsibility to attain, over time and within exacting standards of prudent management, the highest possible return on the investment of our shareholders.

History

Philippine Banking history started on the year 1828, when King Ferdinand VII of Spain issued a decree mandating the establishment of a public bank in the Philippines. However, it took 23 years before the bank become reality. The person behind the actual organization of the bank is the Governor- General Antonio de Urbiztondo y Eguia.

Governor de Urbiztondo called for the support of the *Junta de Autoridades* (a committee comprising of civil and ecclesiastical officials) in approving the bank statutes. The bank was named after the queen of Spain, Isabella II, daughter of King Ferdinand VII. It was called, *El Banco Español Filipino de Isabel 2*.

The bank's office was located at the Royal Custom House in Intramuros. The first managers were Jose Maria Tuazon and Fernando Agguire. The Spanish Crown named Antonio de Ayala to represent the business community of Manila.

On the year May 1, 1852, the first bank notes or paper money, was issued, and the first transaction, which is a lending transaction was done. On they year 1869, the name of the bank was changed into *El Banco Español Filipino*.

The bank decided to open it's first branch in Central Luzon on the year 1980, the reason for this was the emergence of the region as a sugar-producing area. Sugar was exported from this region, during that time, making the product a major source of income for local producers. But the plan did not materialize, and instead it was established on March 15, 1897.

On the year 1912, the bank's official name was Banco de Las Islas Filipinas or Bank of the Philippine Islands, under American administration. On the year 1969, Ayala Corporation became the dominant shareholder group. BPI officially became an expanded commercial bank (Universal bank) in 1982, and thus started engaging in non-allied undertakings.

BPI became the first *bancassurance* firm in the Philippines, on the year 2000, after it acquired the insurance companies of the Ayala Group. Also in 2000, the Bank introduced its internet bank, BPI Direct Savings Bank, which launched BPI into 21st century banking.

With over 700 branches and around 1,100 automated teller machines, BPI boasts of having large network of branches for servicing some three million depositors. Today, BPI has maintained a leadership position in consumer and trust banking, asset management, corporate finance and bancassurrance.

Products and Services

Product

- Deposit
- Loans
- ATM/ debit cards
- Credit Cards
- Prepaid Cards
- Insurance
- Remittance
- Global Transactions
- Asset Management
- Foreign Exchange
- Leasing

Services

- Mobile Banking
- Phone Banking
- Internet Bankint
- ATM Banking
- Cash Acceptance Machine
- Bill Payment Partners
- Prepaid Cellphone Reloading

Number of Customers: 900 – 1000 per teller (per day)

Number of Transactions: 500 – 1000 per day

Statement of the Problem

Express link is an online managing system that allows users to credit employees' salary, allowances, or reimbursements. The problem we have seen on Express Link was unsuccessful payroll. This happens when employees didn't receive their salary on the given date.

Problems concerning companies registered at Express Link:

- The system express link, cannot detect if the employee has closed account or there was an unsuccessful payroll. They will know it when the bank calls them the other day or two days after.
- If the signatories changed or mini keys were lost, they have to pay for the replacement of mini keys.

This process is important to the company, for it gives both the company and BPI loyalty and trust to each other. Express link is vital to companies, for it helps them to manage their accounts.

Objectives of the System

To solve these problems, we proposed a system which is called the E-Phone (Express Phone) which can lessen unsuccessful payroll. It will be more convenient for the authorizer or mini key holders, because they can access it anywhere. Authorizer will also be able to receive alerts, whether their employees received their salary or there is an unsuccessful payroll. They can take action easily and fix the problems. We will replace the mini key with cellphone instead. This will serve as the electronic mini key for express link. The user will also be able to manage their accounts and have transactions via phone.

The proposed system is an online mobile service, meaning by the use of mobile phones you can now have access anywhere you may please. BPI will give a user name and password so that you can log in to Express Link.com. A software will also be given to the authorizer so that it can be installed to their cellphones. The authorizer will be able to access Express Link via

cell phone. The authorizer uploads the database of employees' info to the cellphone. The authorizer will now be able to do payroll transactions via Express Link.

The new process of the system let the authorizer of a certain company would have a mobile phone that has an access to internet and software would be installed in that phone that will serve as the holder's minikey. Then by that he can use his mobile phone as a medium on going online, and the use the account effectively.

With this proposed system, BPI will have the following benefits:

Tangible Benefits:

- Cost reduction and avoidance

We can have avoidance of cost in paying lost mini keys.

- Increased Flexibility

It is much easier to use than having mini keys and also flexible in doing payroll transaction anywhere.

- Increased speed of activity

The transaction will be faster in a way that the company head will just check the employee's account and submit it from via phone.

- Increased speed of reports

E-phone can immediately let the company head know if there is closed account on the payroll by receiving alerts via phone.

- Improvement of management planning and control

It is more convenient to the corporations as well as it will be easier for BPI to communicate with the corporations in their concern.

Intangible Benefits

- Increased organizational flexibility

The system that we proposed which is the e-phone will increase organizational flexibility in the sense that there will be another way of accessing express link which is through cellphone. Before, they only use the net to access their banking, but now cellphone can also be used to access the express link.

- Increased accuracy in clerical operation

e-phone can detect whether the employee has closed account or there is an unsuccessful payroll through the alert system, wherein, a message will be sent of the changes happening coming from the mainframe.

- Information processing efficiency
  Information can be easily accessed everywhere, that is the reason why it is efficient.

The BPI ExpressLink requires a password and mini key in order to do the payroll transaction. In this case, if the password and mini key was lost by the in charge person they will pay for replacement. Our objective is to change the mini key to E-phone where you will just upload certain software to the cellphone of the required person and use it in dealing with payroll transaction for the employees.

Significance of the study:

This study shows the company the different and common problems a client have. It also shows the different ups and downs of the system might have and how and why the system should be updated. This will also help when some of the problems the user might have occurs like: unsuccessful payroll, when the mini key is lost and others. By understanding the different kinds of problems the system might have, the department that specializes in that field can now find a better way to make the system more effective and fix it gradually.

In addition, by the use of this study, the company would be aware of what the clients might like as an improvement in using the system. In that way when the improvements and changes can be done the user and the company can now have better communications and arguments can be avoided.

Scope and Limitation

The study only deals with doing the payroll via Express Link Payroll Managing System. Actual paying of the payroll is not included. Application of express link is also not included in the study. As well as other services of Bank of the Philippine Islands and other services of Express Link beyond payroll was not part of this study.

E-phone (Express Phone) - the proposed system for the Express Link.

Use Case Diagram (Existing System)
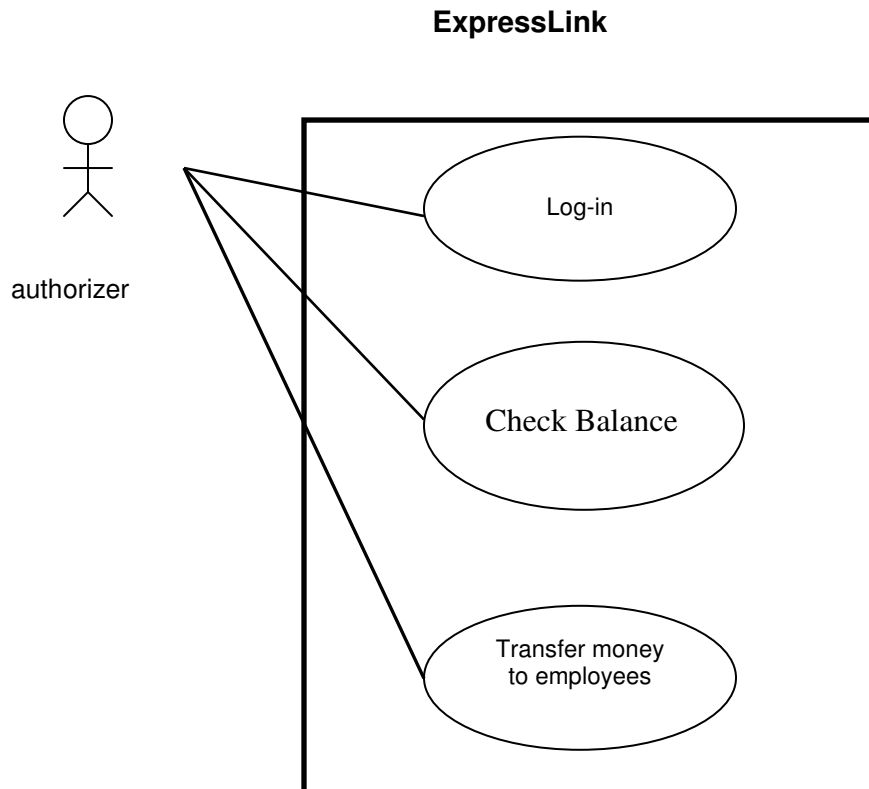
ExpressLink

Identification Summary:

Title: Logging in Express Link

Summary: This use case allows the user to connect on the express link of BPI Express.
Actors: Authorizer
Creation Date: August 11, 2008   **Date of Update:** August 12, 2008
Version: 1.0   **Person in-charge:** Marla Voluntarioso
Flow of Events:

    Preconditions:

    1. The authorizer must have User ID and password.
    2. The authorizer must have internet connection.

Main Success Scenario:
    1. The authorizer enters User ID and password.
    2. Express link verifies if it is a valid User ID and password.
    3. Authorizer enters on their account's main page.

Alternative Sequence:

    A1. Incorrect password

123

From 1

1.1 The computer informs that the pin is incorrect for the 1st or 2nd time.

1.2 Input correct password

Go back to 1

Error Sequence:

E1. Password error reached up to three tries
       1.1 The Banking office requires the user to get a username and password.
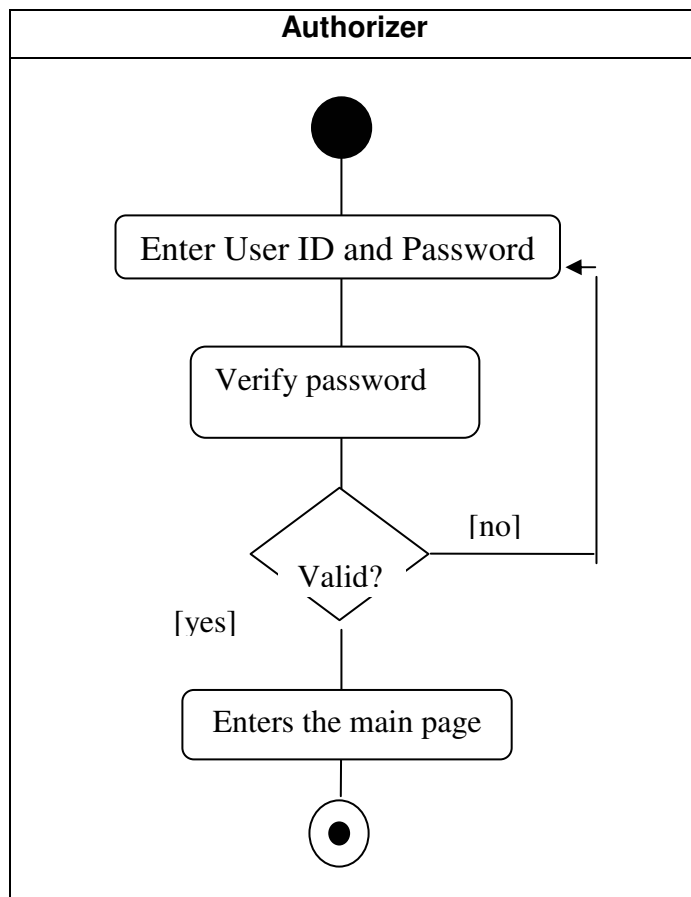   1.2 Use case fails

Post Condition:
       a. Authorizer will be logged in.
       b. Records of the transaction will be recorded

UI Requirements:

- Computer

Activity Diagram – Log in

Identification Summary

Title: Transfer money to employees

Summary: This use case shows how the user can transfer money or do payroll via Express Link.

Actors: authorizer   Version: version 1.0

Creation Date: August 11, 2008   Person-in-charge: Marie Angelie Alcoriza

Preconditions

1. The person must have an account in Express Link.
2. The authorizer must have a mini key.
3. The authorizer must have the software for mini key.
4. The authorizer must be logged in.

Flow of Events

Main Success Scenario

1. Authorizer views the files uploaded.
2. Authorizer clicks on the employees who will receive the payroll.
3. Authorizer inserts mini key before proceeding with the transaction.
4. Authorizer clicks submit.

Error Sequence

From 3

   The user lost the mini key

   Use Case Fails

Post conditions

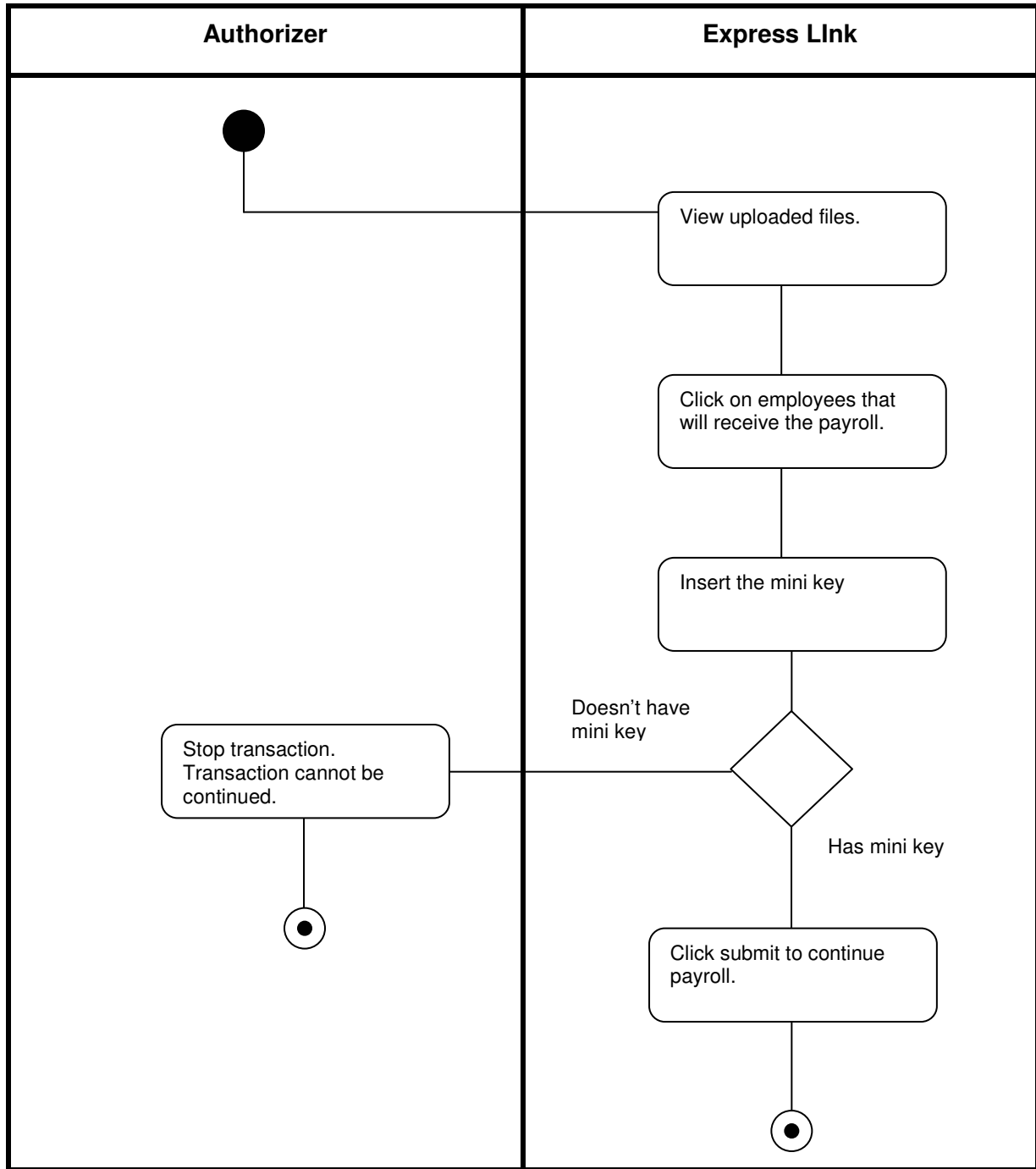1. The money on the account will lessen
2. The employees receive their salary.

User Interface Requirements

a. minikey (input)
b. software for the minikey (input)

Non Functional Requirements

Integrity: The encoding of employees' account number must be accurate

125

Activity Diagram – Transfer money to Employees

Authorizer	Express LInk

View uploaded files.

Click on employees that will receive the payroll.

Insert the mini key

Doesn't have mini key

Stop transaction. Transaction cannot be continued.

Has mini key

Click submit to continue payroll.

Identification Summary:

Title: Checking Balance on a BPI Express link account.

Summary: This use case allows a BPI express link user to check their account balance.

Actors: Authorizer

Creation date: August 12, 2008

Version: 1

Flow of events:

> **Preconditions:**
>
> > 1. Authorizer must have an Express Link account
> > 2. Authorizer must be logged-in
>
> **Main Success Scenario:**
>
> > 1. The user must click 'check balance'
> > 2. The user chooses if 'Today's Transaction' or 'Account History'.
> > 3. User Select one transaction.
> > 4. User Clicks submit.
> > 5. Website shows the transactions.
>
> **Alternative Sequences:**
>
> > A1. Browser logged-out the user's account.
> >
> > > 2. The system informs you to log-in again.
>
> **Error Sequences:**
>
> > E1. No internet connection
> >
> > > 1. The desired page cannot be displayed.
> > >
> > > > Use case fails.
>
> **Post Conditions:**
>
> > -the user updates his account.

Activity Diagram - Checking Balance
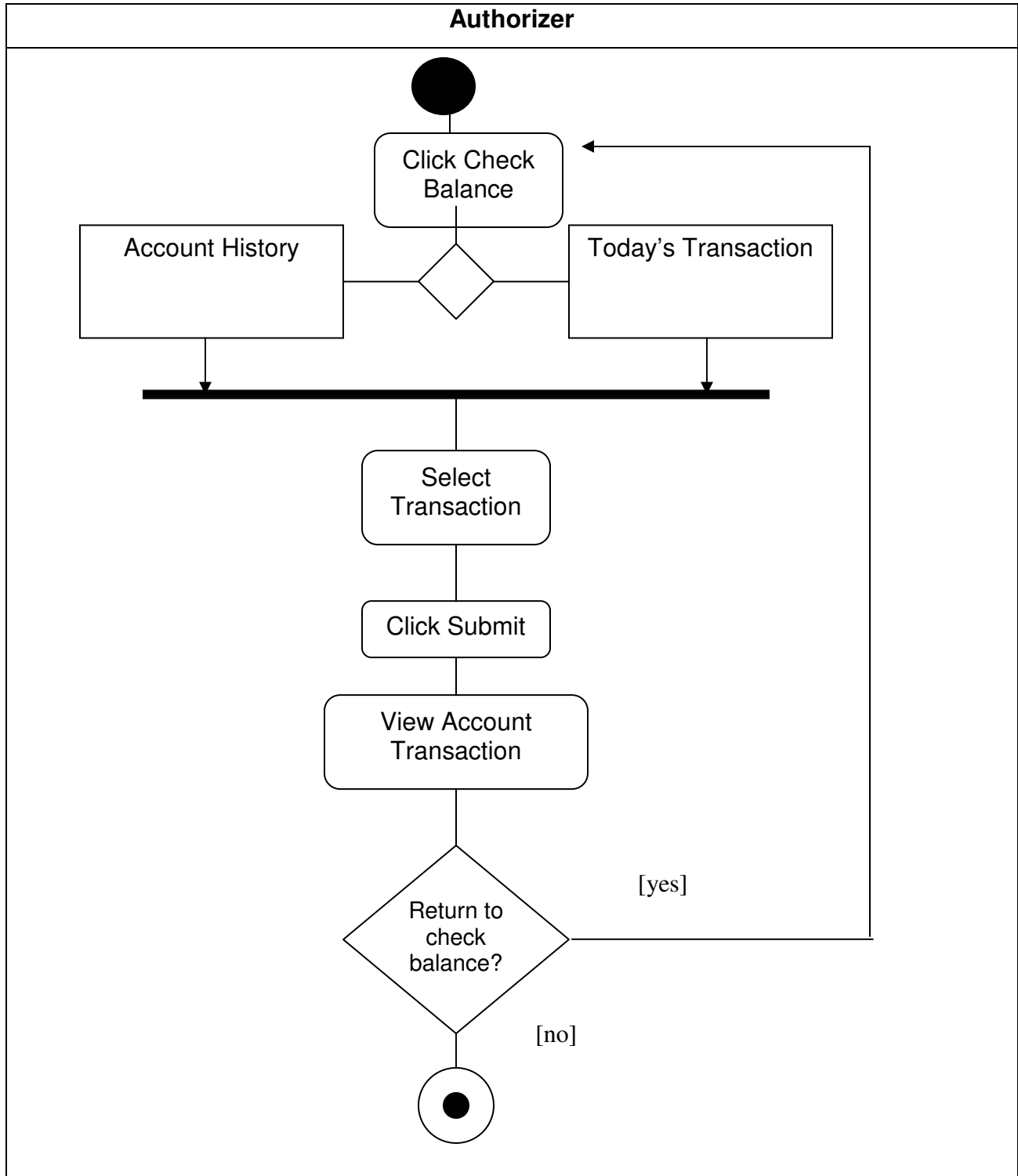
Use Case Diagram (Proposed System)

E-Phone
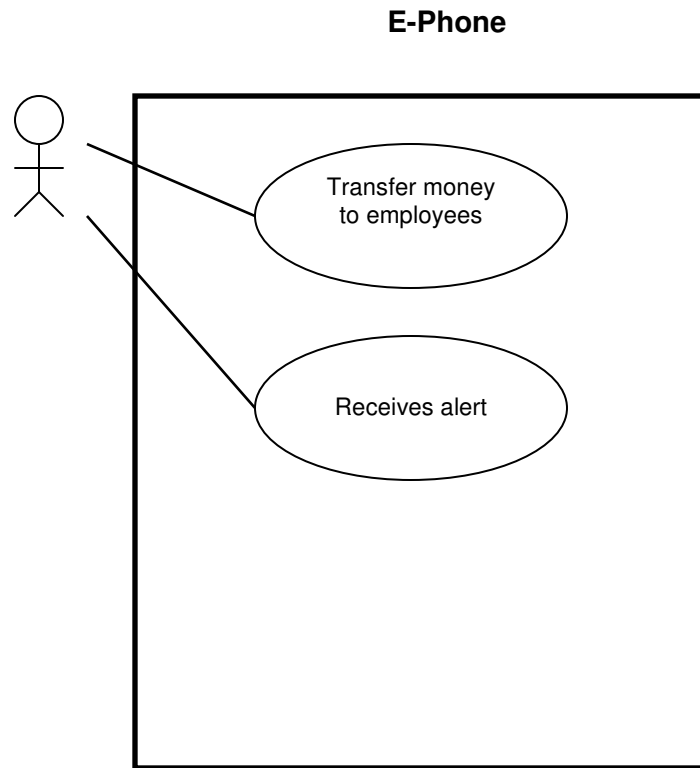
Identification Summary:

Title: Transfer money to employee

Summary: This use-case allows authorizer to know how to transfer money to
employees ATM account.

Actors: Authorizer

Creation Date: Aug. 10, 2008   **Date of Update:** Aug.11,2008

Version: 1.0   **Person in-charge:** Shelyn Chua

Flow of Events:

Preconditions:

3. The authorizer should have e-phone software on their cellphone.

4. The authorizer should have his or her e-phone pin number.

Main Success Scenario:

4. The authorizer will access his or her e-phone software on their cellphone.

5. The authorizer will now access through internet to get connected.

6. The authorizer will input his or her e-phone pin number.

129

7. The authorizer will check the database of payroll.

8. The authorizer will send payroll to employee's ATM accounts.

Alternative Sequence:

. A1. Access internet failed

    From 0

    1a. The e-phone can't access through internet.

  A2. Incorrect pin number

    From # 2

    2a. The e-phone will inform the authorizer that he or she has incorrect password.

    3a.Goes back to #3

Error Sequence:
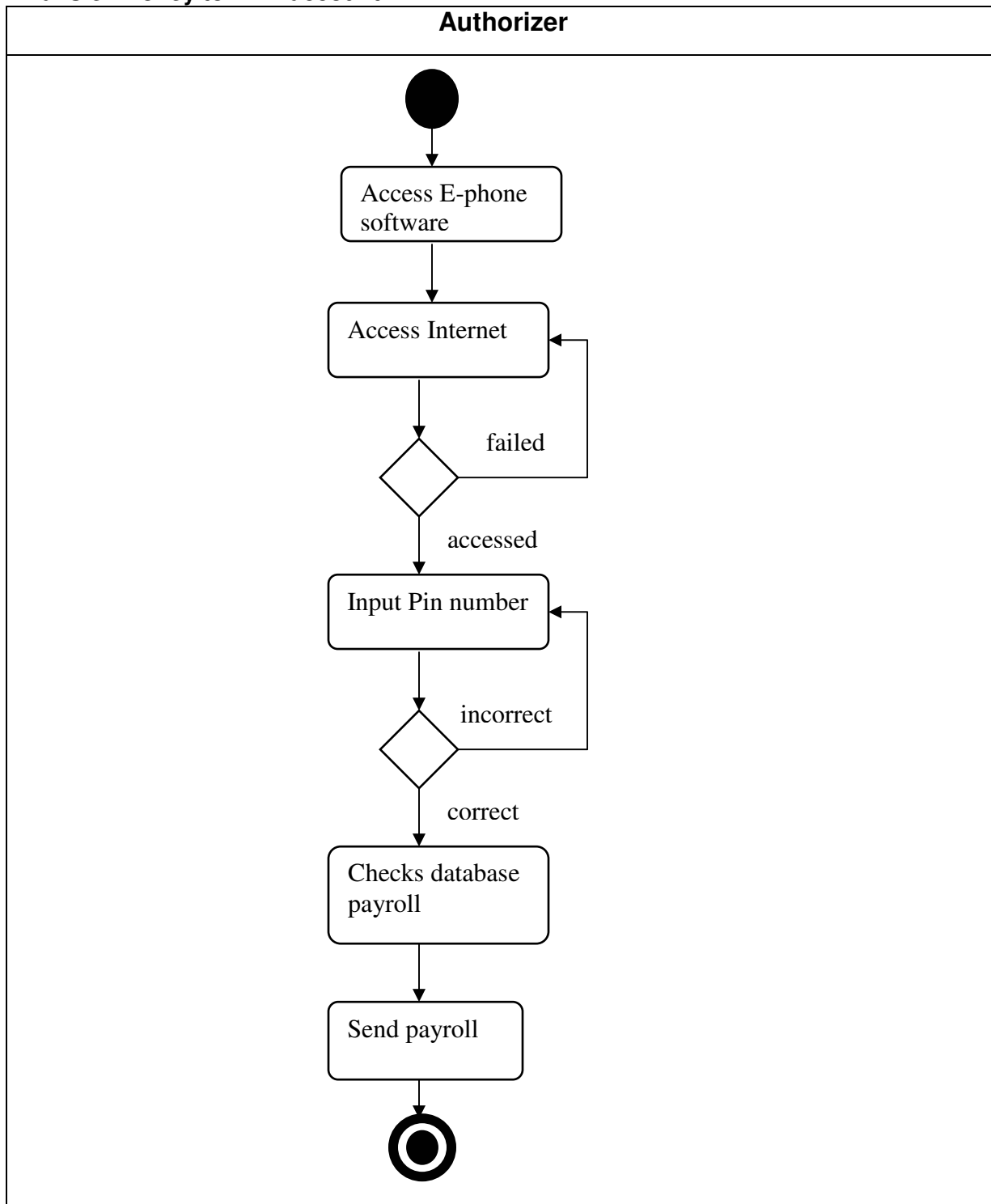
  E1. From 0

    1. The system of the BPI are down.

Post Condition:

    1. The authorizer will finish payroll.

    2. The employees can get their salaries on their ATM account.

Activity Diagram – Proposed System

Transfer money to ATM account

Authorizer

Access E-phone
software

Access Internet

failed

accessed

Input Pin number

incorrect

correct

Checks database
payroll

Send payroll

Identification Summary

Title: Receives Alerts

Summary: This use case shows how the user can receive alert on their e-phone when changes occur in their account.

Actors: authorizer, mainframe   Version: version 1.0

Creation Date: August 11, 2008   Person-in-charge: Marie Angelie Alcoriza

Preconditions

1. The person must have an account in Express Link.

2. The authorizer must have a cell phone.

Flow of Events

Main Success Scenario

1. Mainframe verifies if there are changes that happened today.

2. Mainframe sends changes to authorizer's phone.

Error Sequence

From 1

  1.1 There are no changes in the authorizer's account
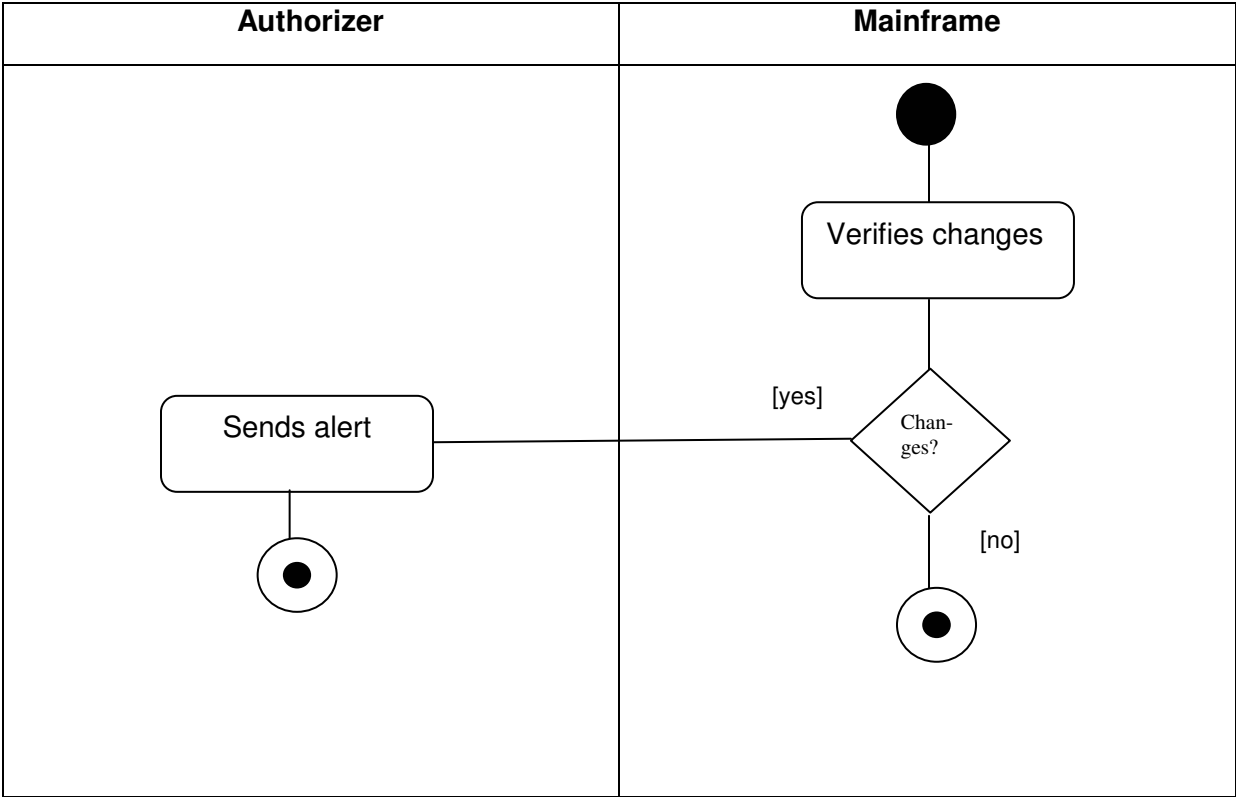
  1.2 Use Case Fails

Post conditions

1. The account will be updated.

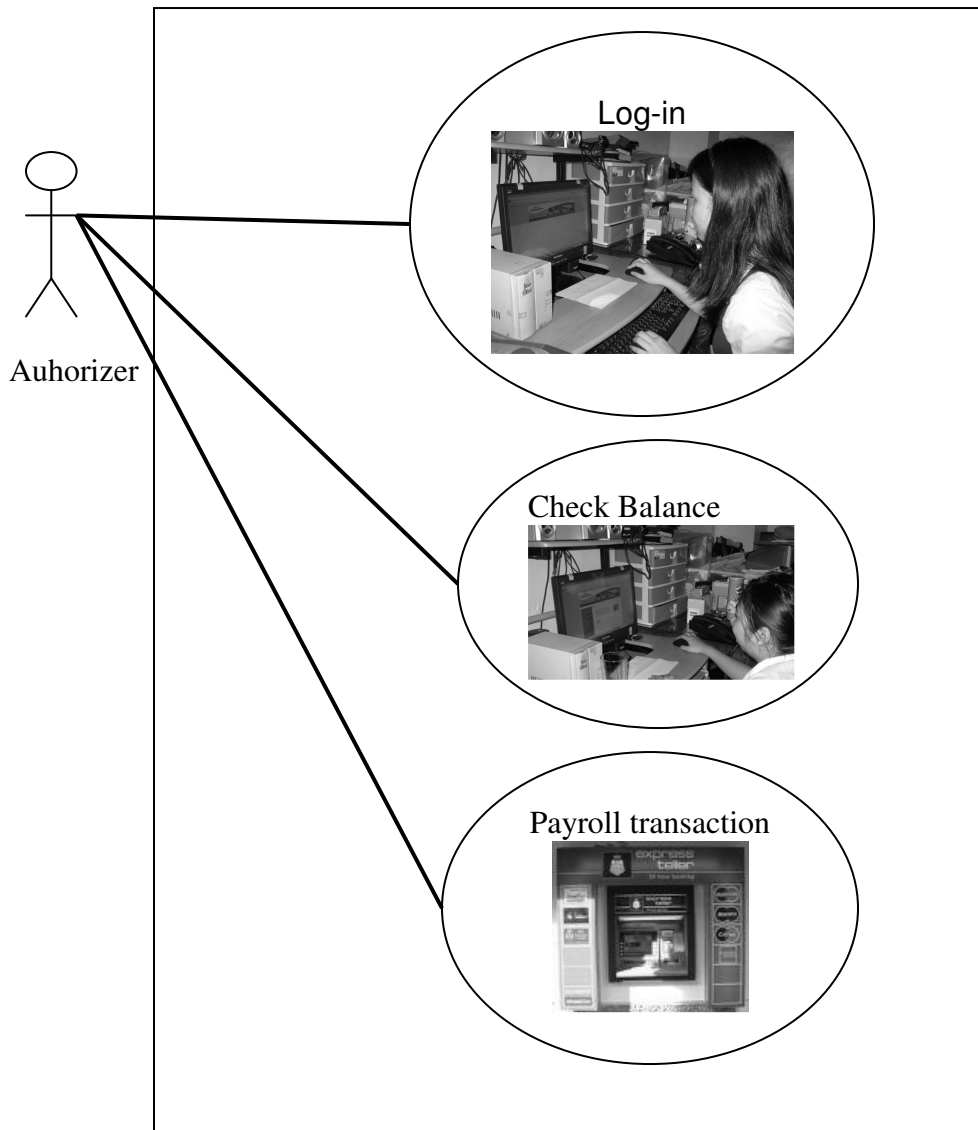**User Interface Requirements**

1. cellphone

Activity Diagram Receive alerts

Authorizer	Mainframe
Sends alert	Verifies changes [yes] Changes? [no]

133

Process walkthrough:

Process walkthrough:

ExpressLink

Log-in

Auhorizer

Check Balance

Payroll transaction

Process walkthrough:
1. Log-in username and password on ExpressLink
2. Check Balance
3. Transfer money to employee's ATM

Processing Time vs. Cycle Time

Existing System

Activities	Processing Time	Cycle Time
1. Log-in to Express link	20 sec.	1 min.
2. Check Balance	5 min.	10 min.
3. payroll transaction	10 mins.	20 mins.
Total:	15mins. and 20 secs	32 mins.

Proposed System

Activities	Processing Time	Cycle Time
1. Log-in to Express link	20 sec.	1 min.
2. Check Balance	5 min.	10 min.
3. payroll transaction through E-phone	3 mins.	5 mins.
Total:	8 mins. and 20 secs	16 mins.

Geographic Flowchart
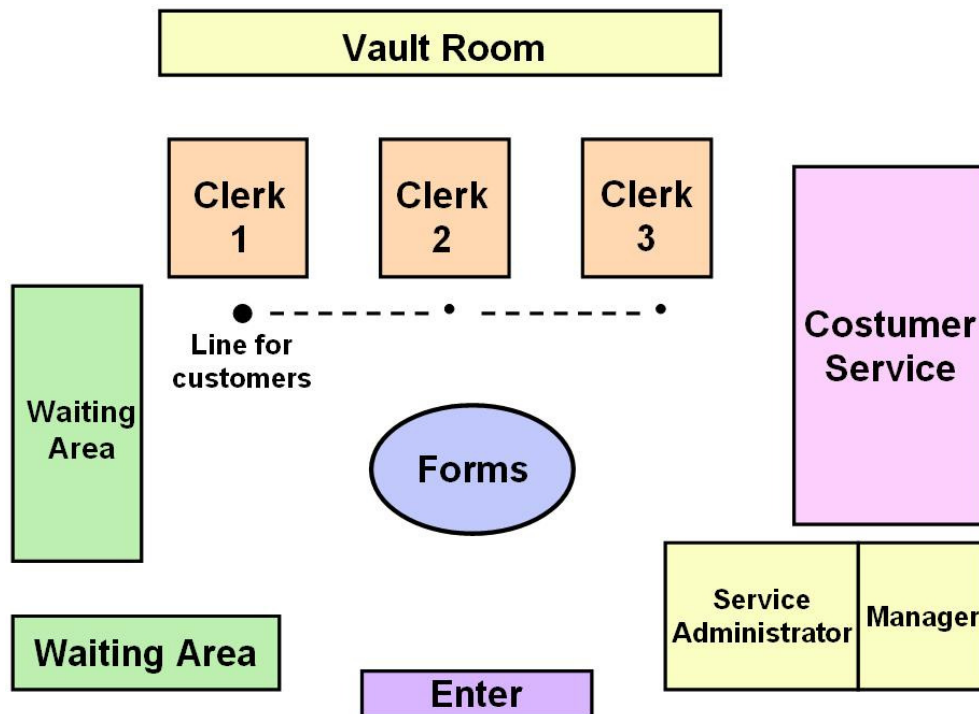
Table of Recommendation

Problem addressed	Recommended Changes	Activities affected by change
Cannot detect if an employee has closed account or there is an unsuccessful payroll.	the authorizer will receive a message that there are changes on his account	Transferring money to employees account. Uploading employees' file
Signatories changed or mini keys were lost	Instead of using mini keys, cellphones will be used. They will just need to connect their phone to their computers. They can also use the cellphone to do transactions on express link.	Transferring money to employees account

Appendix 2

Hoffer J. A., George J.F., Valacich J.S.2002. Modern Systems Analysis and
Design(third edition).Upper Saddle River, NJ: Pearson Education Inc.

http://www.amazon.com/Systems-Analysis-Visible-Workbench-Casebook/dp/0201304597/ref=sr_1_2?ie=UTF8&s=books&qid=1219659818&sr=1-2
http://info.lycos.com/overview.php -lycos
file:///C:/Program%20Files/Acro%20Software/CutePDF%20Writer/README.HTM - cutepdf
http://www.movabletype.com/overview/ - movable type
http://www.sixapart.com/products/#vox - Vox
http://support.typepad.com/cgi-bin/typepad.cfg/php/enduser/std_adp.php?p_faqid=223 - diff bet type and movable
http://many.corante.com/archives/2005/03/03/friendster_blogs_powered_by_typepad.php - friendster powered by typepad
http://everything.typepad.com/blog/2008/06/steve-jobs-deli.html- typepad on iPhone
http://www.typepad.com/features/
http://companyinfo.excite.com/aboutexcite.html
http://www.bricklin.com/history/sai.htm
http://www.blogger.com/about
http://office.microsoft.com/en-us/groove/default.aspx
http://www.rim.com/
http://www.bmc.com/products/products_services_detail/0,,0_0_0_1301,00.htm
http://www.webtv.com/pc/about/
http://www.paulgraham.com/avg.html
http://delicious.com/about
http://www.bloglines.com/about/
http://www.craigslist.org/about/sites.html
http://www.archive.org/index.php
http://www.flickr.com/about/
http://www.fogcreek.com/
http://www.fogcreek.com/FogBugz/
https://www.copilot.com/
http://www.fogcreek.com/CityDesk/
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http://www.tripadvisor.com/pages/about_us.html
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http://www.spreadfirefox.com/
http://web.tickle.com/about
http://www.vallexfund.com/
http://www360.shareholder.com/home/Company/full_full.cfm