

A system analysis reader

Michael Angelo M. Magat



This work is licensed under a Creative Commons Attribution-
Noncommercial-Share Alike 3.0 Philippines License.

To my parents, and friends. ü

Table of Content:

- **Chapter 1: Founders at Work**
 - Max Levchin, Paypal.....7
 - Sabeer Bhatia Hotmail.....8
 - Steve Wozniak, Apple Computer.....9
 - Joe Krauss, Excite10
 - Dan Bricklin, Software Arts.....11
 - Mitchell Kapor, Lotus Development.....12
 - Ray Ozzie, Iris Development, Groove Networks.....13
 - Evan Williams, Pyra Labs (Blogger.com).....15
 - Tim Brady, Yahoo.....17
 - Mike Lizaridis, Research in Motion.....19
 - Arthur Van Hoff, Marimba.....20
 - Paul Buchheit, Gmail.....21
 - Steve Perlman, WebTV.....22
 - Mike Ramsay, Viaweb.....24
 - Joshua Schachter del.icio.us.....25
 - Mark Fletcher, OneList, Bloglines.....27
 - Craig Newmark, craigslist.....28
 - Caterina Fake, Flickr.....29
 - Brewster Kahle, WAIS, Internet Archive, Alexa Internet.....30
 - David Heinmeier Hansson, 37signals.....31
 - Philip Greenspun, ArsDigita.....32
 - Joel Spolsky, Fog Creek Software.....34
 - Stephen Kaufer, TripAdvisor.....36
 - James Hong, Hot or Not.....38
 - James Currier, Tickle.....39
 - Blake Ross, Firefox.....40
 - Mena Trott, Six Apart.....42
- **Chapter 2: Book Review**
 - Systems Development, chapter 1.....44
 - Systems Development, chapter 2.....45
 - System Analysis and Design, chapter 1.....46
 - System Analysis and Design, chapter 2.....48
 - System Analysis and Design, chapter 3.....50
 - System Analysis and Design, chapter 4.....52
 - System Analysis and Design, chapter 5.....53
 - System Analysis and Design, chapter 6.....54
 - System Analysis and Design, chapter 7.....56
 - System Analysis and Design, chapter 8.....58

- **Chapter 3: Use Case Diagram**
 - **DLS-CSB Enrollment.....61**
 - **Barangay Clearance.....64**
 - **Civil Service Eligibility.....66**
 - **Student's Permit.....68**
 - **Epurse.....70**
 - **TIN number.....72**
 - **Multiply.....74**
 - **Linkedin.....76**
 - **Smart Money.....78**
 - **Friendfeed.....80**

- Appendix**
 - System Analysis and Design Project.....84**
 - Reference.....117**

Preface:

This book reflects my experience while taking up SYSANAL (System Analysis) during my 2nd year at college. Before I take up SYSANAL I don't have any idea on how to make a use case narrative and activity diagram. I don't even know the sites and company that we read in Founders at Work. During our SYSANAL I feel like that SYSANAL is the only subject that I'm taking. System Analysis consumes my time and effort. I actually enjoy SYSANAL, it gives lot of works but I enjoy doing it. I learn many things such us how to make a use case narratives, activity diagram, how to abstract things and how to start your own company. The case studies are an inspiration to me to build my on company someday. I wish you'll enjoy reading this book.

Founders At Work

Stories of Startups' Early Days

Max Levchin

Cofounder, Paypal

“You realize one day that you can’t really work for anyone else. You have to start your own thing. It almost doesn’t matter what that thing is.”

- Max Levchin

This quotation by Max Levchin inspires me a lot. As I read the interview to him, I am amazed to the things that he does. He started his company through several ideas such as cryptography software, transmitting money via PDAs and finally as a web-based payment system. With his small ideas he comes up to big business that was acquired by eBay for \$1.5 billion.

He is just a simple guy that works hard to have big money. He does all his work seriously and if he starts something, he finishes it. Even though they faced a lot of problems he always gets a solution to it and didn’t quit. I want to be like Max Levchin, I want to have my own company and have lots of money. My perseverance and hard work will be my main weapon to achieve my goal. I will not quit and strive harder like him. I will do research to learn more things and stuffs that I didn’t know and to develop the things I already know. I hope to achieve this goal of mine someday and be proud of myself for all things that I’ve done.

Sabeer Bhatia

Cofounder, Hotmail

“Make sure you write a business plan because it will crystallize your thoughts to communicate your ideas with somebody else”

- Sabeer Bhatia

Writing a business plan is the first step of Sabeer Bhatia in his web-based email through a web browser. That is called Hotmail that offers free email accounts that could be accessed from any computer with an Internet connection. And on New Year's Eve, 1997, Microsoft acquired Hotmail for \$400 million.

Sabeer Bhatia and Jack Smith, his cofounder, came up with the idea of the web-based email because of their own problem. They can't send email because the firewall is preventing them. Because of frustration, Bhatia made a plan to do web-based email through a browser that can be accessed online. They finished Hotmail in less than 2 years and many people subscribed to it.

My favorite part of the interview is the last part. Bhatia gives advice to someone that wants to start a startup. His thoughts are nice and very helpful. Little by little I know that I can achieve my goals in life. These founders are very inspiring, that I wish to be like them someday.

Steve Wozniak

Cofounder, Apple Computer

“Always seek excellence: make your product better than the average person would”

- Steve Wozniak

Steve Wozniak, one of the pirates of Silicon Valley, a computer geek that turns to a millionaire. He and Steve Jobs founded the Apple Computer that is now one of the top selling computer companies.

I can say that Steve Wozniak is really a geek; there are so many technical stuffs on his interview that is difficult to understand. I really don't know the terms that he said. He designed the Apple I and Apple II that started the revolution of personal computer that we are using nowadays. Steve Wozniak is a hardworking man; he didn't give up on his goals. He said that he wants to build a computer, and then he builds his computer. I like the way that he treated his partner, Steve Jobs, they doesn't argue on something. If someone doesn't know something they try to learn it together. They build their own company from scratch.

I like the last part that Steve Wozniak is very generous that he let his workers to buy a share of their company. He believes that in their company, they we're a community, they are equal with one another. I idolized his dedication and perseverance to achieve his goals that I want to be like him someday.

Joe Krauss

Cofounder, Excite

Joe Krauss and Graham Spencer are co-founders of Excite and one of the biggest websites in 1990's. He and Graham Spencer studied at the same college in Stanford. Joe Krauss studied Political Science and Graham Spencer studied Computer Science. In the group that created Excite only Joe Krauss finished Political Science while all the others graduated from Computer Science. Their company started with the name Architext. They chose search as their focus for their company. Later on they got a contract for \$100,000 from InfoWorld. They asked them to index their archives and make the available for the net. Fortunately they did a good job and InfoWorld introduced them to their parent company IDG. Because of IDG they were able to meet Geoff Yang who will have a major role in the business of Excite. Also because of Geoff Yang they met Vinod Khosla who helped the company in funds too. Unlike other VC's Vinod didn't ask how they were going to make money instead he asked if their technology can scale and could it search a big database. Joe and Graham honestly said that they did not now since they could not afford a bigger hard drive. Right then and there Vinod called his assistant and ordered to buy them a 10 gig hard drive. According to Joe and Graham they were forever indebted to him in a comedic sense. This still shows that these two people because of their devotion to their work they succeeded in their goal even if there came times where they felt unsure on what they were doing.

Dan Bricklin

Cofounder, Software Arts

The first spreadsheet for the personal computer was known as VisiCalc. Dan Bricklin and Bob Frankston are the creators of VisiCalc for the Apple II. They started the company called Software Arts. Dan and Bob met each other in MIT during Dan's freshman year. Bob had just graduated from MIT and was working on a project called Multics a major project in the history of operating systems. Later on there coded a spreadsheet for the personal computer and called it VisiCalc. It was able to solve lots of problems for investment bankers and the likes. Soon enough bigger companies started using VisiCalc like IBM. This is where the A1 system was developed for the spreadsheet. Just like what we see in Excel today. Same as the grid system, it came from the ideas of Bob and Dan. They seem to be like the forefathers of the spreadsheet for the personal computer. Later on Lotus bought the company on the brink of Dan and Bob's bankruptcy. Even so they are still known as the pioneers in the spreadsheet history for the personal computer.

Mitchell Kapor Cofounder, Lotus Development

Mitchell or Mitch Kapor is one of the founders of Lotus Development with Jonathan Sachs in 1982. Lotus 1-2-3 is a spreadsheet that surpasses Visicalc. Lotus 1-2-3 is a “killer app” of IBM pc while Visicalc is the killer app of Apple II.

Mitch Kapor started his work for Apple II computer and called the Tiny Troll and later Visiplot, He became a product manager of some version of Visicalc and develop his own software. I am amazed to him because he said that he does not have a background in computer science, he was self-taught, and he does not have management experience. He is not like Steve Wozniak that is a geek. However, he manages to create software that changes the world.

As I read the article, I am shock on the fact that Apple II had only 64K of memory on that year. That is very low compare to the computer nowadays. The programs on the Apple II were tiny and the people that are building spreadsheets exceeded memory. That was the main problem of Kapor, and he saw that IBM has more memory than Apple II. Therefore, he decided to build a product on IBM that people can use and benefit.

Like the other founder of startup companies, Kapor main problem is money. Luckily, he found Ben Rosen that invests to their product. I think without Ben Rosen, Lotus 1-2-3 will not be launch.

Kapor is a good man. In his company, they never had single employment discrimination. The employees said that Lotus is the best place they ever work. That proves that Lotus is a good company.

I actually like the last part of the interview, when Livingston asks him about anything that he had done to seem more impressive to investors. When he calls L.J. Sevin and asks him for a dinner. In order to save his company and have a investor. He reserve at the fanciest French restaurant in Boston. I imagine his face when L.J Sevin tells him that he wants to invest to the company. I think that he was very happy and he feels very relief.

Ray Ozzie
Founder, Iris Associates, Groove Networks

Ray Ozzie (born November 20, 1955) is Chief Software Architect at Microsoft. He worked on the PLATO system, and began his working career at Data General Corporation where he worked for Jonathan Sachs. Shortly thereafter, he was recruited by Sachs and Mitch Kapor to work for Lotus Development to develop what became Lotus Symphony.

Ozzie left Lotus Development in 1984 and founded Iris Associates to create the product later sold by Lotus as Lotus Notes. Iris Associates was acquired by Lotus in 1994, and Lotus itself was acquired by IBM in 1995. Ozzie worked there for several years before leaving to form Groove Networks.

He founded Iris association, which is a software development company, and Groove Network, which is a software company. Ozzie is a hard working person. He works in different companies and builds his own. I think that Ozzie is a kind a person that always thinks before making a decision. He is a technical person, he is an engineer, he wants to build a thing that is worth accomplishing and he always thinks about the user.

My favorite line of Ray Ozzie was:

“What held people together as the belief that you’re really going to change the world. I think that’s the nature of many startups. You believe that hat you are doing is going to have a dramatic impact. You might not exactly know how, but you really have a belief. That keeps you going and going through any changes and a lot of uncertainty.”

I will remember that line when I start my own startup. My friends and I will think of a product that will change the world. We will not give up on doing it until we succeed like the other founders.

Ozzie's advice was to learn about leadership from the people at the top of the company. A good leader is a good follower. We must learn to respect and appreciate the different skills of people and use them as our advantage. We must have a good relationship to our employees and coworkers.

You must know how to accept failure and how to solve it. You must not quit. Quitting is for losers, and winners never quit. If you want to be successful in life, you must not quit. Now, Ray Ozzie took over Bill Gates as chief software architect of Microsoft. Ray Ozzie, from PLATO to Microsoft.

Evan Williams
Cofounder, Pyra Labs (Blogger.com)

Evan Williams (born 31 March 1972 in Nebraska) is an entrepreneur who has founded several Internet companies. Evan Williams and Meg Hourihan co-founded Pyra Labs to make project management software. A note-taking feature spun off as Blogger, one of the first web applications for creating and managing blogs. Pyra Labs is the company that coined the word Blogger, and made the service a big success.

Evan Williams is an entrepreneur and started a couple of companies. I am amused that he does not have a degree because he dropped out of college and he was self-taught. With Meg Hourihan, they built "Pyra" a web application, which would combine a project manager, contact manager, and to-do list.

As I read this article, I am watching a TV series that is entitled "The Apprentice". Actually, it is the first episode; the contestants are divided into two groups and each group has a project manager. The task is to run a carwash shop and who gets the highest profit wins. Frank, the product manager of the other group is a type of person who is very aggressive. When they got to the place, he divided the task and plan to his coworkers. His coworkers do not understand him because she is very hyper on that day. He leaves his coworkers, runs to a photocopying shop, and prints some signs. However, the signs are very small and the drivers cannot see their signs. On the other hand, Heidi, the project manager of the other group is very calm. She organizes his coworkers nicely. Her coworkers get some trash boxes to build a sign. In addition, they hired two topless guys to hold their signage. They offer a free lunch on their carwash to gain customers.

The main problem of the group of Heidi is their customers are jam-packed, they don't have enough space and workers. Therefore, they let themselves be dirty and wash some cars. On the other hand, the problem of Frank's group is how to get some customers. They do not have customers in their shop.

In the end, Heidi's team won the task. As for Frank's team, they have to eliminate one of their members. Two project managers that have different characteristics and strategies. One that is calm and the other is hyperactive. The calm wins because she does have a concrete plan.

Heidi and Evan are alike, Heidi does not leave his team alone, and they have a plan on how to gain customers quickly. They work quickly and peacefully, all of them do their respective task. Evan on the other hand does not leave his team and in fact, his team leaves him. That is very sad, because he cannot give their payroll because they do not have income on blog. He works alone, but the good part is, Blogger is still running. At that time, I think that he will quit. Imagine yourself working alone, your friends leave you. There is no one you can talk to and that is very sad. He gets negative feedback on Web.

Evan Williams is not a quitter, he continues Blogger. At the end of 2001, he started launching some for-pay features of Blogger. That is the time that Blogger starts making money. On May 2007, Blogger had completely moved over to Google operated servers.

Tim Brady
First Non-Founding Employee
Yahoo

Yahoo is one of the well-known website nowadays. Yahoo is known for their yahoo messenger, the live chat program where you can talk to other people online. They have Yahoo Mail where you can send emails to your friends and colleagues and other stuffs that you can find in yahoo. However, the most famous feature part of yahoo is its search engine.

Two students from Stanford, Jerry Yang and David Filo start yahoo. The two students decide to turn the site into startup, they asked Tim Brady to make a business plan, and he became the first employee of Yahoo. Bradey sacrifices his last term of college to help build yahoo. Tim Bradey played a key role in successfully managing all marketing, operation and business development to launch Yahoo commercially, and to help make Yahoo into one of the most recognized brands and successful businesses on the Internet. He became the VP of Production and the one who is responsible to think about the products of yahoo that will be release.

Like the other startup companies, they have problem on their funds. The three are only student on that time; they do not have a job to support Yahoo because they are all fresh graduate. Because of Tim's business plan, they attracted their first venture capital financing.

There is a time that Bill Gates send a memo on the internet that Microsoft will enter in the field of games and in the last part, Gates said that he's favorite website is Yahoo because it is cool. Their initial reaction is that Yahoo is cool that Gates recognizes them. However, they also think that Microsoft might actually make a website that is better than Yahoo that can erase them in the internet.

I like his advice to "know yourself". We all have special talents, weaknesses, biases, and needs. Being aware of your personal characteristics can help you adapt to others or at least understand why you react to them the way you do. We all have talents to start our own start up. You must be ready on the challenges that will come and you must set your minds to not to give up on achieving your goals.

Tim experience lot of problems on Yahoo but he did not quit because he set his mind to a point on when he will quit but it did not happen.

I think that one of the reason why Yahoo became one of the best website is because the people that is running it are friends. They know each other and trust each other. Because of their good relationship with one another, they don not have problems on producing good products.

Mike Lazaridis
Cofounder. Research in Motion

During his High School days, Mike Lazaridis is already working in shop doing tools. He came from a very nice school that offers a good education. In young age, they are thought to fix machine and tools such as oscilloscope. Moreover, they are thought on how to use a signal generator, a computer trainer.

Mike Lazaridis is the cofounder of Research in Motor (RIM) together with Doug Fregin, his friend since grade school. They founded RIM in 1984 while they were still students at University of Waterloo. One of their projects was a local area network that ran industrial displays. General Motors offers him \$600,000 to build a similar network for them. Then Mike drop out from his school to work on the job full time.

RIM was the first company to appreciate the importance of wireless networks. Lazaridis also foresaw the potential of mobile email that can be a good product of their company. They started the pager where you can receive and send messages. One of their products is the Blackberry, a wireless handheld device introduced in 1997 as a two-way pager. Blackberry, supports push e-mail, mobile telephone, text messaging, internet faxing, web browsing and other wireless information services was released in 2002.

Lazaridis is a Canadian and even though he had different nationality from the ones that have startup. He did not think that he will be discriminated or the public will not buy his product. However, he did not think of this problem and he just made his work and find out if the public will support it.

In 2007, RIM was named one of Canada's Top 100 Employers, as published in Maclean's magazine, the only wireless technology company to receive this honour.

Arthur Van Hoff
Cofounder, Marimba

From Java developer to CTO of Marimba, Arthur van Hoff has stayed in the forefront of Internet technology. A former Java Team founder, marimba, a software distribution company. Marimba is built by Sami Shai, Jonathan Payne, and Kim Polese, Java's product manager.

As I search some articles about Arthur Van Hoff in the internet, I read this article about him entitled "Sun didn't set on Arthur Van Hoff" by Amy Oringel. Arthur says in his interview:

"It's always easy to find a complex solution to complex problems. Truly successful companies are those that find simple solutions to complex problems. I try to be very strict. I always have fights with sales people because I say we aren't going to add this feature because we're going to do it the right way -- it will take longer, but you will thank me."

I like his ideas about simplicity. He thinks on the long-term goals and not on the short term. Like in Google, they are now famous because they simplify their search engine. They don't put ads, and stuff that is unnecessary for a search engine.

When Marimba was acquired by BMC software, Arthur and Jonathan started another startup, which was called the Strawberry.

Arthur Van Hoff is successful in his start-up because he loves on what he is doing. Together with his friend at Java, they built Marimba and they are successful. He started his startup with a good business plan, and the VC accepts their business plan so they build Marimba. Fund is very important on a startup, so in order to VC you must show to your VC that they will not regret if they will fund you. You must be ready for your business plan to impress them and they give their trust to you.

Gmail

Paul Buchheit

Paul Buchheit is the man behind Gmail, Google's free Web-based email (webmail). Gmail is just a weird idea of Buchheit that became a startup that help many people. Buchheit works on Intel before he transfer to Google. He was kind of bored to Intel so he tries to apply at Google to do some new and different stuff. He then becomes the 23rd employee of Google. He works with a small group at Google to make some new projects. Buchheit thinks a web-based email that you can access anywhere as long as you have a computer and an internet connection because he had a hard time accessing his email before. He must go to his house just to check his emails. It takes him and his team a lot of hard work to build the Gmail because they added some new stuff to it. They give user gigabytes of space for their storage while the standard storage on that time is just 2-4 megabytes only. Since Google is famous on their search program, Buchheit added a search program in the Gmail where you can search your mails easily. They also added the autocomplete, it automatically completes the email address for you if it already recognizes the email. Gmail also have conversion-oriented feature and IM or chat. He also starts the Adsense, an Ad running program for the web that also made profit for Google.

Paul Buchheit is a kind of man that always wants innovation. He wants to explore and develop new things. Gmail is a startup that started in a startup company. Buchheit makes Gmail a very user-friendly program.

Gmail encountered system problem when all the user email crashed down. Because of his abilities and hard work, they manage to cope up and surpass the challenges that they encountered. Like the other founder, Buchheit didn't quit on his work. When he was in college, he says to his self that he ill make web-based email. He does all his best to achieve that goal, and now it is the Gmail.

Buchheit is a man that has many weird ideas that turns out to be a good product. It is good that Gmail is under a startup company. He doesn't encounter problems on funds because Larry and Sergey gives their employee 20% of their time work on their own project. They allows there employee to have the opportunity to make their own startup. And that was very good because there is a possibility that maybe

someday one of their employees can create a startup that can change the world.

Steve Perlman

WebTV

The guy behind WebTV is Steve Perlman. He first works at Apple with a group where he led the development efforts for much of the underlying multimedia technology incorporated into the color Macintosh, including the underpinnings of QuickTime technology. He then left Apple with his and goes to General Magic. Perlman cofounded Catapult Entertainment. Catapult developed modems for Sega and Nintendo video games. He built a thin client for surfing the web using a TV screen. He was fascinated on TV and he wants to make it interactive. He recruited the late Phil Goldman and Bruce Leak, to join with him in founding WebTV Networks, Inc.

One of their projects is an online game play through the TV. They were able to set up NBA Jam using a net. Instead of finding another controller for the second person, they set up a link through another dial up connection to another TV so that the two people can play the game at the same time online. This is a very good invention of him that now develops for the online games that can be played in the internet. With this idea, people no develop some MMORPG games that are very interesting because many people can play the same game online.

One of their major problems that they encounter is what they called chicken-and-egg problem. It is a problem involving software and hardware. Software is the content and Hardware is the devices to make the content. They can try to create the context but there is no device that can accept it or receive the content or they are no content because there are no devices available.

Just like the other startup they encounter problem on funds. They don't have venture capitalist that will fund their product but luckily. They meet Marvin Davis, a wealthy financier in Hollywood that is impressed by the prototype of WebTV. He then fund WebTV and raise 1.5 million dollars. They also approached other VCs such as Brentwood Venture Capitalist led by Jeff Brody and Paul Allen who put 4.5 million for their product.

Because of his creative mind, he is the sees the net in very different perspective. He thinks that he can maximize the potential of the internet so he tries his best to make a product out of it. Because of his determination he made a good product. He does not quit in achieving his goal.

Mike Ramsay

TiVo

Watching television is one of my past times. You can watch everything on TV such as movies, news, series, cartoons, music videos and the annoying commercials. Long commercials are very annoying. Mike Ramsay and Jim Barton are the ones that made a solution to this problem. They created a device that digitally records the television programming to hard disk storage for later viewing. They created the first public DVR or digital video recorder.

They call it TiVo, it records the TV program so that the consumer can watch the program in their desired time or schedule. It's also a device that provides an electronic television-programming schedule, and provides recording options based on that schedule. It skips commercial so that you can watch the program smoothly. It is a very good device because you can watch you favorite programs anytime you want.

With the help of the TiVo the consumer has the freedom to skip the annoying commercials. The TiVo will automatically record the program and the consumer can watch it during his/her free time.

One of the problems that they encountered is the high technological background that TiVo needs. The device is high tech and he is worried on the customers because they may have hard time using TiVo. They also had a hard time studying how can they make TiVo simultaneously records the program because of the pause and commercials.

After they launched the product, they acquire lots of profit because many consumers want TiVo. TiVo allows them to watch their favorite program on their desired time.

With his simple idea, it changes the lives of many people. At first, people are annoyed if they couldn't watch their favorite shows because they had a work to do. Now, they can record their favorite shows that is commercial free and they can watch it anytime they want.

Paul Graham ViaWeb

Paul Graham is the cofounder of ViaWeb the first ever application service provider or ASP. That allows users to build and host their own online stores. I had fun reading the case study because it is not boring like the other case study. I think that he is a humorous man. Like the other startup ViaWeb started with the crazy idea of Paul Graham and they do it in an apartment only.

At first they think that they will build software that you can download and install to your desktop customized it to build a website and run it to a server. The idea is good but Paul Graham thinks about his user, some of his user is not that knowledgeable on computer. They may have hard time figuring out what to do so they create ViaWeb that run in the web. They provided the server that can run their product through the web. Paul Graham code ViaWeb in a different programming language Lisp programming language second-oldest high-level programming language in widespread use today.

I like the thought that he believes that the people in a real startup company are the ones that are not comfortable in wearing suits and business attires. They just don't bother on the things they wear when they are talking to their investors. They just focus on their goals, to make people happy.

Paul Graham values his customer a lot. He tries to build a program that is user friendly. They code 24/7 for ViaWeb to try to finish it. And luckily they finish it and he is very happy that it did work and they don't have to code to windows.

They did have problem on investors and funding like the other companies. It is funny that they their nine or ten investors that they didn't accept or didn't accept them. But luckily they get their funding from the angel capital.

Later on, Paul Graham wanted Yahoo to buy them and he conduct demos to Yahoo by phone and online. Then ViaWeb became Yahoo store.

“Never believe it's a deal till the money's in the bank.” This is one of the lines that Paul Graham said. This is an advice for the future people that like to build their own startup The Company must not change their plans if an investor is saying that they want to buy the company because there is always a chance that the investor will not pursue the deal.

Joshua Schachter
del.icio.us

Is the creator of del.icio.us, a social bookmarking web service for storing, sharing, and discovering web bookmarks. And now, it has already three million users and one hundred million bookmarks.

Bookmarking is one of my favorite features in the net or browser; I like the idea that you can store the URLs of your favorite sites. You can access the site whenever you want to visit it and you don't have to memorize the URL. As of I now I think that 50+bookmarks in my browser. And it is very convenient to use bookmarks.

I think Joshua Schachter and Evan Williams have the same way of thinking and lives. From a simple idea and features that they start, they develop their own startup. They both value their workers, Schachter had an experience that he doesn't get any salary for two months because he has lack of funds but he gave his workers their salary to continue their work to him. Williams is left alone by his workers, because he doesn't have the allowance for their salary. They both believe that good works are those that are simple. Schachter said his advice in the last part of the interview:

“ Reduce. Do as little as possible to get what you have to get done. Do less of it; get it done. If you've got two things that you want to put together, take away until they go together. Don't add another thing. Because you can understand it better, you can analyze it more cleanly. The UI will be easier.

Simplicity is the best in doing stuffs, few features means easier to use and your user will like it. Not all users are technical people. The beginner user will much more appreciate your works if it is simple and easy to use.

With such a simple idea of Schachter, he gain 30\$ for his company. It shows that nothing is really impossible in the startup world. You can do whatever you want as long the user needs it. You can make anything out of your imagination. Just try to abstract things and maybe someday there is a brilliant idea that will pops out to your mind that cost a million dollar amount.

Mark Fletcher Bloglines, ONElist

Mark Fletcher was able to do two successful startups. One is known as ONElist and the other one is Bloglines. Mark was a senior software engineer for Sun Microsystems when he created ONElist, a free mailing list service. This was actually one of his personal problems before. He wanted to start a mailing list on the net for his parents. At that software still had to be downloaded and the computer must be connected to the internet for it to work. It was very difficult for a normal user to put together this complicated mailing list.

ONElist was a self funded company. Due to ONElists popularity the company was able to attract venture capitalists. The company started to grow larger and larger until to a point where it had 150 employees. Then it got more popular among users and was able to have a million users a month.

On November 1999 ONElist and eGroups had a merge and worked with each other to go public. These two companies that just merged were still called eGroups. Because of its gigantic merge it easily had 13 million users that use their services every day. All of the users create and send emails at around than 1.3 billion email messages per month. A big breakthrough happed in January 2000. A big success for the company being able to raise a staggering amount of \$42,000,000

Just 7 months later in August 2000 the company was sold to Yahoo. Having at least 18 million users they were bought for a price of \$413,000,000 in a stock deal and became part of Yahoo! Groups.

As for Bloglines, it is a web base news aggregator for reading syndicated feeds using RSS and Atom formats. This became a big help to millions of people around the world. These are the people who needed to check out the news all the time. Because of Bloglines people do not need to go to every news site just to be able to view what news is happening around the world. Bloglines gave these people a huge service. Bloglines was bought by Ask Jeeves a very well known site around the world. They were the ones who were able to buy Bloglines.

It was because of Mark Fletcher that all of these startups became possible. It was his hard work and determination that helped him succeeds in both of his startups.

Craig Newmark
Craigslist, founder

Craig Alexander Newmark is an Internet entrepreneur known for being the founder of the website Craigslist. Newmark resides in San Francisco's Cole Valley and is active at Craigslist in customer service, mostly dealing with spammers and scammers. Craig is just a typical guy who turns his hobby to a business. He is the founder of craigslist.org. Craigslist is a central network of online communities, featuring free classified advertisements (with jobs, internships, housing, personals, for sale/barter/wanted, services, community, resume, and pets categories) and forums on various topics. Craigslist started as an email list to publicize events in San Francisco.

I visited the site then I observe that the site is simple. The interface is very simple and easy to use and it's very nice. It also has variety of categories to choose from such as community, personal, discussion forums, housing, services, jobs, gigs, and resumes. The site has links to different countries including the Philippines.

Like the other startup company, craigslist is just a simple idea or hobby that turns out to be a big business. Newmark maximizes the internet by using its potential. Since many people are using the internet, why post advertisement to it and get paid. He then managed to build a site that to these things.

Newmark's advice to the future founder is to trust his/her instincts. Human instinct is important to a founder. When you encounter a problem and you can't think of any solution to it try to trust you instinct and you can have a solution to solve your problems.

Brewster Kahle **Founder WAIS, Internet Archive and Alexa Internet**

Brewster Kahle was one of the project team at MIT (Massachusetts Institute of Technology) then they help to start a company. He started WAIS (Wide Area Information Servers) a client-server text searching system that uses the ANSI Standard Z39.50 Information Retrieval Service Definition and Protocol Specifications for Library Applications to search index databases on remote computers. The WAIS protocol and servers were primarily promoted by Thinking Machines Corporation. WAIS was one of the earliest forms of Internet search software. It was in some ways a predecessor to web search engines. Kahle sold WAIS to AOL in 1995.

I think that Brewster is one of the guys who have been successful in spite of the fact that he has never been after of the success that he achieve. He's main goal is not the money that he will earned but to help the user to use the internet. He's been pushing protocols for the benefit of the user to make things run better. What he's done with WAIS has been instrumental in bringing about the success of the internet.

Kahle and Gilliat founded Alexa internet, a California-based subsidiary company of Amazon.com that is best known for operating a website that provides information on web traffic to other websites. The Alexa toolbar tracked user browsing behavior and suggested related links using collaborative filtering. Once captured, pages visited by users would then be "donated" to the related nonprofit Internet Archive, to help build a history of the Web. Alexa was acquired by Amazon in 1999. It offers a toolbar that gave the users guidance on where to go next, based on the traffic patterns of its user community. It also offered context for each site visited. You can know how many pages the site has, to whom it was registered, how many other sites pointed to it and how frequently it was updated.

Khale became successful because he had many great ideas in his mind. A startup came from people that have good ideas in the back of their minds. They just need to put an effort to make it a product. The capitalist of Khale give him the trust because they believe that Khale has the ability to create great ideas.

David Heinemeier Hansson

37 Signals

David Heinemeier Hansson helped transform 37signals from a consulting company to a product company in early 2004. He wrote the company's first product, Basecamp, an online project management tool. He also wrote companion products Backpack, Ta-da List, and Campfire. In July 2004, he released the layer of software that underlies these applications as an open source web development framework. Ruby on Rails has since become one of the most popular tools among web developers and won Heinemeier Hansson the Hacker of the Year award at OSCON in 2005. In July 2006 (after this interview), 37signals president Jason Fried announced on the company's blog that Jeff Bezos had made a minority private equity investment.

Before the 37 signals was released, Hansson developed first the Basecamp. Hansson was part of the 37 signals 2.0 management team. With this Basecamp, they picked simple things: a project weblog, milestones tracking, file and to-do list sharing. At first they had this idea of making blog and applied it to project management. In developing the Basecamp, they try to do it to a simpler application because they would probably have some complications with the codes. Hansson was actually the only programmer and designer who had primary concerns of the applications. So, they decided to do it to simpler programs. While doing the Basecamp, Hansson was able to have an opportunity to develop Ruby on Rails. He decided to do this project because he had only 10 hours a week to program for the Basecamp. People got interested with the Basecamp because of the blogs, advertising and emails of Hansson and his colleagues. They thought that it will be successful and need some funds to develop this project. So, Ruby on Rails was an alternative thing to maintain this project. 37signals also produces a blog, Signal vs. Noise.

Ruby on Rails is an open source web application framework for the Ruby programming language. It is often referred to as 'Rails' or 'RoR'. It is intended to be used with the agile development methodology, which is often utilized by web developers for its suitability for short, client-driven projects.

Philip Greenspun

Cofounder, ArsDigita

Philip Greenspun, an American computer scientist and one of the earliest Internet entrepreneurs. Since 1980, Greenspun is starting to build Internet application. Greenspun likes application that people can connect to each other. Unfortunately, people have no standard programming system and no real standard programming environment. Greenspun can make an application to the operating system of apple computers but Microsoft users can't run the application and vice versa. When the internet came in early 90's his problem is solve. The people can access the application through the net. He will just make an application that can run through the server and the user's browser can load the application. This is the beginning of ArsDigita. ArsDigita, a web development company that was cofounded by Philip Greenspun together with Tracy Adams, Ben Adida, Eve Andersson, and Jin Choi. I actually don't have any idea on what ArsDigita is. I've never heard that company and after I read the case study I learned on what is ArsDigita is all about. I learned that the company produced a popular toolkit know as ArsDigita Community System (ACS). ACS was an advanced Open Source toolkit for developing web applications developed primarily by developer associated with ArsDigita Corporation. The good thing about ArsDigita Community System is it's an open source application. I think their main goal for their product is to help the user. Give the user on what they want and need.

They manage to grow ArsDigita to about \$20 million in revenue before taking a venture capital investment. Like the other startup that has problems on finding their venture capital, they also have problem on their venture capital itself. They manage to get a deal of \$38 million for their venture capital. After few months after the deal, the investors pushed Greenspun out of the company. And about six months later, Greenspun and his co-founder were unhappy with the financial performance of the company. They make a move by using their stock ownership to vote themselves back on the board of directors. They also have problems on people; they hire the people that are not qualified for the job. The company loses lots of money because of this people. The company did not hire the right people and it resulted to a big problem. Companies' goal is to help the user/customer and gain profit so that their company will continue running. It's hard to run your own company but as you can see, Greenspun and his other cofounder manage to run their company. If I were Greenspun, I think I will not let the VC to run the company, I am the one who start the company and I think that if there is a person that knows

a lot of the company, I think that it is me. I will also be strict on hiring employees; all of the employees must be professional and professionally competent. If my employees are all professional, it will not be hard for us to give better service to our customer.

I read to wiki that when Greenspun is not flying airplanes and helicopters or traveling he teaches electrical engineering or computer science classes at MIT. Maybe it's the reason why Greenspun is riding a helicopter on his picture at founders at work. Like the other founder, Greenspun didn't quit on his goal. Even if they encounter big problems on their staff and VC, they managed to survive but unfortunately ArsDigita crashed and the company dissolves in 2002.

Joel Spolsky

Cofounder Fog Creek Software

I really don't have an idea on what Fog Creek really is. After reading the case study, I now know that Joel Spolsky and Michael Pryor founded Fog Creek in the year 2000. It is a company that is located at New York. Fog Creek make FogBugz, their first application, a web-based project management system for software teams. They also make Fog Creek Copilot, the easiest way to provide tech support over the internet. Spolsky inspiration for his work is ArsDigita because he thinks that the idea of Greenspun is good and since ArsDigita crashes he wants to continue the concept of Greenspun that can help the other programmers.

Spolsky's main goal is to give a nice place to work for their employees. They wanted to create software, hire the best people and treat them like stars. Spolsky were having trouble finding a place to work where programmers had decent working conditions and got an opportunity to do great works. In the early days, people thought that the programmers are people that are hard to understand. They don't know that programmers are the ones that can give lots of profit. Spolsky believes that a programmer is most productive with a quiet private office, a great computer, a chair that is very comfortable and a computer that runs smoothly.

Spolsky learn from the mistakes of Greenspun from ArsDiita and he made a solution to it. They hire good programmers and the founders funded itself. They invested for the nicest environment that they can give to their programmers. In the past, programmers are working together with other management. They are in an office that many people are noisy and doing a lot of noise. The programmers can't code properly. Spolsky then give his programmers the opportunity to have a good working environment.

The company starts on making 5,000 dollars to 10000 dollars a month by their product. They have few problems encounter but no major problem that can lead of crashing the company. Spolsky manage to survive its company even if they don't have external funding from a venture capital. He treats his programmers as stars and his programmers like it. In exchange, the programmers codes good product that can have a good profit for the company.

I think that all founders must treat their workers as stars like Spolsky did. Based on a book from management, a hawthorns effect is true. Workers tend to build more work if they have a good environment and their managers are motivating them to do well. If I will be a founder someday, I think I will also treat my workers very nicely and like stars just like what Solsky did.

TripAdvisor

Stephen Kaufer

In the early days, people are having a hard time on finding a good place that you can have your vacation to relax, enjoy, and unwind yourself. There are many travel agencies available but some of it doesn't give the right information. Some travel agencies are bias on giving information to the user. Stephen Kaufer is one of the victims of this thing. He and his wife are finding some place for them to stay. Unfortunately, they are not satisfied on the place that the agency gives to them. After this experience he plans to build a better search engine that shows relevant details on the places that you can go. It is like a forum that lets the other people to post or comment on the place that is available in the web. In this matter, the user can freely decide on which place to go because of the comment of other people. Steve Kaufer, Langley Steinert, Nick Shanny, and Thomas Palka started TripAdvisor, an online travel site, in 2000. TripAdvisor.com is a free travel guide and research website that hosts reviews from users and other information designed to help plan a vacation. TripAdvisor.com has Hotel/Attraction/Restaurant reviews were user can post their opinions of hotels, attraction, and restaurant. They also have Travel wiki, a wiki in which users can add information on destinations as a way to aid potential visitors. TripAdvisor also have maps like in the Google Maps. It also has a forum page, were people post their questions to other people and other people can answer it.

It is actually my first time to hear this site and I'm amazed on to its concept. TripAdvisor is really needed by people, specially the ones who love to travel. It is startups that people really needs, the site give convenience to the user to search a nice place to have their vacation where they can surely enjoy their stay. The concept of the TripAdvisor is very simple but the impact to the user is great. It fastens the process of booking of the customers to the hotels and other services. The company encountered problems and one of it is about marketing and business development.

Now, TripAdvisor is the largest travel community in the web nowadays. it is now covering 212000 hotels and 74000 attraction and in over 30000 destinations worldwide. It has more than 15 million reviews and opinions and nearly 30 million unique visitors a month. If you look at the background of the site, it is just a small problem of Stephen Kaufer that turns to an outstanding site. He put him in a situation that he is the user then him think of the problem to resolve his problem. I think startup must be like TripAdvisor, you put yourself in a situation that you are the user and think of your problem or what do you need and construct a solution to it.

James Hong Hot or Not

Hot or Not is a site that allows a user to rate the photos that is uploaded by the other user. Photos are submitted voluntarily then the other user will rate the pictures of it is hot or not. It was founded by James Hong and Jim Young on 2000. The idea of the site is when Jim and James were drinking, Jim mentioned a girl that he meets at a party then he come to an idea to make a website that rate photos from 1-10 that can measure the "hotness" of the photo. HotOrNot.com is a startup that came from a fancy idea.

At first, I don't really have an idea on what is Hot or Not is. This is the first time that I heard this site so I try to search it to the net. I see that the interface is simple then o try the site. It is really addicting, there is a lot of pictures to be rated and the user can choose on the gender and age he/she wants to rate.

Jim and James didn't think that hotornot.com will be a business. They just think that it is a site that the user need. This site does not only rate photos but it has an additional feature that the user that has an account at the site can meet other people. It has a match engine that let the user meet the people that has a photo in the site. Jim and James build the idea of the site on a Monday; they start the coding on a Wednesday and Thursday. Their first user was James dad and he was easily addicted in using the site. They launched it on a Monday with their own picture, James mailed to 40 friends. They got easily 40,000 hits after their first day.

One of the problems that they encounter is the cost of the bandwidth. \$150,000 is the cost of bandwidth per year and it is growing fast. And so they started off \$60,000 in debt due to high bandwidth costs of hosting images at the time.

Annual revenue was estimated at \$5 million, with net profits of \$2 million. Hot or Not was recently sold for a rumored \$20 million.

I think hot or not was one of the coolest startup that I encounter; its concept was new and unique. It's like flickr with a twist. In flickr, you post photos. But in hot or not, you are not just only posting a photo but you can know what other people thinks about your photo, if it is hot or not. This startup adds my motivation to make my own startup someday. They have their idea; they think if the users need it, then they work hard to make the idea a product and have an income.

James Currier, founder

Tickle

Tickle.com is not new to me, I already use Tickle and it is very addicting. They have different test that can show your real personality. They have this IQ test, personality test, self assessment test and some fun test. Some of the tests are very challenging and very addicting. Tickle.com is a media company that provides self-discovery, and social networking services. Tickle.com is formerly known as Emode.com. Tickle was founded by James Currier, a former venture capitalist with a passion for digital media and social sciences. Tickle was acquired by Monster in 2004 for about \$100 million. James Currier then lives the company to start another startup called OOga Labs, a digital media studio that develops consumer Internet applications.

James Currier comes up with the idea of tickle.com when they are asked to take a personality test at their school. When they got their result, all of the students talk about it. It is like news that becomes the center of attention in the community. Then he realized how media affected the behavior of the people. And when the internet is launched, he started Emodes.com then it became Tickle.com. Their initial problem came when no one is taking their test; they had this anxiety test, parenting test, relationship and communication test. In order to solve this problem, they launched a fun test that can tell on what kind of dog breed you are. So they come up with a test that is 15-question test but not scientific. After 8 days, million of people are entering the site and cost their server to shutdown every 10 minutes. So they have to unplug it from the wall, throw it in the back of the car and plug it into a T3 at an ISP in Lynn, Mass.

Other problem that they encounter is about their people. They have a VP for engineering is not working so they just let him go. They also have a head in HR that was pregnant. The pregnant woman applies for a maternity leave for a whole 5 months and getting a full salary. Unfortunately, they have a problem on money on that time.

James managed to survive his company in spite of the problems that they encounter. With just a little test that he takes, he earns lots of many and helps other people. Media really have great impact to people. He uses the potential of the net with his idea. Like the other startup, tickle started with a weird idea of someone that turns into business.

Blake Ross, Creator

Firefox

Firefox was created by Blake Ross and Dave Hyatt. Firefox is a web browser that is use to access the World Wide Web. Blake was only 14 years old when he joins the Netscape team. I was little shock about this information; I can't imagine that a 14 year old guy working with the team of professional and he is the one that helps the team to fix some bugs. Firefox became the second-most popular browser in current use worldwide, after Internet Explorer.

Netscape is sliding down the market and it came to a point that they only have 5 percent in the market share. And it got worse when AOL started to demand more revenue from the browser. On that time, there is no available browser. Internet Explorer had been dissolved at that time in 2001. A first, Phoenix is the name of Firefox. And it is started by David Hyatt, Joe Hewitt who is now with Blake doing a new startup called Parekey. Blake was focusing on the development side, with Brian Ryner and Asa Dotzlec providing build and QA (Quality Assurance) support. They soon change the name Phoenix because they have a trademark issue on it. They change it to Firebird but Firebird is already use by an open source database. They think of another name that has an impact to user so they want to stay the "fire" word in it. Soon, they think of Firefox, it is a Chinese name for red panda. One of the amazing facts in Firefox is that their developer comes from different country and continent. Ben Goodger is from New Zealand, Pierre Chanial from France, and Jan Varga from Slovakia.

This is one of my favorite case study in the book. I use Mozilla Firefox ever since I discover it. At first I use Internet Explorer because it is already available when you install Windows XP to your computer. And when I use Firefox, I realized that IE and Firefox have lots of differences. Firefox is much faster; you can also have lots of tabs while browsing. The interface of Firefox is very simple and user friendly. Firefox is like the Google of the browser. Firefox and Google have simple interfaces that are very nice. Blake started Firefox not thinking on how much profit it will give. He treats it as a hobby and to help the users and give them on what they needs.

Blake gives the user on what they need, a simple, easy to use browser. Without him, I think there is no one that can create Firefox like we use today. He designed Firefox to be simple and add free unlike the other browser. I like the concept that he focuses on what does the user need. I wish someday that I can to build my own startup that the user need and can help many people.

Mena Trott Six Apart

When I read the title of the case study, I really don't have an idea on what is Six Apart. After reading the case study, I find out that it is blogging software. It is the blogging site that changes the blogging world. It is founded by a Husband-and-wife Mena and Ben Trott. The name 6 Apart is from the number of days between their birthdays.

Six Apart Ltd. is the creator of Movable Type blogware, TypePad blog hosting service, and Vox, and the former owner of LiveJournal. Mena's job is to write a blog. After creating her blogs, she noticed that the blog became more and more popular. After their company closed, they started working on blogging tool. Mena and Ben created Movable Type when they are in college. Movable Type became very popular and it became a full-time job. The demand for the couple became bigger after creating Movable Type. They formed ALC in July of 2002. They had problem on TypePad in case of funds. They don't have enough money to support a big project. They spend their time in their apartment for 18 months. Fortunately, they found a venture capitalist that grants them funding. They get funding from a group led by Joi Ito and his Neoteny Co. something which allowed the company to hire additional employees, acquire a French weblog publishing company, and reveal plans for what was to become its hosted publishing system, TypePad.

Making your own company is very difficult; you'll face many difficult problems. Mena's goal is to connect with other people or blogger. She does not have many friends during their High School because she has Ben and she feels that she only needs Ben to live.

Mena and Ben help and support each other to finish their goal and make a product that can help many people. They developed a thing or a product that the user surely needs.

BOOK REVIEWS:

Book: Systems Development

Author: Jordan Machesky

Reference no: QA 76.9 S88 J68 1990

Quotation: "We believe in *learning by doing*"

Chapter 1:

The goal of the book is to give a rational view of this challenging subject, Systems Development. The Chapter 1 is an overview of the development process and products. It talks about the five components of information system – people, procedures, data, software, and hardware. This components is use to produce information by accessing and processing data.

The chapter talks about the different people involve in the system development such as the developer, programmer, analyst, operators, end-user, user-manager and the user-sponsor. It also discuss about the Procedures that are instructions for people. And the different type of Procedures such as User procedures, Operator procedures, Normal procedures, and Recovery procedures. The next topic is about data. Data is the central component of an information system. And it also talks about the different types of software that is use and the different computer hardware that must be avail. The book also has a component summary that briefly summarizes the five components of information management.

Book: Systems Development

Author: Jordan Machesky

Reference no: QA 76.9 S88 J68 1990

Chapter 2:

The chapter two of this book is much technical than the previous chapter. It talks about the conflicting world of organizing, managing, and developing a system. It focuses on the Systems Development Goals, Management Activities, and Application Software Goals.

The chapter briefly discusses the System Quality Subgoals such as Functionality, Ease of maintenance and Flexibility. And their corresponding First-Level Characteristics and Second-Level Characteristics that is somehow easy to understand.

A Summary of Development Phases of a bank is included in the chapter that can help to understand the different phase that is such as Designing, Implementation and Review. My favorite part on this chapter is the author briefly discusses the step-by-step procedure on the systems development. And how can it be efficient, user friendly, and flexible.

TITLE: System Analysis and Design
Author: Alan Dennis
Barbara Halex Wixom
Reference no. QA 76.9 S88 D45 2003

Chapter I

The Chapter of the book introduces the systems development life cycle (SDLC), the fundamental four-phase (planning, analysis, design, and implementation) that is common to all information system development projects. I have a little background on SDLC because I take ISTCON last term so I understand the terms somehow. I believe that SDLC is not just a simple topic; you must have a deeper understanding on the system and have good analyzing skills.

The key person in the SDLC is the system analyst, who analyzes the business situation, identifies opportunities for improvements, and designs an information system to implement them. The SDLC is an infinite cycle, systems must be improve and develop otherwise it will die or extinct.

I learned that the main goal of a system analyst is not to create a wonderful system but to create value for the organization that means a high profit. The chapter briefly defines and discuss about the different phase on SDLC, which is very helpful.

In planning stage, we must answer the question "why build sytem?" we must know why we are doing the system. We must develop a workplan and a strategy.

In Analysis, we must answer the question "who will use the system? What the system will do? And where and when it will be used?". This is the time that the project team will analyze the system, using use cases, process model and data model to understand the system.

In Design, we will plan on "how" does the system works. The design must be easy to understand so that the user will not have a problem in working with the system.

The implementation is the last, longest and most expensive phase. This is the phase where you search for bugs and errors. The implementation, the system is built, installed and maintained.

The Next topic that discussed is about Systems Development Methodologies, such as waterfall and parallel development, use as formal step-by-step processes. Rapid application development (RAD) methodologies tend to speed up development by using prototypes. In addition, Agile development methodologies focus on streamlining the SDLC by eliminating so many tasks.

Next topic is about the Project Team Roles and Skills. An analyst must have general skills, such as technical, analytical, interpersonal, business, management, and ethical. I must acquire all this skills as system analysts someday. I think that it will take a lot of efforts. I must have a lot of knowledge on programming to be a good system analyst. There are a lot of roles and responsibilities such as the business analyst, system analyst, infrastructure analyst, change management analyst, and project management.

I recommend this book to other student to read. The words are easy to understand and the approach is very good. It briefly discusses the terms and gives some examples. I learn a lot on the first chapter. It brightens my ideas on SDLC and the different methodologies and different roles/jobs.

TITLE: System Analysis and Design (Third Edition)

AUTHOR: I. T. Hawryskiewicz

Reference No. : T 57.6 H38 1994

Chapter 2

System for Coordination

The second chapter of the book focuses on people. It describes the large number of ways in which people work. It also outlines the different ways in which computers can be used to support such work. The Organization is divided in three levels, strategic levels, management levels, and operational levels. The Strategic level set the long term goals of the organization. They plan the strategy of the organization for the future. The Management level is responsible for acquiring and arranging the resources to meet these goals and for defining the detailed tasks to be carried out at the operational level. The Operational level is the one that will carry out the tasks. This level must have good communication with each other so that they can achieve their common goal.

The chapter discusses the different ways in which people use computer to assist them in their own individual work and their work with other people such as:

- Keeping track of appointments;
- Preparing and maintaining personal files and letters;
- Preparing documents and reports;
- Sending out personal computations;
- Meeting and talking to people;
- Making decisions;
- Keeping tracks of budgets for which we are responsible;
and
- Updating addresses of contacts

It also talks about groups of people that work together in an organization. Group support systems introduce a new dimension into computing, as they must emulate the behavior of people in an organization. Group can be characterized between open and closed groups and loosely and tightly coupled. Open groups allow members to be freely added or deleted from the group. While Close groups does not allows any person to join their groups. Loosely coupled groups allow

members to act independently of each other, whereas tightly coupled groups impose restrictions in such interactions.

The chapter outlined the different kinds of interaction between group members and defined different classes of group works. This included social networks, clerical procedures, decision support systems and design groups. The chapter described some characteristics of these different kinds of groups, and identified how to put together computer systems to support them.

Title: System Analysis and Design (Third Edition)

Author: I.T. Hawryzkiewicz

Reference No. T 57.6 H38 1994

Chapter 3 : Sytem

The chapter is entitled "Systems for Business Application". The chapter describes some typical computer-based information systems that support the common business units found in organization. The chapter describes some of the more common business units and their processes. The business units described in this chapter are those which keep organizations functioning.

You can see and organizational chart in the chapter that can help the reader to further understand the typical information system. And organization chart is a chart that shows the business units of the organization. The chapter discusses the important subsystems found in most organization such as; Human resources subsystems, which maintains information concerning the organization's personnel and it is the part of a business that maintains personnel policy. Human resource subsystem has two subsystem the Personnel subsystem that function is to keep information about people and Payroll subsystem a system for paying the organization's personnel. One of the major subsystems is called Material Subsystem that keeps track of the material resources. Other subsystem is the Accounting information system that tracks on an organization's financial transactions. It has two subsystems called accounts receivable and accounts payable. Accounts Receivable is a subsystem that keeps track of money owned to the organization and Accounts payable is a subsystem that keeps track of the money owned by the organization. Another major subsystem is the General Accounts Subsystem to keep track of funds used by internal departments. Marketing Subsystem is a subsystem that determines what an organization is to produce and then publicizes its products. Client relations subsystem is the part of the system that interacts directly with organization's clients. Clients are the people that are outside the organization who deal with the organization. Production subsystem is the last subsystem that produces the physical goods.

The second part of the chapter discusses about Business Processes. A Business process is a set of steps used to achieve a business goal. The business process is now becoming dominant, and many systems are being redesigned to meet business processes needs.

Business processes is very important to an organization, in order to achieve the organization's common goal a series of steps must be conducted. The subsystems must work together to achieve their goals.

Title: Introduction to Systems Analysis and Design (Third Edition)

Author: I.T. Hawryskiewicz

Reference No.: T 57.6 H38 1994

Chapter 4: Gathering Information

Information is the key resource, the most vital ingredient. It is one of the most important factors in building systems is to develop a good understanding of the system and its problem. In order to identify the correct system requirements and provide solutions that are acceptable to the organization, information is needed.

The Chapter focuses on the three important issues in gathering information; what are the information sources, what to study, and what are the methods needed to gather information.

Some sources for information are the systems users or the personnel that is using the system. They are the ones that are always interacting to the system so you can gather lots of information to them. Other sources are forms and documents, computer programs and procedure manuals and reports.

The chapter described the three most important ways on gathering information namely, interviewing, prototyping and ethnography.

Interviewing is one of the most common ways on gathering information. It is done by asking questions to other people that uses the system or have lots of knowledge of the system. The chapter mainly concentrated on interview. Because it described a number of important points to remember when organizing a search for information about the system sing interviewing.

Prototyping is another method and it is suited to experimental systems such us decision support systems. Te trend to group work suggests newer approaches that emphasize interaction in social setting. Lastly, the ethnographic approach or ethnographic studies, it means that you gather information by observing the system.

Title: Introduction to Analysis and Design (Third Edition)

Author: I.T. Hawryskiewicz

Reference no. : T 57.6 H38 1994

Chapter name: Problem Solving

The term problem –solving process is now commonly used to describe how activities are combined and organized. At the same time it is necessary to create an environment that provides the needed support for the process and its participants. The environment provides the tools and facilities needed to design and build systems.

It said in the chapter that there are many different processes in problem solving. And the kind of process used to design systems often depends on the kind of problem being solved. This chapter described some general problem-solving principles, as well as different ways to organize problem solving for information system design.

It discusses that for well-defined problems. A linear cycle was suggested. The linear cycle is a set of predefined steps for building a system. It is widely used in the design of systems that can be easily understood and which have well-defined workflows. The linear cycle groups system development activities into a sequence of consecutive phases. A phase in the sequence can only commence once the previous phase has been completed. A report that serves as the output is produced at the end of each phase, describing what has been achieved and outlining the plan for the next phase.

The 5 phase in linear cycle:

Phase 1 – Problem definition

Phase 2 – Feasibility study

Phase 3 – Systems analysis

Phase 4 – Systems design

Phase 5 – System Construction

It also included two additional phases called Post-Implementation review and Maintenance that take place after the system is built. The chapter concluded by suggesting that the linear cycle may not be appropriate for all projects, particularly for system that do not have clearly defined objectives. Alternative cycles may be needed to build such system. Where the problem is not well defined, an evolutionary or prototype approach may be more appropriate. Prototype and evolutionary cycles call for design methodologies that allow easy system changes. They also requires project management systems that support controlled change.

Title: Introduction to System Analysis and Design (Third Edition)

Author: I.T. Hawryskiewicz

Reference no. T 57.6 H38 1994

Chapter 6: Starting a Project

In the previous chapter I learn the different Problem Solving steps that must be done. In this chapter, it discusses how important that a company must identify the problem that will be solve. Then to justify that solving the problem is worthwhile. Finding the right problem to solve is perhaps the most important thing that a company/management must do. It said that if a company tries to solve the wrong problems, the company will be wasting time and resources, and then the solution will not have value to anyone. If the management do not identify the right problems to solve, then the system ill not be as good as it should be and eventually this will lead to difficulties.

The chapter describes how to find problems to solve, how the management can justify solution and how projects are started. The chapter describes problem finding and justifying it in the context of the linear cycle. However, problem finding and justifying is equally important in any other kind of system development life cycle and usually precedes analysis and design activity in any project.

Setting the goal of a management can be done in two ways: Setting goals using external considerations and setting goals using internal considerations. Some of the ways in setting goals using external considerations are; using normative models, which describe an accepted or conventional way of doing something; using historical models of the ways in which organizations develop; comparing activities and analyzing changes to government policy and community attitudes. While in setting goals internally, the management must focuses on their internal problems and tries to solve it. The management asked questions to the people that are working in the environment to further develop their knowledge about the different problems that the management encounters.

In justifying a project, the management is checking the feasibility of the project, they evaluate whether it is worthwhile to proceed with a project or not. Feasibility analysis is the second phase of the linear cycle. Feasibility analysis usually considers a number of project alternatives, one of which is chosen as the most satisfactory solution.

In summary, the chapter describes how a project is started in a management. The first step is to define the project goal, and the next is to evaluate the feasibility of achieving this goal. The chapter outlined methods used to define the goal and evaluate its feasibility, together with the necessity of proposing a number of broad solutions and then evaluating the technical, operational and economic feasibility of the solution.

Title: Introduction to Systems Analysis and Design (Third Edition)
By: Igor T. Hawryszkiewicz
Reference no: T 57.6 H38 1994

Chapter 7 – Describing Data

The Chapter is entitled Describing Data. It discusses about one of the important aspect or part of system analysis and design. A system analyst must know how to describe data. With a data flow diagram, an abstract or implementation independent model of the data is developed first and in the end it is converted to a physical implementation.

Data analysis is a much difficult subject than doing a data flow diagram. A data flow diagram is almost looks like a system you can actually see the physical operations and its flows can be imagined just as easily. A data model on the other hand is often more abstract and difficult to relate to actual system components. Often it contains data from more than one function or it must show associations that are not visible as physical things in the system. Data modeling is a difficult topic for a beginner.

It is made up of more than one level and different ideas are used at each level. In the first level, analysts develop a conceptual model of data. This model represents the major data objects and the relationship between them. It is also sometimes called semantic analysis because it captures the natural semantics of the system. While the next level is the one who organized the first model into a good shape. This process removes redundancies; often it is called normalization, which uses ideas from relational theory. The normalized model is then converted to a physical database.

Conceptual model describes the essential semantics of system data. This model consists of a number of symbols joined up according to certain conventions. Entity-relationship analysis is a method where conceptual model symbols are used. This method was introduced by Chen in 1976 and is now widely used. Entity-relationship analysis uses three major abstractions to describe data. These are; entities, which are distinct things in the enterprise; relationships, which are meaningful

interactions between the objects; and attributes, which are the properties of the entities and relationships.

The E-R model is refined by converting it to a relational model. It also provides a number of criteria to construct normal form relations. Finally this chapter shows the relationship between the E-R model and DFD diagrams and how this two can be used to ensure that correct and complete models are developed during analysis.

Title: Introduction to Systems Analysis and Design (Third Edition)
By: Igor T. Hawryszkiewicz
Reference no: T 57.6 H38 1994

Chapter 8 – Advanced Modeling Methods

The chapter is entitled Advanced Modeling Methods. It briefly covers some alternative methods that are now used for high-level conceptual modeling. It also discusses about the common extensions to the E-R model, the dependent entity sets and subsets.

Dependent entities are very useful for modeling historical information. Historical information must be kept whenever two entities interact more than once. Dependent entities are also sometimes known as weak entity sets. An entity or relationship set is made up of objects that have not only the same properties, but another property in common: their existence depends on the existence of parent entity in another set.

Subsets are modeling situations where we wish to treat entities from one entity set in the same way in some cases and differently in other cases. To model different methods of treatment of entities in an entity set it is necessary to show division of entity sets into subsets. It is also common for entities in different subsets to have some different attributes and some common attributes. The common attributes are shown as attributes of the parent entity set, whereas attributes particular to a subset are shown only as attributes of that subset.

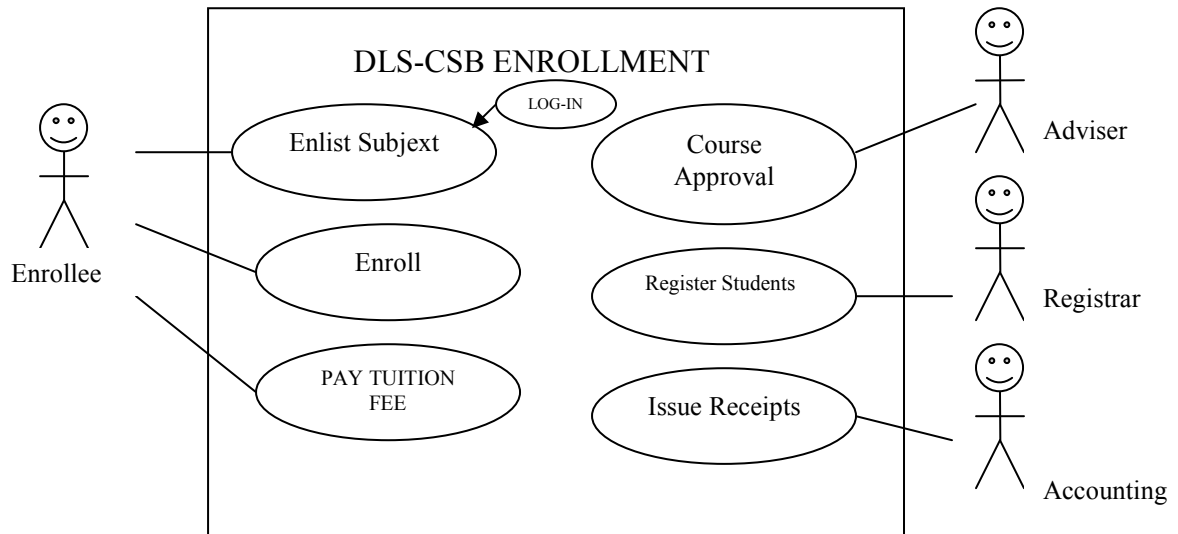
Entity-relationship modeling is one of alternative methods that have been proposed for conceptual modeling. The alternative methods use different modeling abstractions and different modeling symbols. The two methods are entity modeling and binary-relationship modeling.

Entity-relationship models of data are static models. They describe the data structure but do not show what happens to various parts of the data structure.

Entity life-cycle histories tell us what happens to entities in the system. Each entity in the system goes through a number of states. An application may be received in which case it becomes a 'received' application. The application may then be checked, it then becomes a 'checked application' and finally the application may be approved, in which case it becomes an 'approved' application. To summarize, this chapter described some alternative methods for conceptual modeling.

USE CASE DIAGRAMS:

DLS-CSB Enrollment



Identification summary

Title: DLS-CSB Enrollment

Summary: this use case allows an enrollee to enroll in DLS-CSB for a term

Actors: Enrollee (Student), Adviser, Registrar, and Accounting

Creation Date: June 4, 2008

Date of update: September

2008

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events:

Preconditions:

1. The system must be online.
2. All of the enlisted subjects must be approved by the student adviser
3. The accounting must have change for the payments and a ready printer for the official receipt.

Main Success Sequences:

1. The student enlists all his/her subjects.
2. The adviser approves the listed course.
3. The registrar issues the EAF of the students.
4. The student presents his/her EAF and pays at the accounting.
5. The accounting issues receipt.

6. The student is enrolled.

Alternative Sequences:

A1: Incorrect username or password.

A.1.1 The computer informs that the username or password is incorrect and restart the page again so that the user can retype his/her username and password.

A2 : The accounting or registrar is out for break

A.2.1 The student waits for the accounting or registrar to go back on duty.

Error Sequences:

E1: The Student Forgot his/her EAF

E1.1 The student gets his EAF.

E2: The Check is not accepted.

E2.1 The student made another check that is

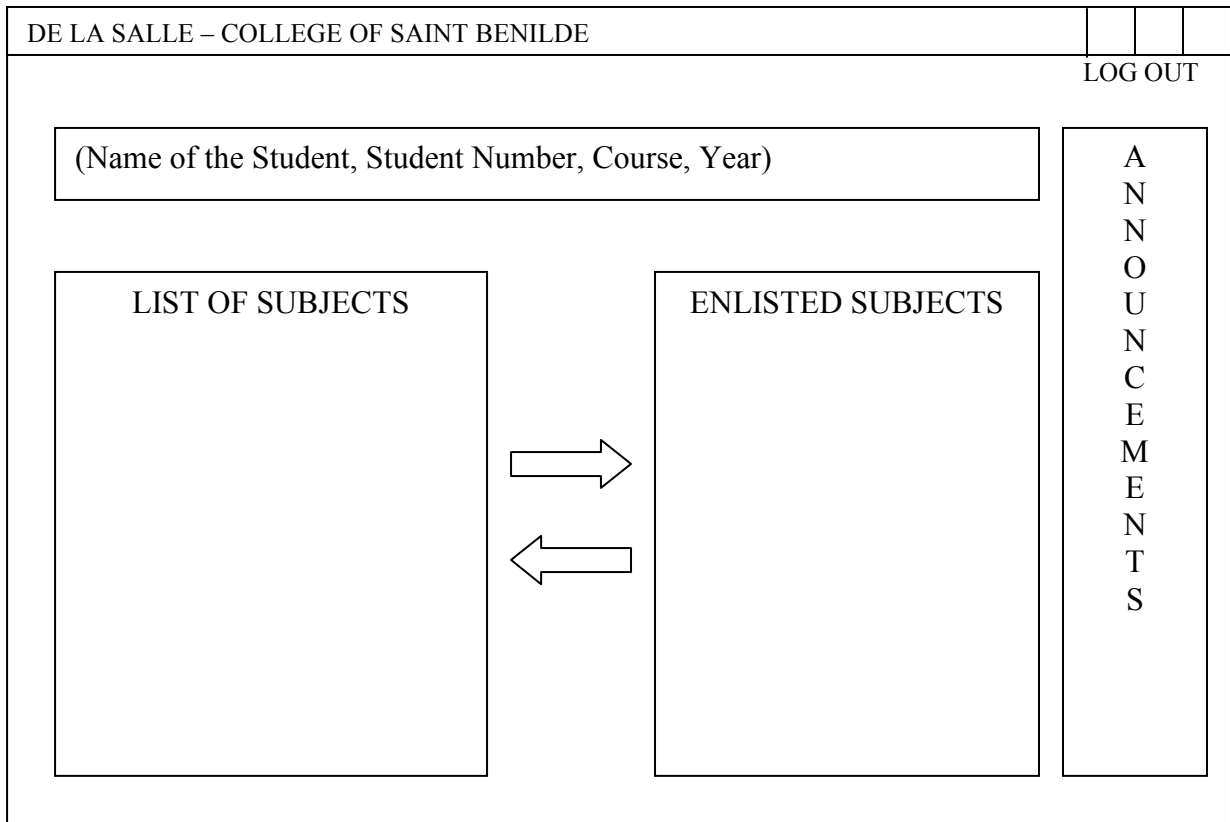
valid.

Post Conditions:

1. The accounting has fewer papers, change, and ink.

UI (User Interface) Requirements

ENLISTMENT



Non-Functional Requirements

- Response Time:

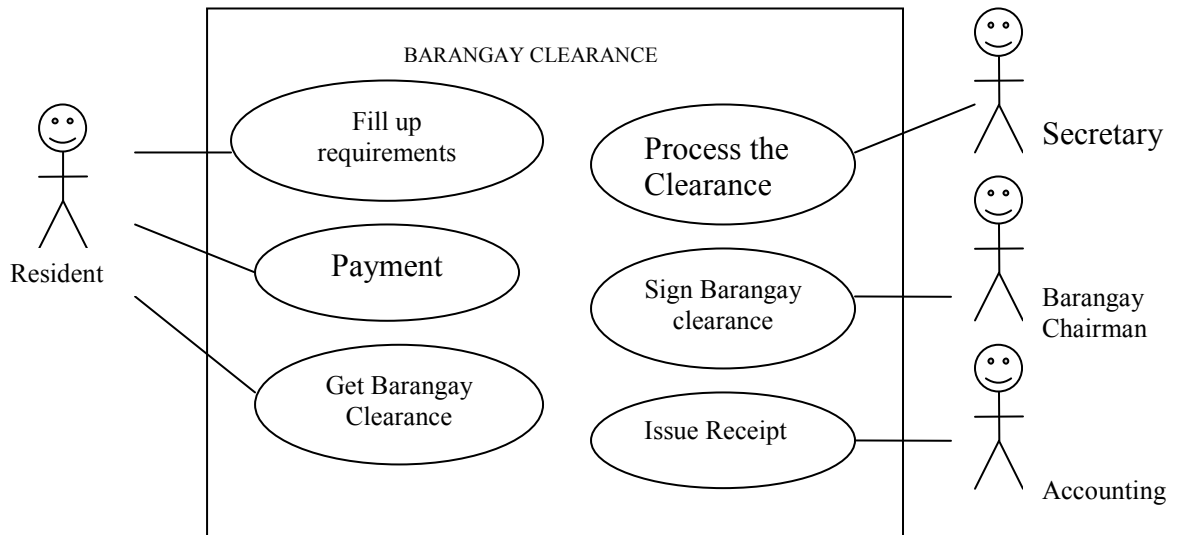
The speed of the Online Enlistment is based on the speed of the internet connection of the computer.

The accounting has three windows that process the payments.

- Availability – the online enlistment is available on every computer that has internet connection.

The accounting and registrars opens at 8:00 am and closes at 4:00 pm.

Barangay Clearance



Identification summary

Title: Getting Barangay Clearance

Summary: this allows a resident of a certain barangay to get a barangay clearance.

Actors: Resident, Secretary, Barangay Chairman, Accounting

Creation Date: June 11, 2008

Date of update: July 2008

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events:

Preconditions:

4. The barangay hall must be open.
5. The resident must fill up the requirement sheet and have money for the payment.
6. The Barangay Chairman must be in the Barangay Hall.

Main Success Sequences:

1. The Resident filled up and signed the requirements and pay for the service.
2. The Barangay Chairman signed the Barangay Clearance.

Alternative Sequences:

- A1: The resident went to a wrong Barangay Hall.
 A1. The secretary will tell to the resident the proper barangay hall that he/she belong.

Error Sequences:

- E1: The resident has a barangay record.
- E2. The secretary will not give a Barangay Record to those residents that committed crimes or malicious acts at the Barangay.

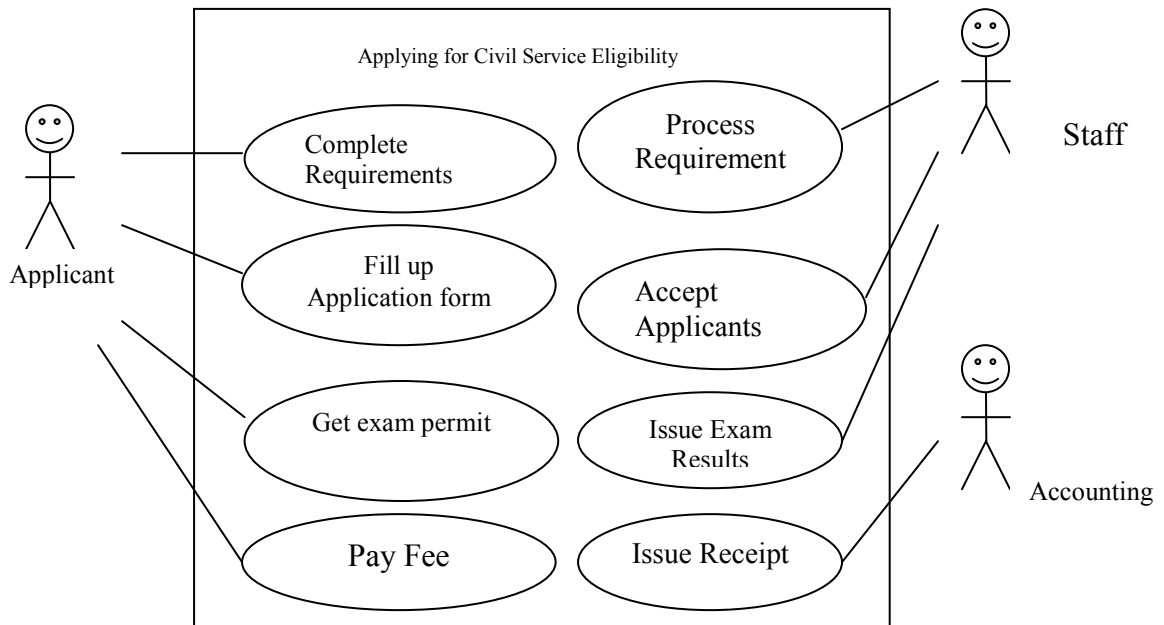
Post Conditions:

- 2. The secretary has fewer requirements form for the barangay clearance.
- 3. The accounting has fewer papers, change, and ink.

Non-Functional Requirements

- Response Time : The service is fast because there are only few people in the barangay hall that is requesting for a barangay clearance.
- Availability – The barangay opens at 8:00 AM-5:00 PM and closed during Saturday and Sunday.
- Confidentiality – The Barangay staff is does not give the resident's identification to other people.

Civil Service Eligibility



Identification summary

Title: Applying for Civil Service Eligibility

Summary: this allows a person to apply for the Civil Service Eligibility

Actors:

Creation Date: June 24, 2008

Date of update: July 2008

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events:

Preconditions:

1. The Applicant is a college student or college graduate.
2. The Applicant completes all the requirements.
3. The Applicant presents a valid ID.
4. The Applicant has the P350 for the fee.

Main Success Sequences:

1. The Applicant completes all the requirements
2. The Applicant pays the P350 for the fee.
3. The Applicant gets his/her exam permit, date and venue of the examination.

Alternative Sequences:

A1. Late for application

A.1 The applicant must apply for the next batch of the civil service eligibility exam.

A3.1 Picture in the ID is not valid

A3.1.a The ID pictures (1 ½ x 2) must with a full name tag that includes the complete name

A3.2 The ID picture is photocopied scanned or computer enhanced.

A.3.2.a The applicant will get another ID that is valid for the application.

Error Sequences:

E1: The applicant is not a college student or college graduate.

E1. A High school student is not allowed to be civil service eligible.

Post Conditions:

1. The staff has less requirements form for the applicants.

2. The applicant will now only wait for the examination date.

2. The accounting has less paper for the receipt.

User-Interface (UI)

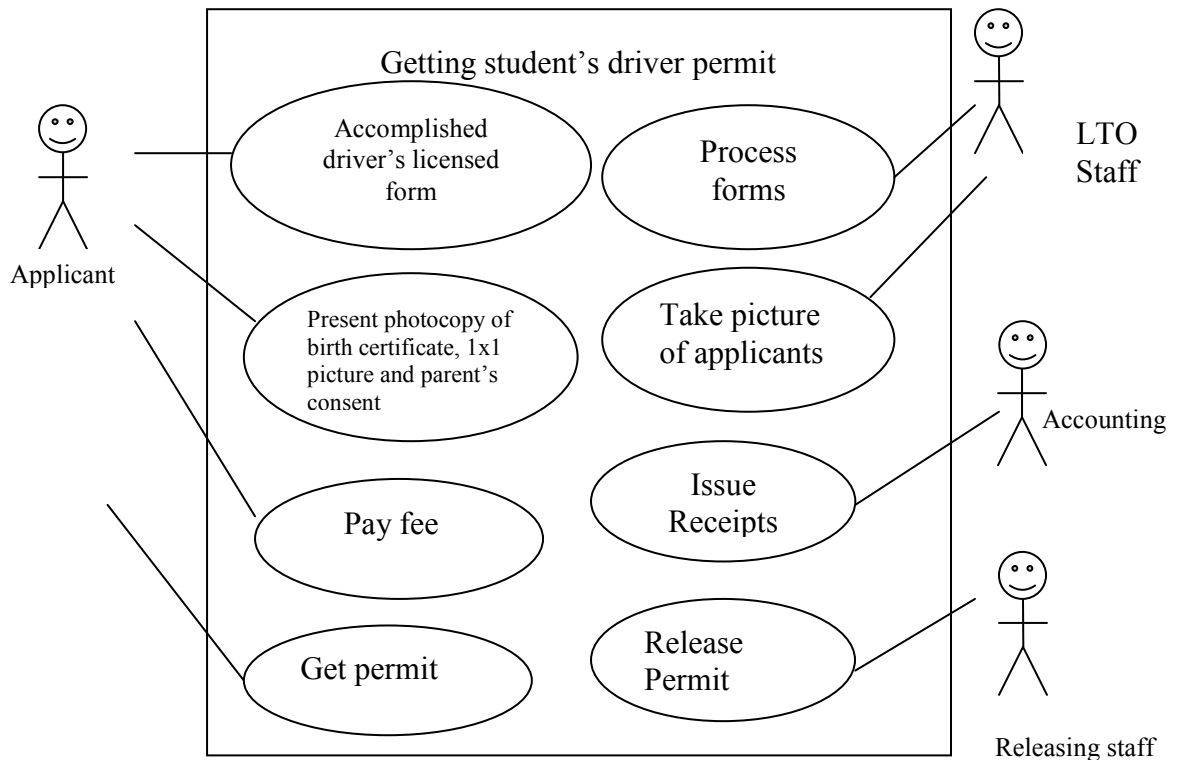
1. The Computer-Based examination is now available and can be taken for the Civil Service Eligibility Examination

2. A computer-based system also serves as database for the applicants.

Non-Functional Requirements

- Response Time: The staffs assess the transaction immediately.
- Availability: The office is open 8:00 AM – 5:00 PM from Mondays – Friday and closes during weekends and holidays.
- Confidentiality: The transaction between the staff and applicant is done privately.

Student's permit



Identification summary

Title: Getting student's permit

Summary: this allows an applicant to apply for a student driver permit.

Actors: Applicant, LTO staff, Accounting, Releasing staff.

Creation Date: July 2 2008

Date of update: July 2 2009

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events:

Preconditions:

1. The LTO office is open.
2. The applicant must bring all the requirements and fill up the application form.
3. The applicant must be 16 years old and above.
4. The applicant must have the 142.63 Php for the fee.

Main Success Sequences:

1. The applicant fills up the application form.

2. The applicant presents the form with his photocopy of birth certificate, 1x1 picture.
3. The applicant will be called for the picture taking.
4. The applicant will pay at the accounting office for the fee.
5. The applicant will go to the releasing section to get his student driver permit.

Alternative Sequences:

A1. The applicant is a minor between ages 16-17.

A1. The applicant must present a parent's consent to apply.

A2. The applicant is 18 years old and above.

A2. The applicant must present his/her TIN number before he/she can apply.

.

Error Sequences:

E1: The applicant is 6 years old and below.

E2. 16 years old and below can't apply for the student driver permit.

Post Conditions:

4. The LTO staff has fewer application forms.
5. The accounting has fewer papers, change, and ink.
6. The applicant has now his student driver permit.

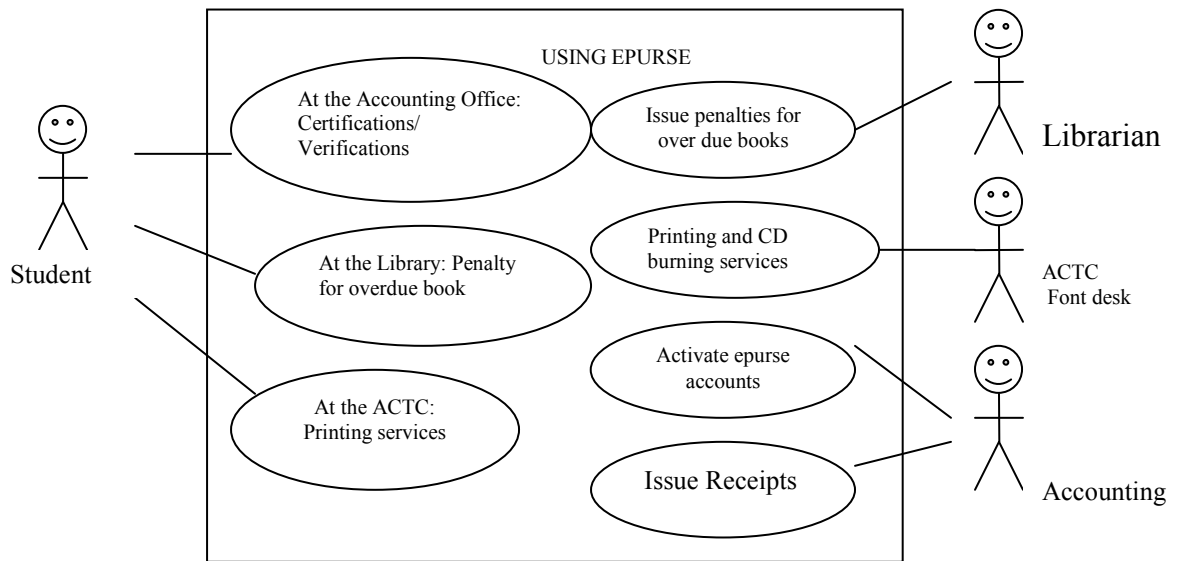
UI (User-Interface)

1. The LTO has computer system that can process the transaction faster.

Non-Functional Requirements

- Response Time - The service is fast because the staffs process the permit immediately.
- Availability – The LTO opens at 8:00 AM and closes at 5:00 PM
- Confidentiality – The transaction between the applicant and staff is done privately.

EPURSE



Identification summary

Title: Using epurse

Summary: this allows a student to pay transactions using epurse.

Actors: Student, Accounting, ACTC, Librarian

Creation Date: June 17, 2008

Date of update: July 2008

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events:

Preconditions:

7. Your epurse must have load.
8. The load of the epurse must be sufficient for the transaction.
9. Your account must be active.
10. The necessary personnel must be present.
11. The student is enrolled at the school.

Main Success Sequences:

1. You paid your transaction using your epurse.
2. You don't have to pay at the accounting office whenever you have a transaction.

Alternative Sequences:

A1: The load of the Epurse is insufficient to the amount of the transaction.

A1. The transaction will be voided and the student must pay at the accounting office for the transaction or reload his/her epurse.

A2. Lost ID card

A2. Epurse account will be hold and the student will be asked to get a new ID and sign a form of lost ID. Then, he/she will be asked to activate his/her epurse account.

Error Sequences:

E1: The student is not enrolled from the school.

E2. The personnel will not accept the epurse.

Post Conditions:

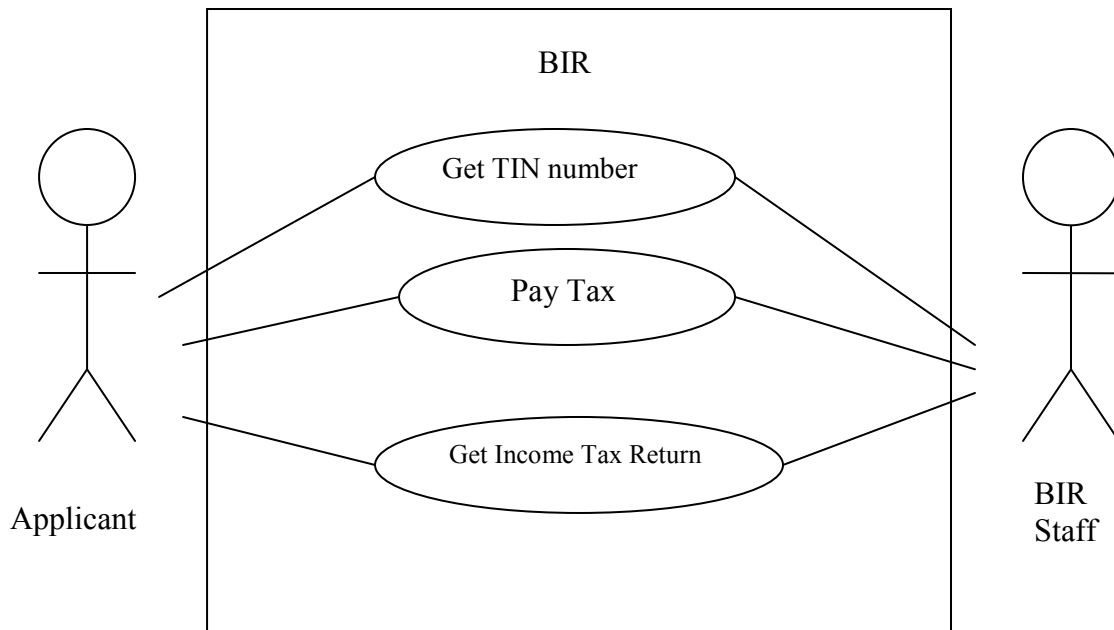
7. The student can use his epurse to pay for the printing services, CD burning services, payment for the over due book.

8. The students don't have to go at the accounting office whenever he does some transaction.

Non-Functional Requirements

- Response Time: The personnel can process your transaction faster using epurse.
- Availability – The Accounting office is open from 8 AM to 5 PM
- Confidentiality – The transaction between the student and the personnel is done privately.

BIR



Use-case Narrative

Title: Getting a TIN number from the BIR

Summary: This Use-Case Diagram shows how you can get a TIN number from a BIR office

Actors: Applicant, BIR employee

Creation Due: July 9, 2008

Date of Update: September 2008

Version: 1.0

Person in Charge: Michael Angelo M. Magat

Magat

Flow of Events:

Preconditions:

1. The applicant has the requirements needed.
2. The BIR is open and the BIR staff is present.
3. The applicant has sufficient money for the payment.

Main Success Scenario:

1. The applicant presents his birth certificate to the BIR staff
2. The staff will check if the birth certificate is valid.

3. The staff will give the application form to the applicant.
4. The applicant will fill-up the application form.
5. The applicant will pass the application form to the staff.
6. The staff processes the application form and check if it is incomplete.
7. The applicant will pay the fee.
8. The staff issues receipt, change and the valid TIN number of the applicant.
9. The applicant will get his receipt, change and valid TIN number.

Alternative Sequences:

A1: The applicant's application form is not complete.

Starts at scenario 6

7. The staff returns the application form to the applicant

Returns at scenario 3

Error Sequences:

E1: The applicant's birth certificate is not valid.

Starts at scenario 2

3. The staff returns the invalid birth certificate.

4. The staff will not allow the applicant to get a TIN number

5. The applicant will not get his/her TIN number.
The use case failed.

Post Conditions:

1. The applicant will get a valid TIN number
2. The BIR record of TIN number will be updated.
3. The staff has lesser application form.

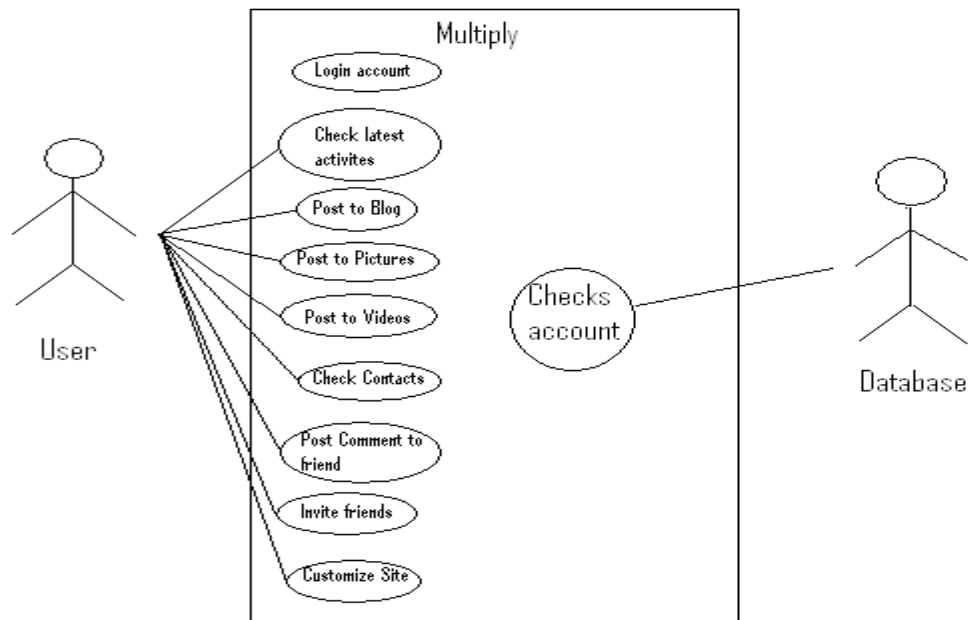
UI (User Interface) Requirements:

- application form

Non-Functional Requirements:

- The BIR office is open Mondays to Fridays, from 8:00 am – 4:00 pm
- The transaction between applicant and staff is done privately.

MULTIPLY



Use Case Narrative (Post to Blog)

Title: Post to Blog using Multiply.com

Summary: This Use-Case Diagram shows how to post a blog using Multiply.com

Actors: User, Database

Creation Due: July 15, 2008

Date of Update: December 2, 2008

Version: 1.0

Person in Charge: Michael Angelo Magat

Flow of Events:

Preconditions:

4. The user must have internet connection
5. The system must be online

Main Success Scenario:

10. The user inputs his valid multiply account
11. The database checks if the account is valid/active
12. The user clicks the post blog/journal icon
13. The user types his/her journal
14. The user now has a blog/journal on his homepage

Alternative Sequences:

A1: System Maintenance

The system is currently offline due to fixing some bugs in the site

A2: Incorrect Password

The site will tell the user that he/she has inputted the wrong password for his/her account

Error Sequences:

E1: No internet connection

The user cannot go to the site if he/she doesn't have internet connection

E2: No Multiply account

The user cannot post a blog/journal if he/she does not have a multiply account

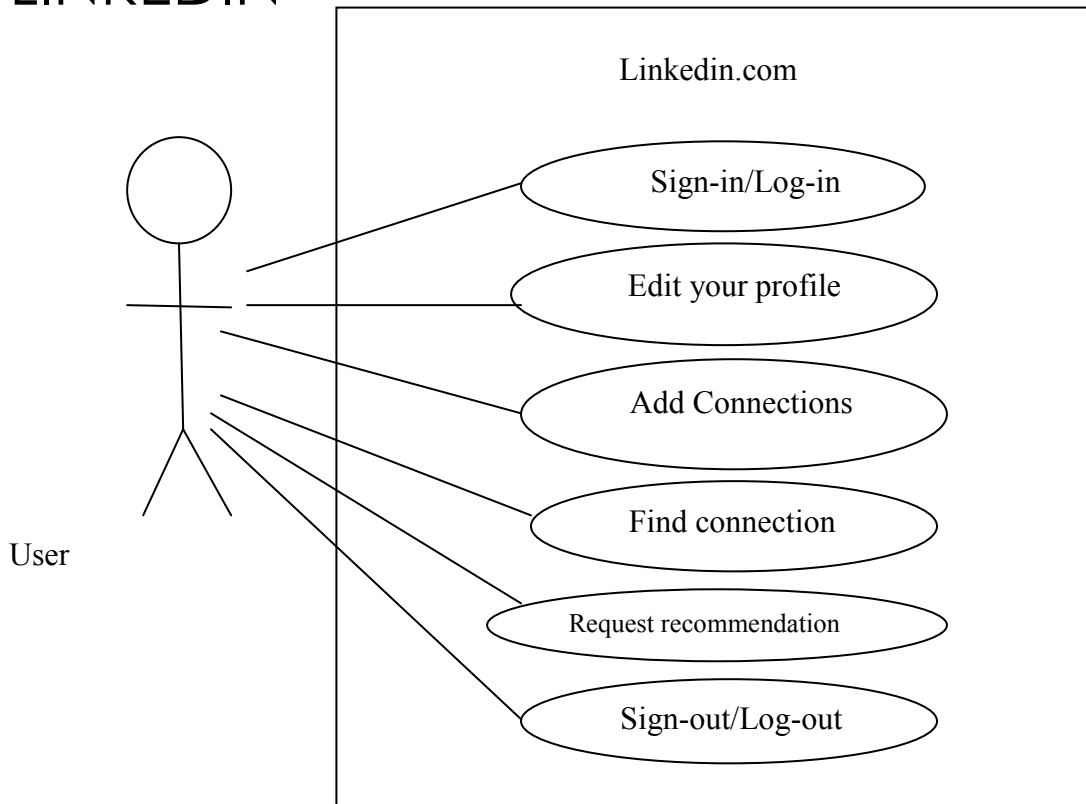
Post Conditions:

4. The user has now a blog/journal on his/her page
5. His/her contacts can now view his blog/journal

Non-Functional Requirements:

- The website is available 24 hours a day, 7 days a week
- All the account is secured in a database.

LINKEDIN



Use Case Narrative

Title: Sign in to LinkedIn.com

Summary: This use case allows a user to log in his/her account at linkedin.com. Actors: User

Creation Date: July 23, 2008

Update Date:

August 2008

Version 1.1

Person-in-

Charge: Michael Magat

Flow of Events

Preconditions:

- The user has an account at linkedin.com.
- The computer is connected to the internet.

Main Success Scenario:

1. The user goes to the home page of linkedin.com.
2. The user clicks the sign-in button.
3. The user inputs his/her email address and password.

4. The system checks if the email address and password inputted by the user match an existing account.
5. The user waits for the system to load the site.
6. The user is now in his/her account.

“Alternative” Scenario

A1: Email address and password did not match

A1 sequence start at point 4 of Main success scenario

5. The site notifies the user that the email address and password didn't match.

6. The user will retype the email address and password.

Scenario goes back at point 5.

A2: Remember me

A2 starts at point 4 of main success scenario

5. The user chooses if he/she wants the site to remember his/her email address and password.

Scenario goes back at point 5.

Error Sequences

E1: System Maintenance

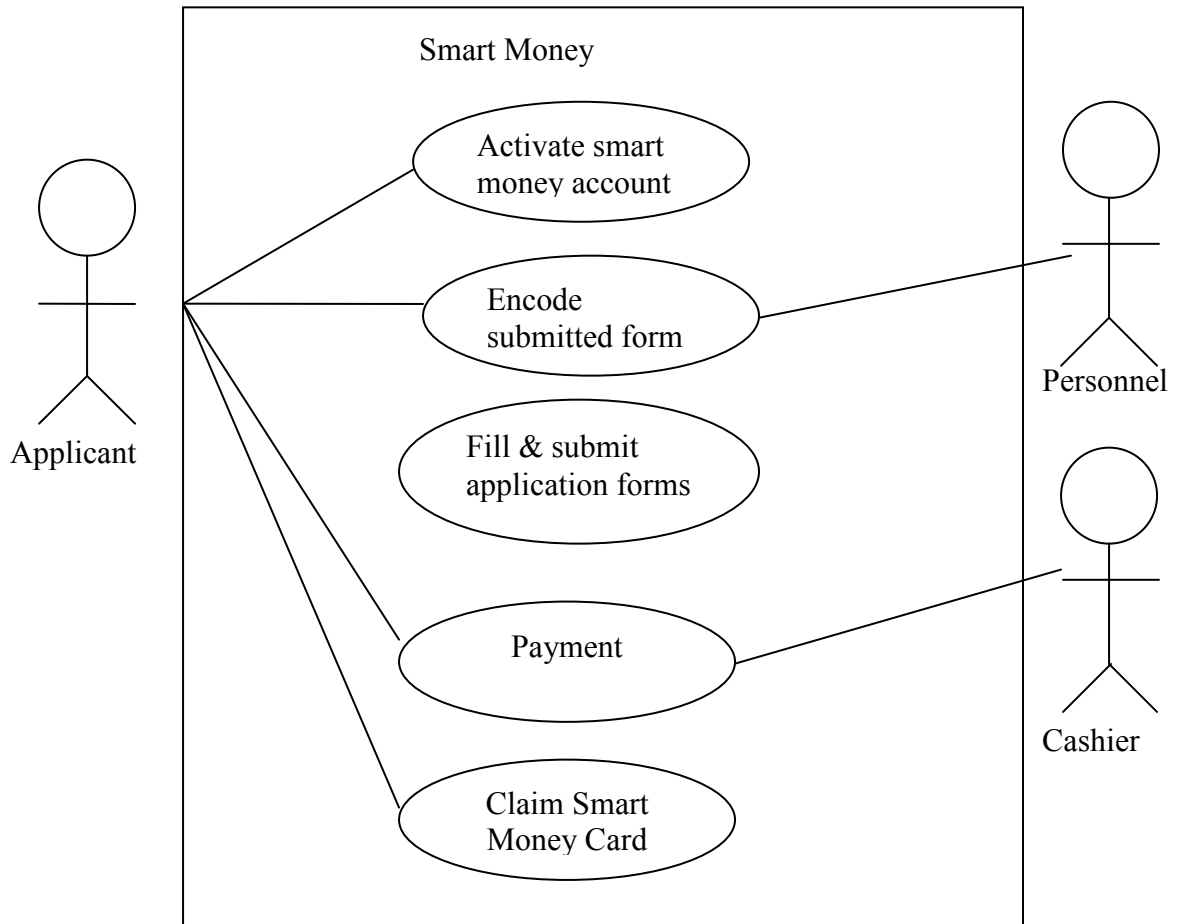
E1 sequence can start at any point of the sequence at main case scenario.

-user will not be able to access his/her account system fails.

Post Condition

User access or edit his/her account.

SMART MONEY



Identification Summary

Title: Getting a Smart Money Card

Summary: This use case allows a person to apply for his/her own Smart Money account.

Actors: Applicant, Personnel, Cashier

Creation Date: July 18, 2008 Date of Update: August 2008

Version: 1.0

Person in Charge: Michael Angelo M.

Magat

Flow of Events

Pre- Conditions:

1. The applicant is at least 12 yrs old.
2. Applicant must be a Smart subscriber.
3. The Smart office is open.

4. The personnel are present.

Main Success Scenario:

1. The applicant goes to Smart branch.
2. The applicant activates the account.
3. The applicant fills & submits papers.
4. The personnel checks if the requirements are complete.
5. The applicant pays the required payment.
6. The cashier will issue a receipt.
6. The applicant claims the card.

Alternative Sequences:

A1. The Smart is closed.

Scenario starts at point 1 of the main case scenario.

2. The applicant comes back on a different day.

Scenario goes back at point 1

A2. The requirement is incomplete.

Scenario starts at point 4 of the main case scenario.

5. The personnel will ask the applicant to complete the requirements.

6. The applicant completes the requirement.

Scenario goes back at point 3.

Error Sequence:

E1. The server is down

Use case fails.

E2. The smart office experience power failure.

Use case fails.

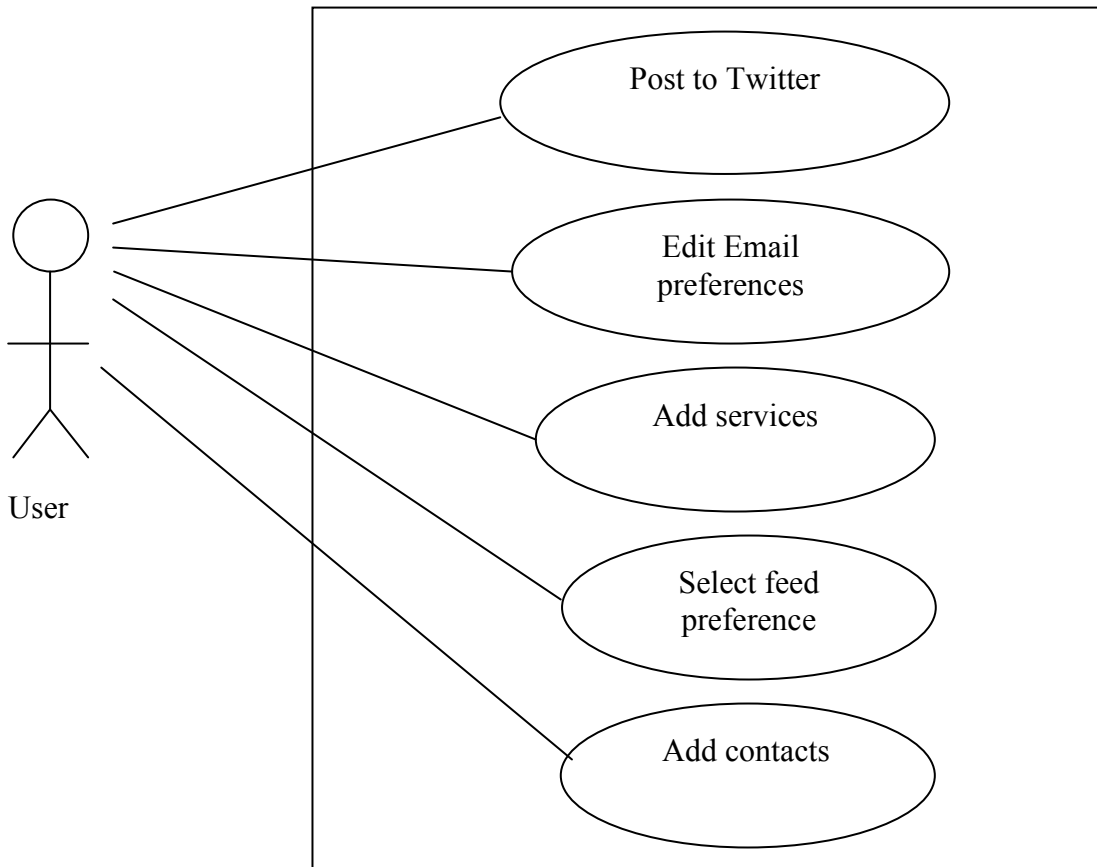
Post Conditions:

1. The card holder can pay his/her Smart bills with the card.

2. The card holder can transfer money by means of Smart Money.

3. The applicant has now his/her Smart Money card.

Friendfeed.com



Use Case Narrative

Identification Summary

Title: Friendfeed.com

Summary: This use case shows how Friendfeed.com is related to Twitter.com

Actors: User

Creation date: July 2, 2008

Date of update: August 2008

Version: 1.0

Person in charge: Michael Angelo M. Magat

Flow of events

Preconditions:

1. The computer must be connected to the internet.
2. User has a Friendfeed account.
3. User has a Twitter account.

Main Success Scenario

1. User accesses the internet
2. User goes to Friendfeed homepage.
3. User logs his/her account to Friendfeed.
4. User logs his/her account to Twitter.
5. User chooses his preference.
6. User links to Friendfeed.
7. User checks update.

Alternate Sequences

A1: Incorrect email address

A1.1: User retypes his/her account to log in.

Error Sequences

E1: No internet connection

E1.1: User cannot log in to both accounts

E2: The website is down or under maintenance.

E2.1: User will not be able to access the site.

Use case fails

Post Conditions

1. User updated his Friendfeed and Twitter accounts
2. User was able to post successfully

UI (User Interface)

- Friendfeed website

Non-Functional Requirements:

- Response time: The speed of the process depends on the speed of the internet that the computer have.
- Availability: Once there is an internet connection

Appendix:

System Analysis and Design
project

A Systems Analysis Study on the Provident Fund of AMOSUP

Presented to the
Information Systems Program
School of Management and Information Technology
De La Salle – College of Saint Benilde

In Partial fulfillment of the
Requirements of the subject
Systems Analysis

Submitted By:
Magat, Michael Angelo
Lansang, Jairus
Guinmapang, Nelson
OOC/2nd year
August 2008

Submitted To:
Mr. Paul Pajo



Company Profile

Company Name: Associated Marine Officers' and Seamen's Union of the Philippines

Address: Cabildo corner Sta. Potenciana St. Intramuros, Manila

Telephone No.: (02) 527-8491 to 98 loc. 103

Fax: 527-3534, 527-3538

Email Address: s_center@amosup.org, capt_oca@amosup.org

Capability: training and education, board and lodging, medical and dental plan, financial and legal services, housing

Date of Incorporation: November 11, 1960

Executive Officer: Captain Gregorio S. Oca

Manpower (as of June 2007):

- 1 – Admin
- 1 – Assistant
- 4 – Processors
- 6 – Encoders
- 1 – IT
- 1 – Accounting Clerk
- 1 – Releasing Clerk
- 1 – Filling Clerk
- 1 – Messenger
- 1 – Janitor

Associated Marine Officers' and Seamen's Union of the Philippines

On November 11, 1960, Capt. Gregorio S. Oca, concerned with the plight of the licensed crew of United President Lines, Magsaysay Lines, Inc. and the Eastern Shipping Lines, constituted the Associated Marine Officers' Union of the Philippines (AMOUP), with the PTGWO as the mother organization. At the same time, Bro. Donato Alarcon organized the unlicensed crew and formed the Associated Seamen's Union of the Philippines (ASUP). The members then working on board foreign vessels, receiving very low salaries and wages, with poor working conditions, and often not covered by necessary benefits and unprotected from accidents, sickness and death.

Guided by the same ideals and principles, the two (2) unions decided to merge into one cohesive organization in 1972 and named it the Associated Marine Officers' and Seamen's Union of the Philippines (AMOSUP-PTGWO). As early as its inception, AMOSUP affiliated itself with the International Transport Workers' Federation (ITF).

The union also realized that in order to be competitive with other seafarer supplying countries, the Filipino Seamen should be well trained, disciplined, and hard working. In return, the seafarer should be justly compensated and given all necessary benefits to afford a decent living. With these principal goals, focused on molding and upgrading the skills and improving the social status and well-being of the members, the leadership of AMOSUP began reshaping the future of the organization. The rest is history.

The unparalleled and successful programs of AMOSUP serve as lasting tributes and shrines to the people who helped organize the union and the members who believed and continuously supported its leadership.

VISION

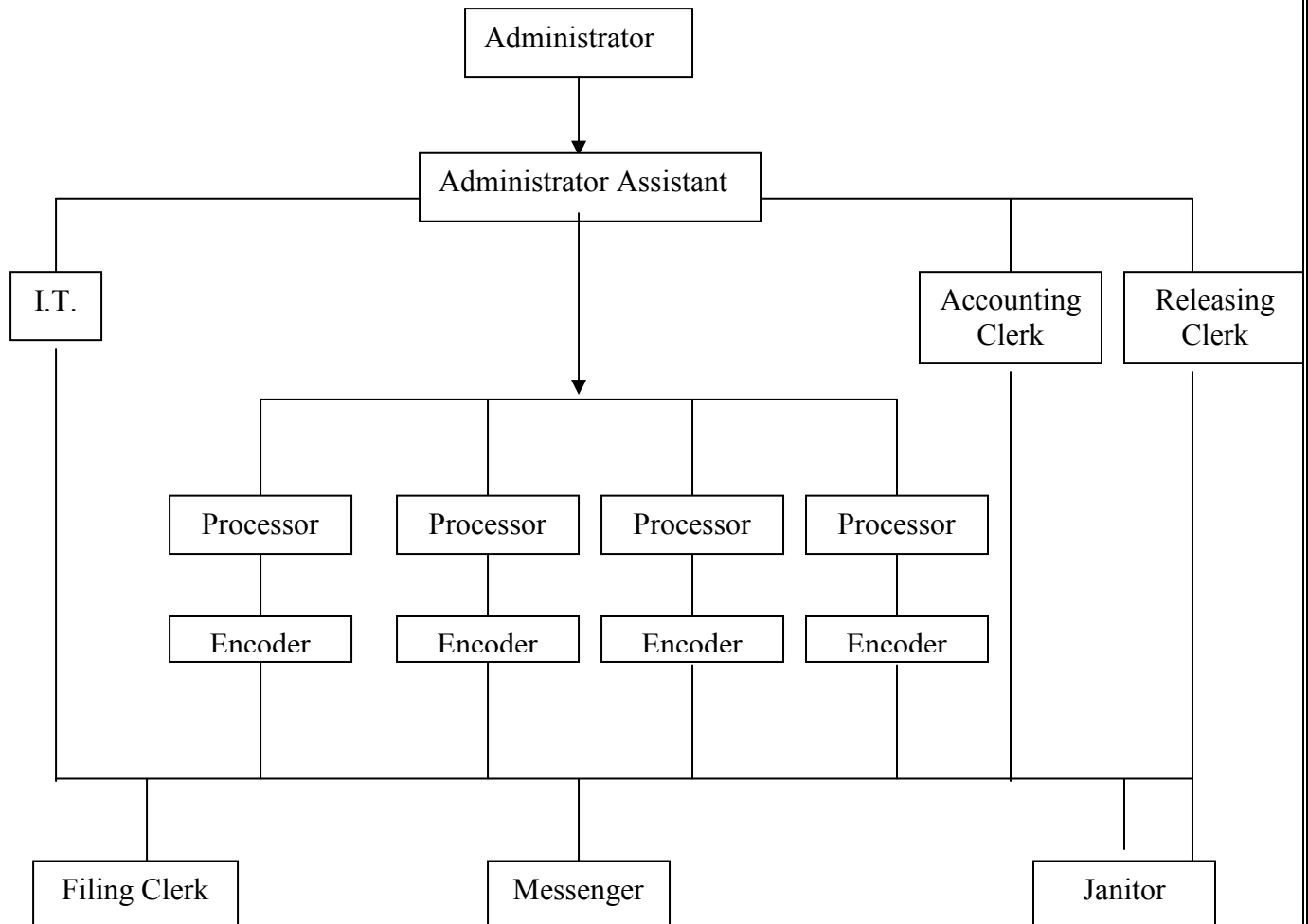
AMOSUP, our vision is to give seafaring Filipinos valuable support in their quest for a better life. It begins as we negotiate for Collective Bargaining Agreements (CBA) that demand full commitment from all the parties involved – the Union, the employed, and the employee. With all three working towards the same goal, the seafarer receives

the fruit of his labor in fair remuneration, benefits, programs and facilities available to him as an AMOSUP member

MISSION

With aims and objectives to unite all Filipino seafarers, Capt. Oca labored to fight for the social, legal and moral rights of the members in the domestic and foreign fronts. He wanted free, if not, affordable medical and dental services, sufficient education and adequate training, and a united organization with clear, definite and willful objectives.

ORGANIZATIONAL CHART



Statement of the Problem

We chose the system on how a seafarer who is 50 years or above now has the privilege to collect his or her provident fund. According to our interviews the seafarers rely on the passbooks that they receive on the start of their working contract to keep track of the money being invested in their provident fund. For each vessel that you ride you receive a passbook for it. The passbooks serve as a record of contributions from the vessels they have participated in. Each seafarer has to update his or her passbook regularly to validate the contributions in the Provident Fund Office. The problem is that there are a lot of vessels one seafarer can work in. Thus each seafarer could manage from around 3 or more passbooks. We can see that it would be difficult to keep track and update all your passbooks especially for the ones who live in provinces.

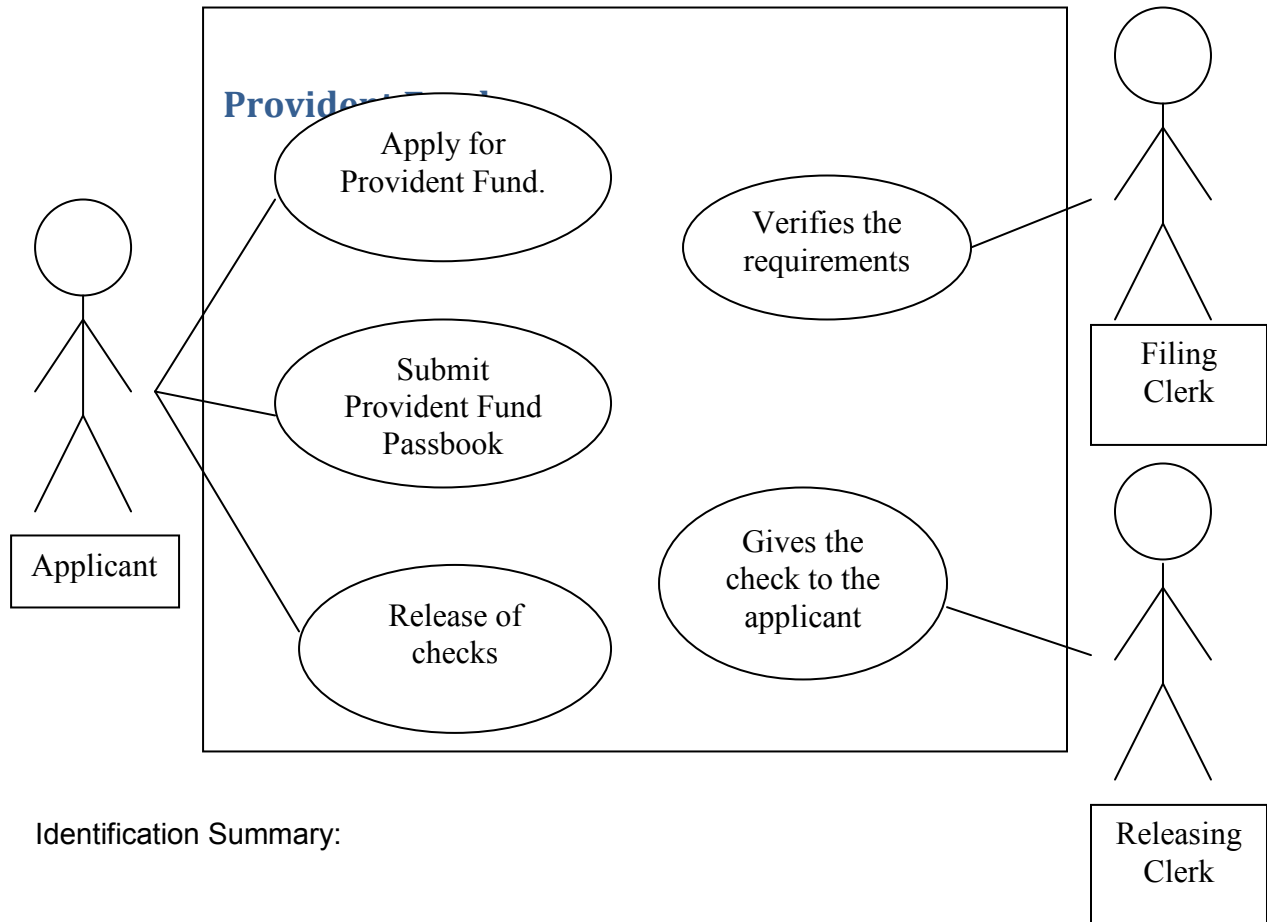
Significance of the Study

This study's significance is to show the user how our proposed system could increase efficiency in their system. We find it important to study how each process works because through it we are able to find out what needs improvements and what causes problems. With our study we will be able to make a much more efficient system and an easier way for the seafarers to check on their Provident funds. Because we know that if we want our proposed system to replace the existing one we have to carefully study how it runs. We cannot make a better system based on just what we know about the system. Studying it further would lead us to the real problems the existing system has.

Scope and Limitation

The process that we examined is how the company updates Provident fund of its union members and make it available for their applicants. We did not include their other the other services offered at AMOSUP as we plan to focus on how to increase the efficiency in the Provident fund department.

EXISTING SYSTEM



Identification Summary:

Title: Submitting of ID/Passport or Seaman's book

Summary: This use case shows how seafarers submits their ID/Passport or Seaman's book

Actors: Applicant, Filing Clerk, Releasing Clerk

Creation Date: September 12, 1990

Date of update: Aug 2008

Version: 1.1

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The office is open.
2. The staffs are present.

Main Success Scenario:

1. The applicant gets stub on counter 1.
2. The staff gives stub.
3. The applicant waits at the lounge for his stub to call.
4. The staff calls the applicant number.
5. The applicant goes to the respective counter.

(Counter 2 for JSU or Japan Seamen's Union.

Counter 3 for TCC ships.

Counter 4 for Dutch, Belgian, French, LSA, SMOU, NCSU and Swedish.

Counter 5 for British, FKSU, PRV, Italian and NCL)

6. The applicant presents his requirements to the staff.
7. The staff checks if the requirements of the applicant is complete.
8. The staff inputs the applicant's information to the database.
9. The applicant has now a provident fund.

Alternative Sequences:

A1. Incomplete requirements

A1. Scenario starts at sequence 7 of the Main Case Scenario.

8. The staff informs that the requirements are incomplete.
9. The applicant completes the requirements.

Scenario goes back at point 2.

A2. The applicant goes to the wrong counter.

A2. Scenario starts at sequence 5 of the Main Case Scenario.

6. The staff will inform the applicant that he goes to a wrong counter.

7. The applicant goes to the counter where he is under.

Scenario goes back at point 6.

Error Sequence:

E1. The database is offline.

E1. The sequence starts at point 8 of the main case scenario.

10. The staff will not be able to input the file of the applicant.

Use case fails.

E2. The office experiences power failure.

E2. The sequence starts at any point of the Main Case Scenario.

The office will not be able to process the applicants because they don't have electricity.

Use case fails.

Post Conditions:

1. The applicant now has a Provident Fund.
2. The stubs in counter 1 are lesser.
3. The office has all the profile of the applicants.

Non-functional Requirements:

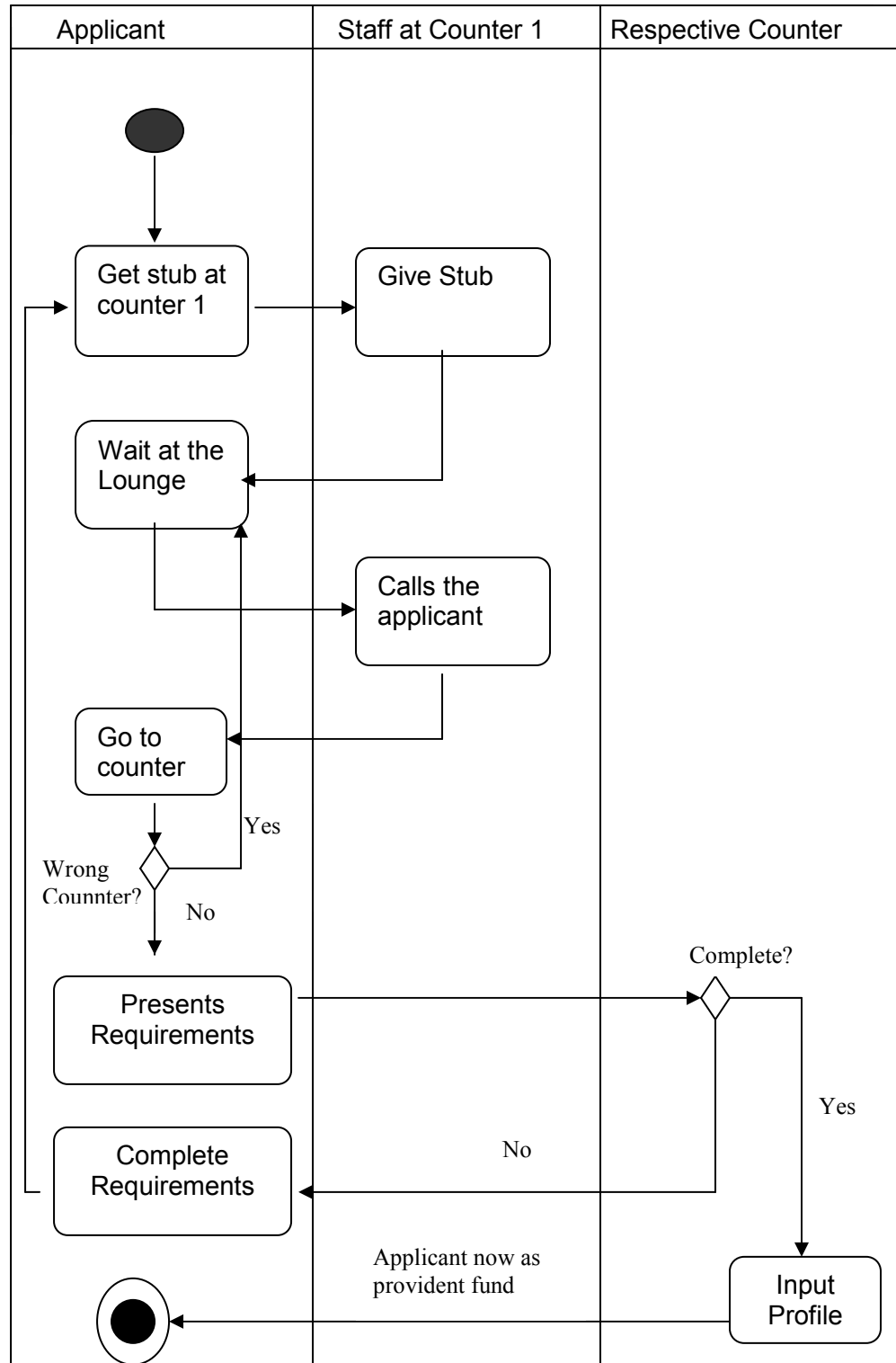
1. Availability

The office is open 8:00 AM to 3:00 AM during weekdays.

2. Confidentially

The transaction between the applicant and staff is done privately.

Activity Diagram: With Swimlane



Identification Summary:

Title: Submitting of Provident Fund Passbook

Summary: This use case shows how seafarers submits their Provident Fund passbook

Actors: Applicant, Filing Clerk, Releasing Clerk

Creation Date: September 12, 1990

Date of update:

Version: 1.1

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The applicant has a Provident Fund.
2. The office is open.
3. The staff is present.

Main Success Scenario:

- 1 The applicant gets stub on counter 1.
2. The staff gives stub.
3. The applicant waits at the lounge for his stub to call.
4. .The staff calls the applicant number.
5. The applicant goes to the respective counter.
(Counter 2 for JSU or Japan Seamen's Union.
Counter 3 for TCC ships.
Counter 4 for Dutch, Belgian, French, LSA, SMOU, NCSU and Swedish.
Counter 5 for British, FKSU, PRV, Italian and NCL)
6. The applicant presents submits his Provident fund passbook.
7. The staff checks if the content of the passbook from their database match.
8. The staff approves the passbook.
9. The staff processes the passbook for the releasing of the check.

10. The staff will give a claim stub of the schedule on when does the applicant can get his check.
11. The applicant waits for the releasing of the check.

Alternative Sequences:

- A1. The applicant goes to the wrong counter.
 - A2. Scenario starts at sequence 5 of the Main Case Scenario.
 6. The staff will inform the applicant that he goes to a wrong counter.
 7. The applicant goes to the counter where he is under.
Scenario goes back at point 6
 - A2. The content in the passbook did not match to the database of the office.

The scenario starts at point 7 of the Main Case Scenario.
 8. The staff will match the content of the passbook and the data in their database.

Scenario goes back at point 8.

Error Sequence:

- E1. The database is offline.
 - E1. The sequence starts at point 7 of the main case scenario.
 11. The staff will not be able to check the passbook of the applicant in their database.

Use case fails.
- E2. The office experiences power failure.
 - E2. The sequence can starts at any point of the Main Case Scenario.

The office will not able to process the applicants because they don't have electricity.

Use case fails.

Post Conditions:

The applicant gives his passbook to the staff.

The applicant waits for the schedule of the releasing of the check.

The staff has lesser paper for the schedule of the releasing of the check.

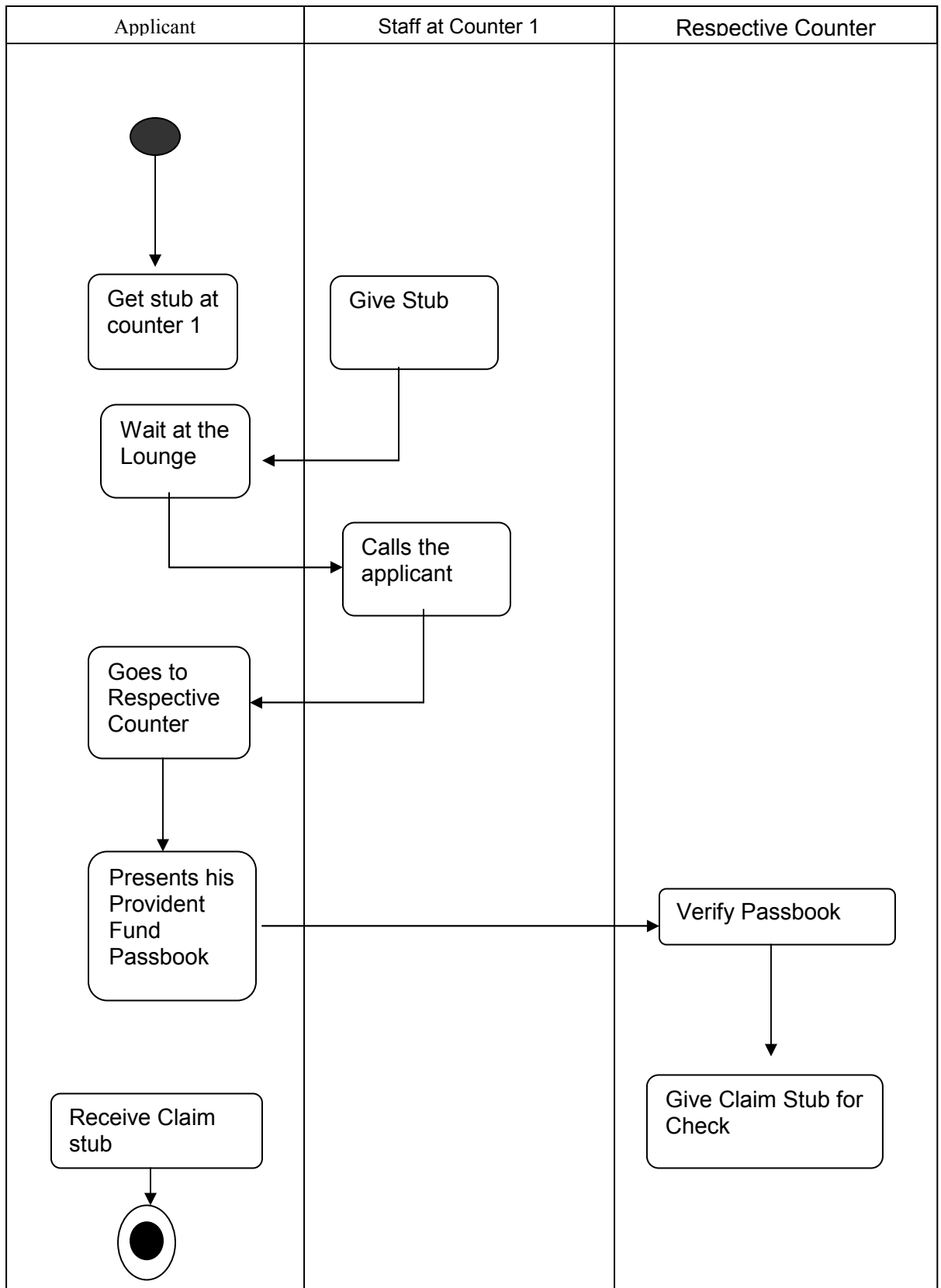
Non-functional Requirements:

1. Availability

The office is open 8:00 AM to 3:00 AM during weekdays.

2. Confidentially

The transaction between the applicant and staff is done privately.



Identification Summary:

Title: Releasing of Checks

Summary: This use case shows how seafarers receive their checks from the releasing clerk

Actors: Applicant, Releasing Clerk

Creation Date: September 12, 1990

Date of update:

Version: 1.1

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The office is open.
2. The staffs are present.

Main Success Scenario:

- 1 The applicant goes to counter 1.
- 2 The applicant presents his claim stub.
- 3 The staff checks if the date of the claim stub and the current date match.
- 4 The staff checks if the check of the applicant is ready.
- 5 The staff asks for a identification card from the applicant.
- 6 The applicant presents identification to the staff.
- 7 The applicant will sign a paper stating that he has received the check for his provident fund.
- 8 The staff gives the check to the applicant.
- 9 The applicant claims the check.

Alternative Sequences:

A1. Lost claim stub.

A1. The scenario starts at point 2 of the Main Case Scenario.

3. The staff will ask the applicant to get an affidavit of loss stating that he lost his claim stub.
4. The applicant gets an affidavit of loss.
5. The applicant notarizes his affidavit of loss
6. The applicant presents his affidavit of loss.

Scenario goes back at point 3.

Error Sequences

E1. Unreleased check

E1. The scenario starts at point 4 of the Main Case Scenario.

5. The staff will tell to the applicant that the check is not yet available.
6. The applicant will not get the check.

Use case fails

E2. The office experiences power failure.

E2. The sequence starts at any point of the Main Case Scenario.

The office will not able to process the applicants because they don't have electricity.

Use case fails.

Post Conditions:

- The applicant now has his check.
- There are fewer papers in counter 1.

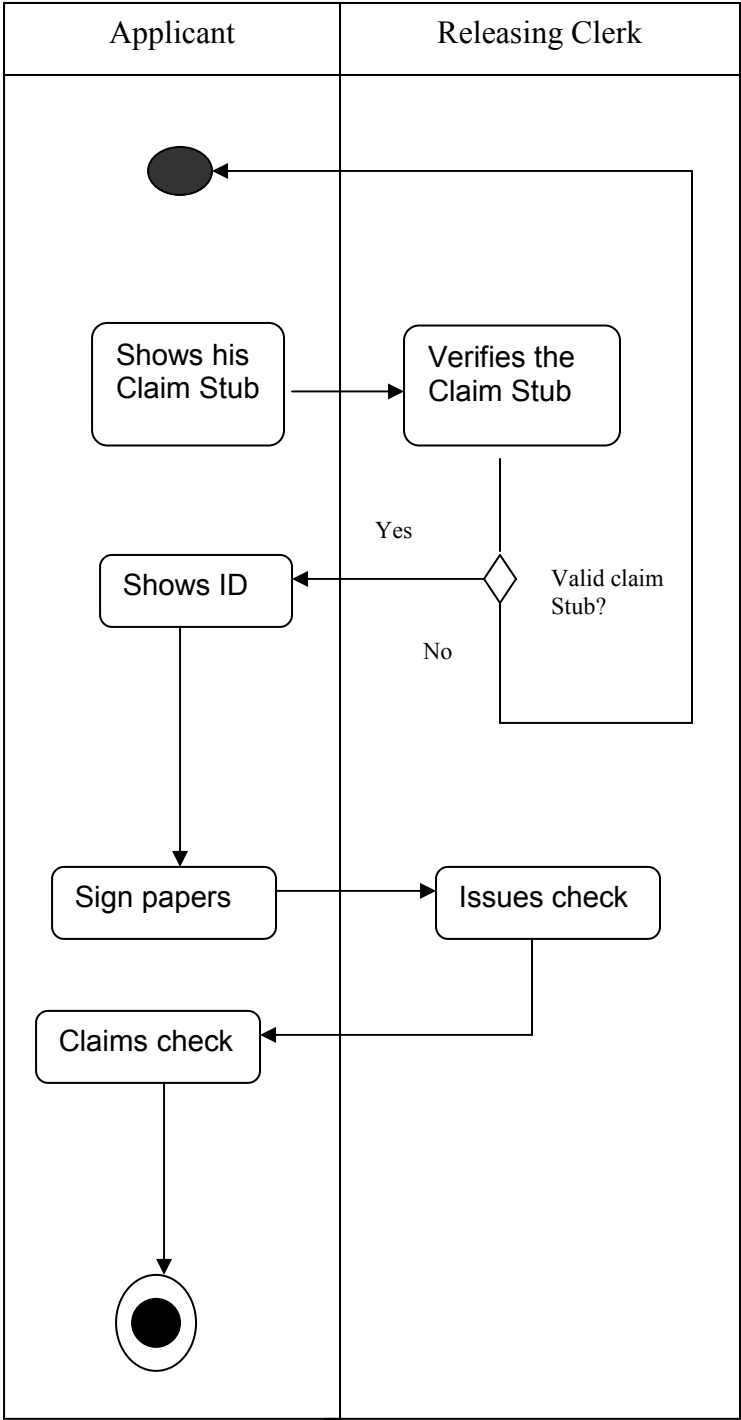
Non-functional Requirements:

1. Availability

The office is open 8:00 AM to 3:00 AM during weekdays.

2. Confidentially

The transaction between the applicant and staff is done privately.



Identification Summary:

Title: Verifies Requirement

Summary: This use case shows how filing clerk verifies the requirement of the applicant.

Actors: Applicant, Filing Clerk

Creation Date: September 12, 1990

Date of update:

Version: 1.1

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of event

Precondition:

1. The office is open.
2. There is an applicant.

Main Success scenario

1. The applicant goes the staff to pass the requirements.
2. The staff checks if the applicant completes all the needed requirements.
3. The staff verifies the requirement and transfers the data to the database

Alternative Scenario:

A1. Incomplete Requirements

The scenario starts at step 2 of the Main Case Scenario.

3. The applicant's requirements are not complete.
4. The staff asks the applicant to complete his requirements.

The scenario goes back to point 2.

Error Scenario:

E1. The office experiences power failure.

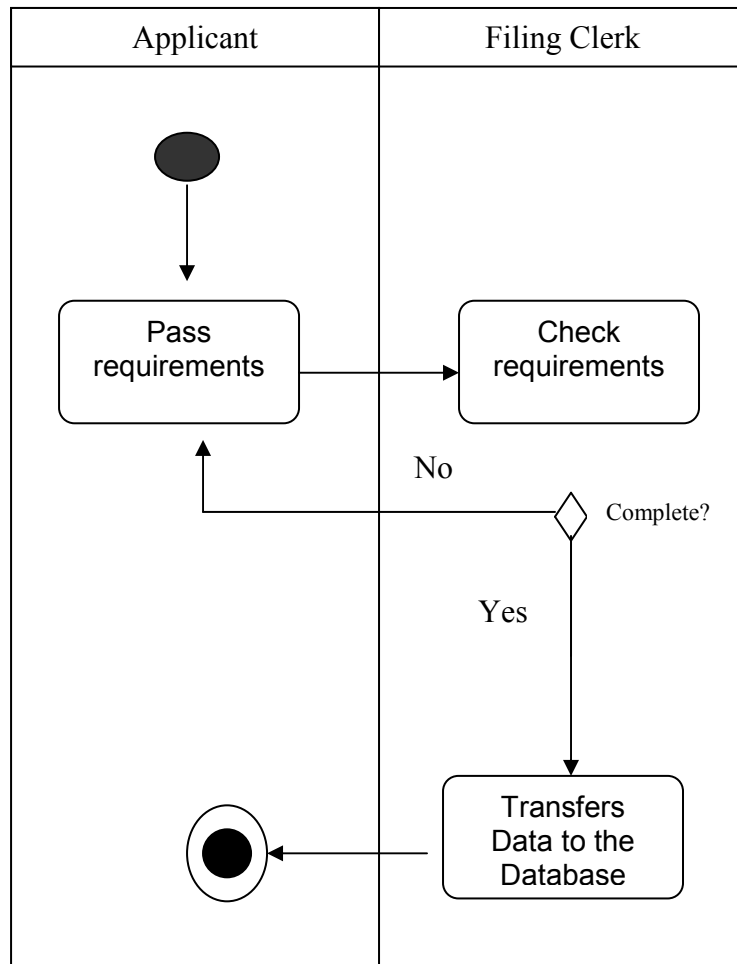
E1. The sequence starts at any point of the Main Case Scenario.

The office will not be able to process the applicants because they don't have electricity.

Use case fails

Post Conditions:

1. Availability
The office is open 8:00 AM to 3:00 AM during weekdays.
2. Confidentially
The transaction between the applicant and staff is done privately.



Identification Summary:

Title: Gives the check to the applicant

Summary: This use case shows how releasing clerk releases the check to the applicant

Actors: Applicant, Releasing Clerk

Creation Date: September 12, 1990

Date of update:

Version: 1.1

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of event

Precondition:

1. The office is open.
2. There is an applicant.

Main Success scenario

1. The applicant gets claim stub for the check
2. The applicant will wait at the lobby to be called using the claim stub.
3. The releasing clerk verifies the claim stub.
4. The releasing clerk checks the applicant's account
5. Once approved, the releasing clerk will give to the applicant the check that contains his Provident Fund money.

Alternative Scenario:

A1. Lost claim stub

1. The scenario starts at step 3 of the Main Case Scenario.
2. The applicant lost his stub number to get his Provident Fund

Error Scenario:

E1. The office experience power failure.

1. The sequence starts at any point of the Main Case

Scenario.

2. The office will not able to process the applicants because they don't have electricity.

3. Use case fails

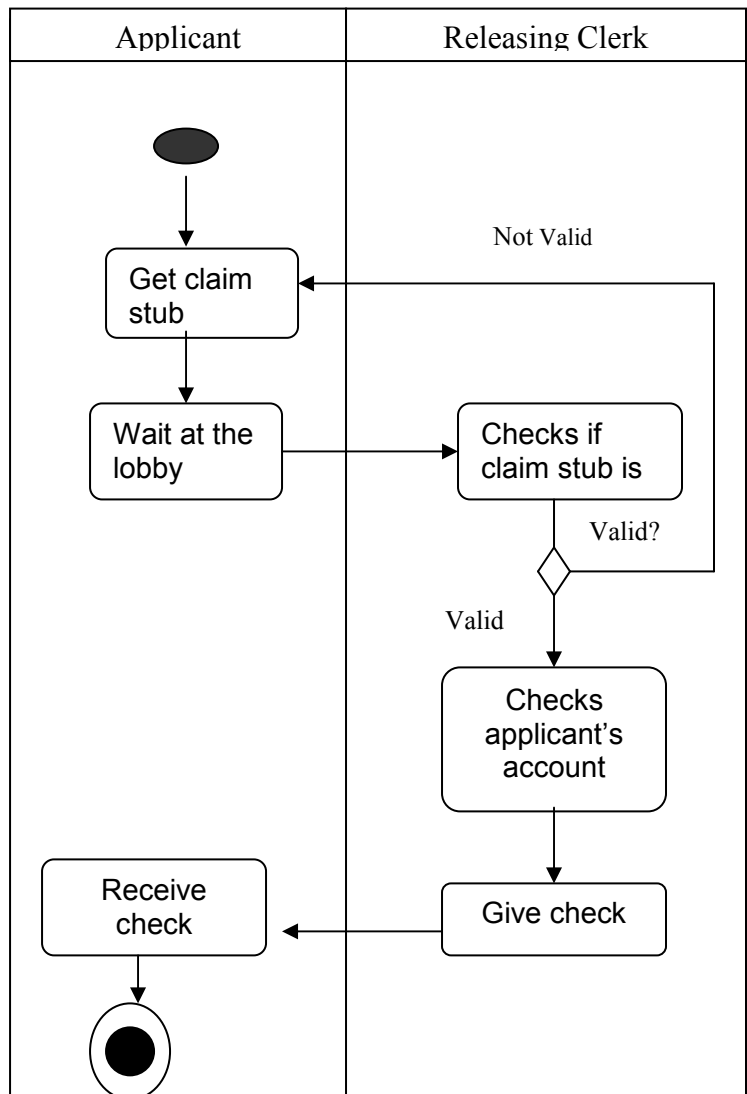
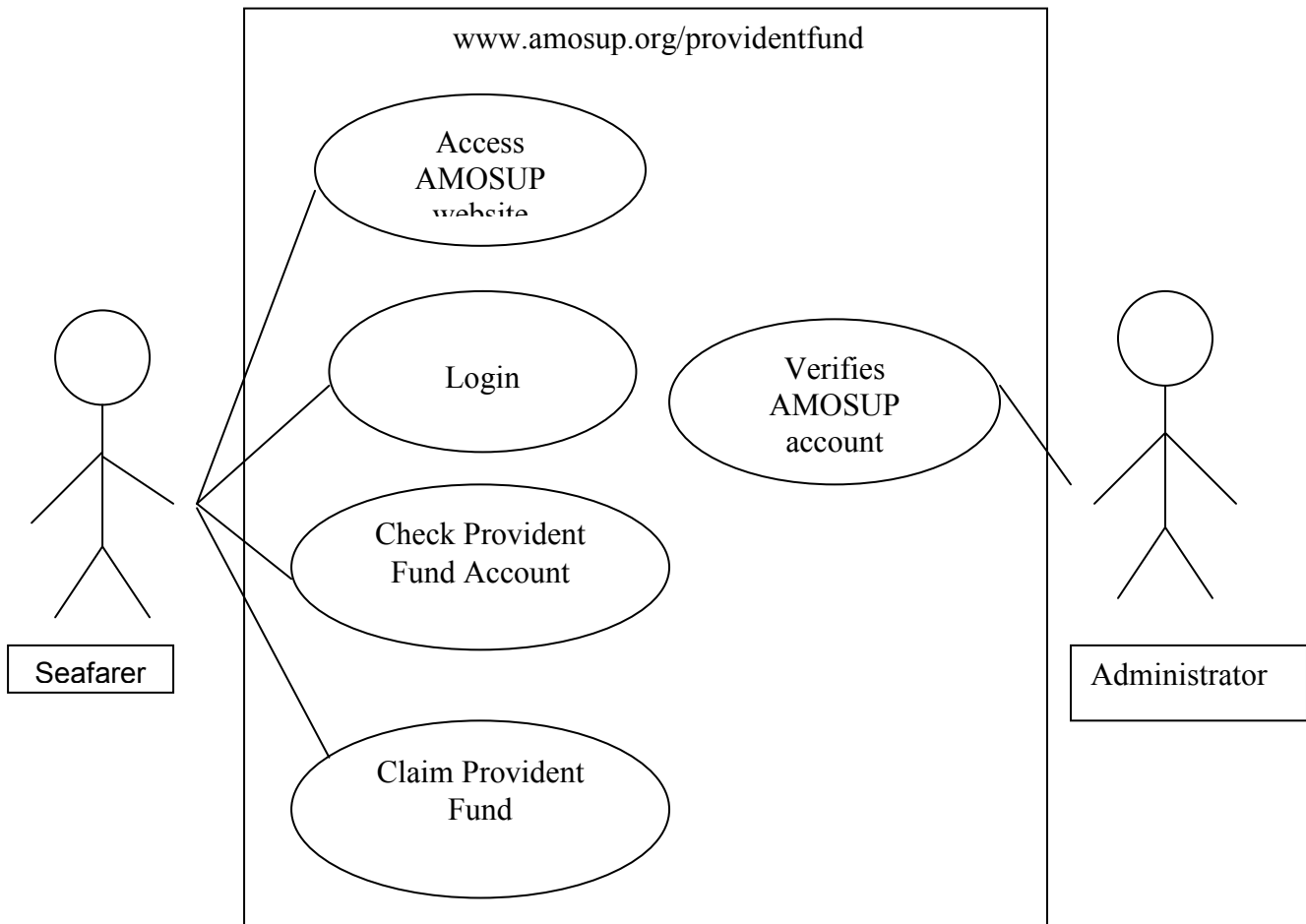


Table Recommendation

Problem	Recommended Change	Affected Activities
Seafarers find it difficult to manage and update their Provident Fund passbooks.	A newer system that automatically updated the seafarers Provident funds without the help their passbooks. This would also allow the seafarer to keep track of the money stored in his or her Provident Fund.	The submission of requirements can be submitted online through the seafarer's personal Provident Fund account.

Proposed System:



Identification Summary:

Title: Access AMOSUP website

Summary: This use case shows how the applicant can access the AMOSUP website

Actors: Applicant, Administrator

Creation Date: October 12, 1990

Date of update:

Version: 1.2

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The applicant has Internet access
2. The applicant has a working browser

Main Success Scenario:

1. The applicant access the internet
2. The applicant inputs AMOSUP's URL.
3. The applicant access' the AMOSUP website.

Alternative Sequences:

A1. The server is offline

A1. Scenario starts at sequence 2 of the Main Case Scenario.

3. The applicant cannot access the website if the server is offline
4. The applicant must then wait until the server is back online

The scenario goes back to point 2.

A2. The Internet connection was disconnected

A2. Scenario starts at sequence 1 of the Main Case Scenario.

2. The applicant must reconnect to the Internet to access the AMOSUP website

The scenario goes back to point 1.

A3. The URL accessed is incorrect

A3. Scenario starts at sequence 2 of the Main Case Scenario.

3. The correct URL must be placed in order to access the AMOSUP website.

The scenario goes back to point 2.

Error Sequence:

E1. There is no Internet access available.

E1. Scenario starts at sequence 1 of the Main Case Scenario.

1. The applicant must first have an Internet connection in order to access the AMOSUP website.

Use case fails

E2. The applicant does not know the AMOSUP URL.

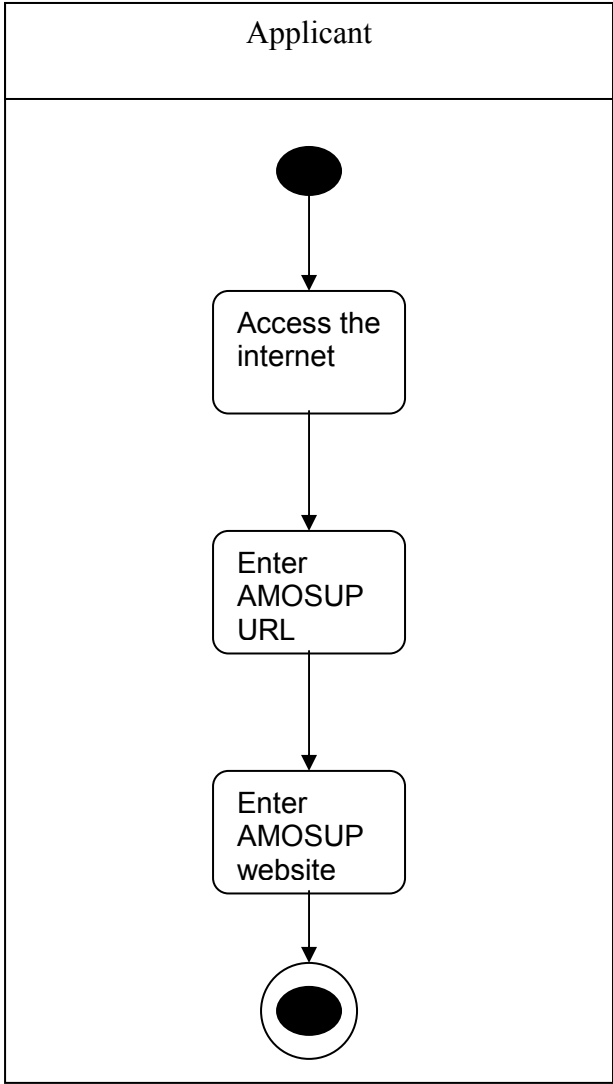
E2. Scenario starts at sequence 1 of the Main Case Scenario.

1. The applicant would not be able to access the AMOSUP website unless he or she knows the AMOSUP URL.

Use case fails

Post Conditions:

- The number of people visited the website increases



Identification Summary:

Title: Login

Summary: This use case shows how the applicant can login at AMOSUP website

Actors: Applicant, Administrator

Creation Date: October 12, 1990

Date of update:

Version: 1.2

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The applicant must have a working internet connection
2. The applicant must be at the AMOSUP website
3. The applicant must have an account

Main Success Scenario:

1. The applicant inputs his username and password
2. The system administrator verifies the username and password
3. The applicant is successfully login

Alternative Sequences:

A1. Incorrect username or password

A1. Scenario starts at sequence 2 of the Main Case Scenario

3. The applicant must input the correct username and password

The scenario goes back to point 1

Error Sequence:

E1. Does not have an account

- E1. Scenario starts at sequence 1 of the Main Case Scenario.
2. The applicant cannot login unless he or she has created his or her own personal AMOSUP account

Use Case fails

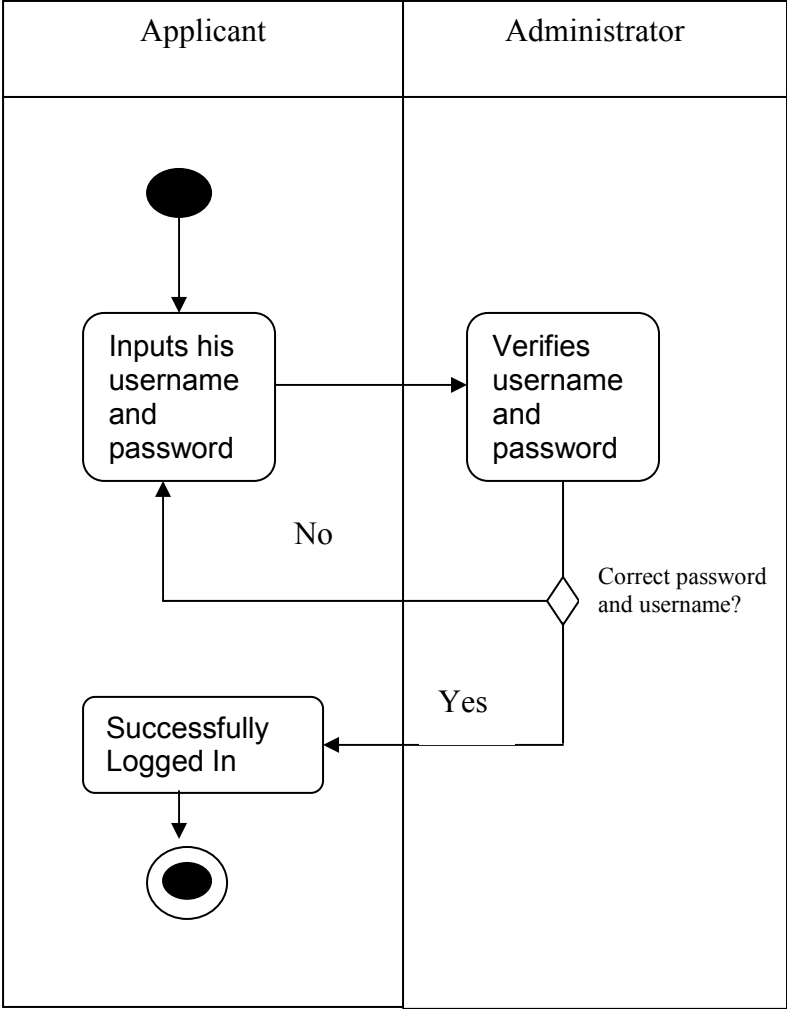
E2. Accessed the wrong website

- E2. Scenario starts at sequence 1 of the Main Case Scenario.
2. The applicant can only access his or her AMOSUP account through the AMOSUP website

Use case fails

Post Conditions:

- The log of users who have logged in the site has increased



Identification Summary:

Title: Check Provident Fund account

Summary: This use case shows how applicant can check their Provident Fund account

Actors: Applicant, Administrator

Creation Date: October 12, 1990

Date of update:

Version: 1.2

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The applicant must have a working internet connection
2. The applicant must be logged in his own AMOSUP account
3. The applicant must have an Provident Fund account

Main Success Scenario:

1. The applicant selects the Provident Fund link in the AMOSUP website
2. The applicant access the Provident Fund page
3. The applicant's Provident Fund information is displayed in the page
4. The applicant can view the amount of his or her Provident Fund account has stored through the web page.

Alternative Sequences:

A1. Incorrect link accessed

- A1. Scenario starts at sequence 1 of the Main Case Scenario.
2. The applicant must access the correct link in order to view his or her own Provident Fund page.

The scenario goes back to point 1

A2. The web page timed out

A2.Scenario starts at any point of the Main Case Scenario.

1. The applicant did not enabled the “remember me” option and has to log in his account again to access his account

Error Sequence:

E1. Website is under maintenance

E1. Scenario starts at any sequence of the Main Case Scenario.

1. The applicant cannot view the website until the maintenance is over

Use case fails

E3. Accessed the wrong website

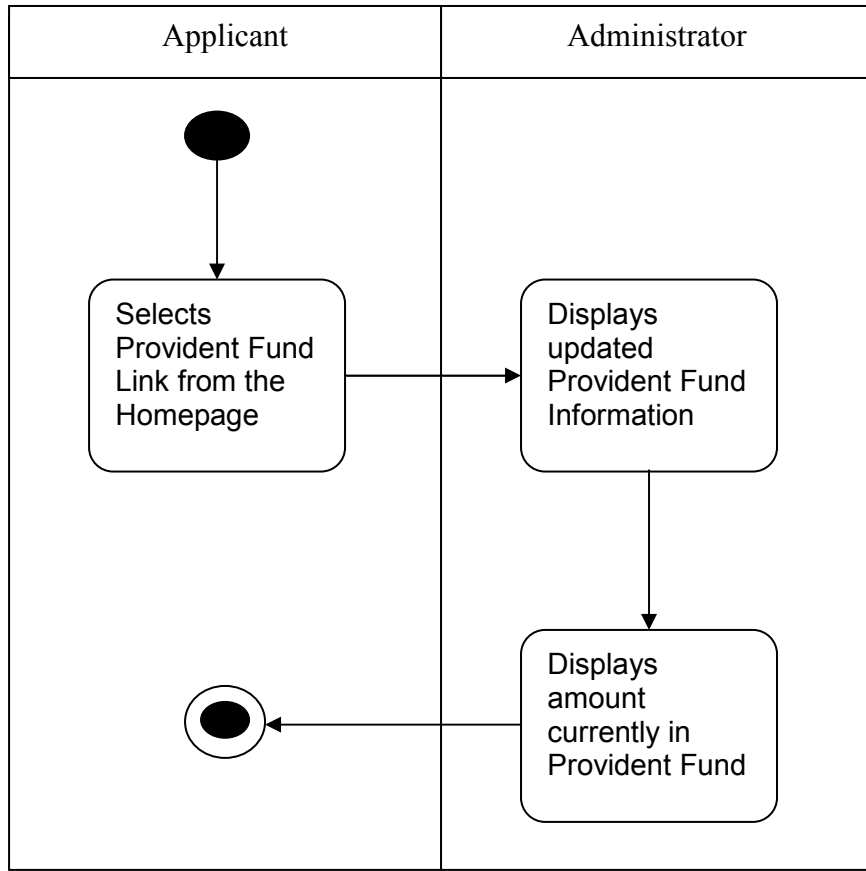
E3. Scenario starts at any point of the Main Case Scenario

1. The applicant can only access his or her AMOSUP account through the AMOSUP website

Use case fails

Post Conditions:

- The view of Provident Fund in the site has increased
- The seafarer now knows how much is currently in his account



Identification Summary:

Title: Claim Provident Fund

Summary: This use case shows how applicant can claim their Provident Fund

Actors: Applicant, Administrator

Creation Date: October 12, 1990

Date of update:

Version: 1.2

Person-in-charge: Jairus Lansang, Nelson Guinmapang, Michael Magat

Flow of Events:

Preconditions:

1. The applicant must be logged in his account
2. The applicant must have a Provident Fund account.

Main Success Scenario:

1. The company will receive a request claim from the applicant.
2. The company will issue letter to the applicant on where he can claim his fund. (The company will cite the bank that is affiliated with them, if the seafarer is living in the province.)
3. The applicant will go the go the bank where his or her money is delivered.

Alternative Sequences:

- A1. The company is not affiliated with any of the banks where the applicant lives
- A1. Scenario starts at sequence 2 of the Main Case Scenario.

3. The bank then chooses to send the check through the applicant's bank account.

The scenario goes back to point 1

A2. The money is not delivered to the bank

A2. Scenario starts at sequence 3 of the Main Case Scenario

2. The bank informs the company that the money has not been received.

3. The company verifies and resends the check

The scenario goes back to point 2

Error Sequence

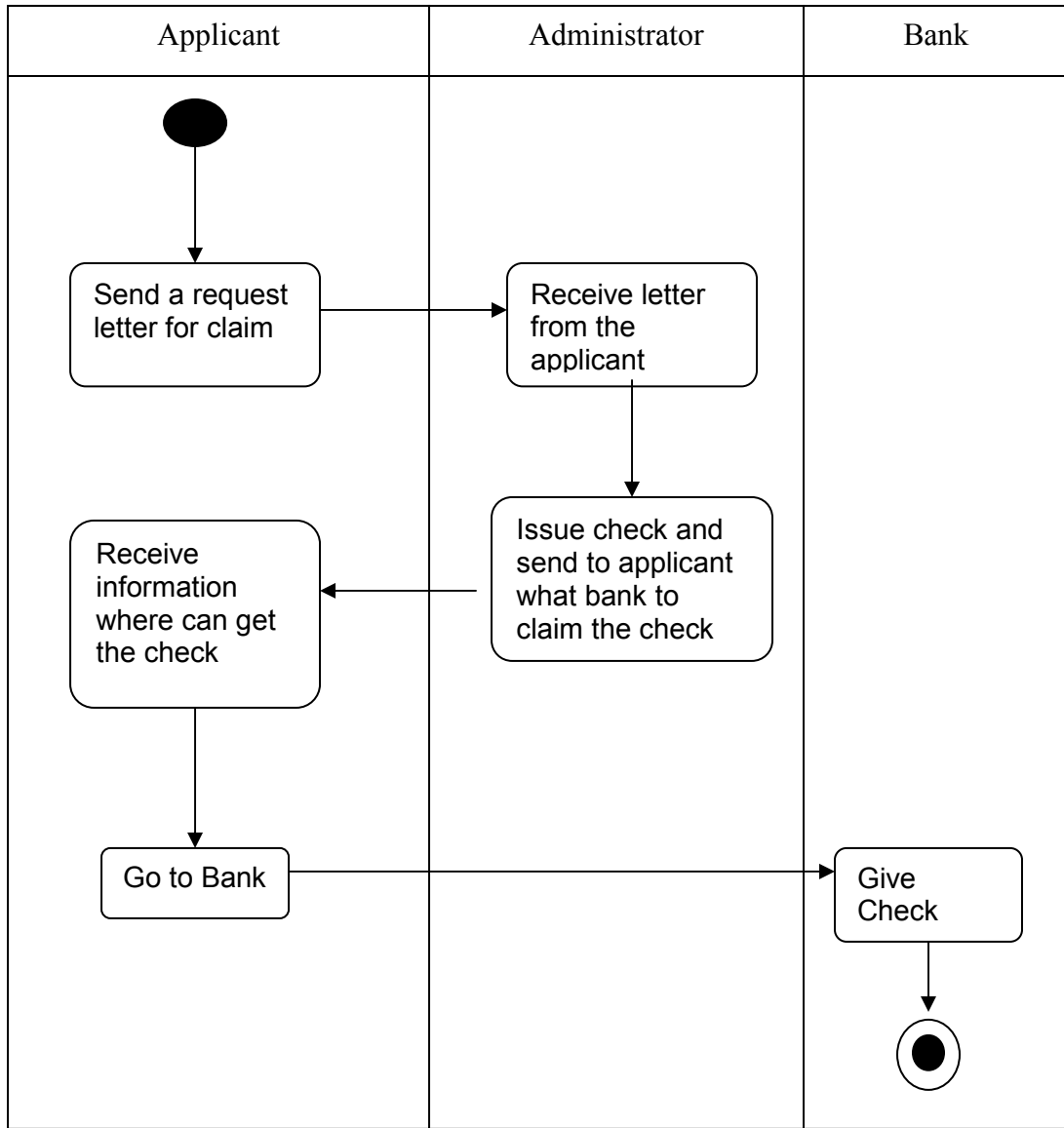
E2. A letter stating that the money can be claimed was not received by the applicant

1. The applicant does not know if he or she can claim the money

Use case fails

Post Conditions:

- There is less money in the whole Provident Fund
- The applicant now has his Provident funds



Reference:

Founders at Work by Jessica Livingston

Systems Development by Jordan Machesky

System Analysis and Design (Third Edition) by I. T. Hawryskiewicz

System Analysis and Design by Alan Dennis and Barbara Halex Wixom

<http://www.wikipedia.org>

<http://www.google.com>

<http://www.yahoo.com>

**De La Salle – College of Saint Benilde - Learning Resource Center
(EXTENSION)**