UST Counseling and Career Center - Career Services Website

A Thomasian Online Career Clinic

A Capstone Project

presented to the

Department of Information Technology

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Chapter 1

Introduction

Project Context

The UST Counseling and Career Center - Career Services Website is a system being designed for the UST Counseling and Career Center - Career Services which intends to increase productivity and lessen the hassle of the counsellors and students. It will contain information about the students of the University of Santo Tomas and will also have more functions for the management of the student's Resumé. With the process of innovation along with new ideas, there is no doubt that technological advances really do happen. The group have thought to improve and develop the UST Counseling and Career Center's existing Online Career Clinic.

The system must be made in a way that it is not rushed and the quality and specification of the system is enough or more than enough for the standard of the client. One of the advantages in improving such system is that it will provide a new and better feel and as well as better service and experience for both the administrators and students to use. With this in mind, the proponents will develop a system that will provide an effective and efficient way of handling workloads and distribute them evenly.

Purpose and Description

The purpose of the project is to develop a more advanced version of the UST Counseling and Career Center's web system. The proponents aim to provide efficiency on the website specifically for the checking and managing of student resumes being the

main purpose of the website. When a student uploads their resume through the website, the counsellor will then be able to see and keep track the files which resumes are ready to be evaluated. In evaluating the resume, the resume can be set as "Tiger Ready" or not. The counsellor will be able to save and retain the data in the database. The counsellors can then provide the result of the evaluation of the resume pertaining to necessary changes that has to be made for errors present on each student resources.

Objective

The proponents aim to provide a more advanced evaluation and record management for the UST Counseling and Career center's Online Career system.

Scope and Limitations

The given project is focused to improve and add some additional features to the website of UST Guidance Counseling and Career Office given with the help of the director of the said organization. The developed website will be primarily used for evaluating and assessing the chosen student to enable to guide them about their career.

Scopes of the project are the following:

- Account Management
    - The system is capable to determine if an account is an admin/user.
    - The system will verify if the users of the website is a Thomasian and currently enrolled in the university.

- System Security

    - The system prevents threats from harmful website attacks

- System Report

    - The system is capable to generate log reports accurately.

- Record Analysis

    - The system is capable in reviewing the uploaded resume.

    - To be able to know if the resumes are tiger ready.

    - To be able to know if a resume is uploaded.

- Decision Making

    - The system would be able to support and give aid to the user in evaluating uploaded student resumes.

    - The counsellor is to determine whether the resume is applicable to be a "Tiger Ready" resume upon evaluating.

- Content Management

    - The system is capable for counselors to add, update, and delete contents inside the announcement section

Limitations of the project are the following:

- The system cannot accommodate other students other than Thomasians.

- Only graduating students of UST or students who are taking their practicum can use the website services.

- The size of the resume file to be uploaded must be 15MB only or less

- The communication of the counsellor and student is not included in the system

- The system will require internet connection to function online.

Chapter 2

Review of Related Literature, Studies and Systems

Students play a complementary role in the university academic life through their participation in the courses and instructors evaluation through the use of an online evaluation system by the UST Online Career Clinic of Guidance and Counseling for quality teaching and academic excellence. When it comes to UST Career and Counsel's system, evaluating of a student's resume requires information analysis, decision making and a proper aid with the use of a Decision Support System (DSS). Since decision making is one of essential management tasks, effective decision making results a successful evaluation. There are several types of DSS that include communication-driven DSS, knowledge-driven DSS, model-driven DSS, data-driven DSS and lastly, the document-driven DSS. Basically the document-driven type is the most common support application targeted among a wide base of users. Its main function is to search web pages and look for documents based on precise set of keywords or terms. They are also specifically designed to convert the documents into important business data. The common technology methods used to set up such DSS are through a client or server system or via the web (Dennis Moore Hopkins, 2010).

A decision is about choice making wherein a decision maker needs to have two or more choices or options available and then select one of those that makes the decision. Meanwhile, A decision support system (DSS) is a computerized information system used to support decision-makers in an organization or a business. operations of companies.These benefits can be obtained if the company is using DSS since it strengthens their attractiveness for implementation, especially their ability positively impact on company's performance (Al-Nakib Noofal Ahmed Mohsen Mohammed, 2016). DSS comes in many forms, and the term basically refers to a computer-aided system that helps the users make decisions and combines the power of critical thinking to get optimal, informed and efficient decision making (J. Stoltzfus, 2017).

For this research case, the UST Counseling and Career Center - Career Services Website requires both critical thinking and information analysis. Your resume contains a summary of what you do for a living. A well-written resume means that you understand how your tasks and responsibilities fit into the overall goals of the organization/company for which you work (Ruth, 2018). In preparation, we are to provide an information about ourselves wherein it requires critical thinking and proper evaluation. Information plays a major role in any organization wherein the value of information also depends on its application and use. Critical thinking is a process used to think about and evaluate information and reach a conclusion. We should not automatically accept that what we are reading is valid, true, applicable or correct. Instead, we should gather the evidence, analyse all aspects rationally and objectively, and with an open mind, so as to reach your own conclusion (Dr Birut Zemits, 2017).

A related system for the UST Career Website is the Campus Labs Course Evaluations. The system focuses on improving the output of the faculty by assessing based on their performance given in some time. The system also has the aid of Decision Support System (DSS). Monitoring and Evaluation Systems is similar to the project since it functions as a systematic mechanism on how to monitor and evaluate a project, programme or policy. In Zambia, the Impact Manager is one of such sophisticated and interactive web based software that does analysis; both qualitative and quantitative within the framework. It develops reports, tracks activities on the platforms and sends notification to users of any activities done on the system and users are able comment and receive feedback (Given Hapunda, 2018).

Role-based Online System (ROES) is similar to the system because ROES is an easy to use, adaptable, and extendable online evaluation system and the benefit of ROES being an online system is that it is accessible to anyone willing to setup and perform an evaluation (Thomas Price, 2009). Another system that we can relate is Hokey Min's application of a decision support system to strategic warehousing decisions. Warehousing costs make up a significant portion of a company's business expenditures. Thus, many companies are pressured to control warehousing costs by improving their warehousing productivity (Hokey, 2009). To cope with such warehousing challenges, a specific decision support system (DSS) that incorporates several computer‑based models into the warehouse decision‑making process is proposed. These models include: a simulation model based on computer‑aided design, an analytic hierarchy process, and a forecasting technique.

In conclusion, with the help of decision support systems, these are interactive tools which enable users to make informed decisions about unstructured problems. It may compose organized collection of models, people, procedures, software, databases, telecommunication, and devices, which helps decision makers to solve unstructured or semi-structured business problems. Furthermore, A DSS can be any computer application that enhances the user's ability to make decisions. More specifically, the term is usually used to describe a computer-based system designed to help decision-makers use data, knowledge and communications technology to identify problems and make decisions to solve those problems (UK Essays, 2013).

Announcements board is one of the features in the career website. However, the non-technical staffs of the website must refresh the announcements regularly or weekly to provide the visitors to receive updates in the information. In a study named "Web Authoring Tool for Effective Content Management" by J.Shyam Jegadeesh, J.John Spencer, P.Libin Jacob, and Anisha Pearl (2004), Web Content Management System (WCMS) is a software application made to provide website authoring and administration tools to the organization. It is equipped with features that provides the user to create and manage contents in the website. With the ease of use, the WCMS gives a user-friendly interface that makes the organization to edit and publish website. However, there are some challenges in deploying WCMS for example: when creating a dynamic and personalized page for the site, the cache can hog a lot of memory. Also, the user must have the minimum knowledge of the programming or markup language that is being

used. In that case, non-technical users must also be trained to use WCMS in order to edit

and make changes in the website (Jegadeesh, 2014).

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Synthesis of the Project

The table of the Synthesis of the Project provides the summary of the Review of
Related Literature and Review of Related Studies presented above in tabular form.

Table 1 Synthesis of the Project

No.	Author/s	Title	Short Description
1	J.P. Shima, M. Warkentina, J. Courtney, D. Power, R. Shardad, C. Carlssone	Past, Present, and Future of Decision Support Technology	Describing Decision Support Systems
2	M. Beynon, S. Rasmequan, S. Russ	A New Paradigm for Computer-based Decision Support	Human-Computer interaction quality and improvement
3	Dr. Birut Zemits	Critical Thinking	Why critical thinking important.
4	S. Good	Development of a Decision Support System for Sustainable Implementation of Rural Gravity Flow Water Systems	Decision Support as a Resource

5	UK Essays	A Decision Support System Information Technology Essay	Explains the basics of a DSS
6	T. Price, J. Walters, Y. Xiao	A Role-based Online Evaluation System	Describing the design and implementation of a Role-based Online Evaluation System
7	K. Tripathi	Decision Support System is a Tool for Making Better Decisions in the Organization.	How DSS can help and aid organizations.
8	G. Hapunda	Developing a Participatory Monitoring and Evaluation System	Defining the purpose and scope of the M&E system
9	J.S. Jegadeesh, J.J. Spencer, P.L. Jacob, A. Pearl	Web Authoring Tool for Effective Content Management	Describes a Web Content Management System.
10	J. Stoltzfus	Decision Support Systems (DSS) Applications and Uses.	Use of DSS through applications
11	R. Mayhew	What Is the Importance of Resume Writing?	Writing an effective resume.
12	D. M. Hopkins	Document Driven a Type of Decision Support System	Difference of decision support systems
13	S. El Rahman	A Web-Based Course and Instructor Online Evaluation System	A similar system regarding the UST Counselling and Career Center - Career Services Website
14	B. Travica	Decision Making and Information Systems	Decision making is about

15	Al-Nakib Noofal Ahmed Mohsen Mohammed, Ahmed Abdulatef Mashli Aina,	Decision Support Systems (DSS) Capabilities and Competencies Impact on Firm Performance: A Mediating Role of Absorptive Capacity	Positive effects of Decision Support Systems (DSS)
16	H. Min	Application of a Decision Support System to Strategic Warehousing Decisions	A similar system regarding the UST Counseling and Career Center - Career Services Website

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Shima, J.P., Warkentina, Merrill, Courtney, James F. , Power, Daniel J., Shardad, Ramesh, Carlssone, Christer (2002) *Past, present, and future of decision support technology* Mississippi: Elsevier B.V.

Beynon, Meurig, Rasmequan, Suwanna, Russ, Steve (2002) *A new paradigm for computer-based decision support* University of Warwick, Coventry: Elsevier Science B.V.

Zemitis, Birut (2017) *Critical Thinking* Charles Darwin University, Australia: CDU

Good, Stephen P. (2008) *Development of a Decision Support System for sustainable implementation of rural gravity flow water systems* Michigan Technological University, Michigan

Essays, UK. (November 2013) *A Decision Support System Information Technology Essay.* Retrieved from: UKEssays

Price, Thomas, Walters, Jeromie, Xiao,Yingcai *A role-based online evaluation system* The University of Akron, Akron, Ohio

Tripathi, K P (2017) *Decision Support System is a tool for making better decisions in the organization.* Institute of Management, Kolhapur (MS), India

Given Hapunda *Developing a Participatory Monitoring and Evaluation System* University of Zambia,School of Humanities and Social Sciences

Jegadeesh, J.Shyam, Spencer, J.John, Jacob, P.Libin , and Pearl, Anisha (January 2014) *Web Authoring Tool for Effective Content Management.* Retrieved from: https://www.academia.edu/

Stoltzfus, J. *Decision Support Systems (DSS) Applications and Uses.* Retrieved from: Business.com / Technology / Last Modified: February 22, 2017

Mayhew, Ruth. "*What Is the Importance of Resume Writing?"* Work - Chron.com, http://work.chron.com/importance-resume-writing-9220.html.

Dennis Moore Hopkins (2010) *Document driven a type of decision support system* Retrieved from:ezinearticles

El Rahman, Sahar (2015) A. *A Web-Based Course and Instructor Online Evaluation System* Manama, Bahrain: IEEE

Travica, Bob (2000) *Decision Making and Information Systems* University of Manitoba,California: Umanitoba

Al-Nakib Noofal Ahmed Mohsen Mohammed, Ahmed Abdulatef Mashli Aina *Decision Support Systems (DSS) Capabilities and Competencies Impact on Firm Performance: A Mediating Role of Absorptive Capacity* School of Management, Wuhan University of Technology, Wuhan, China

Hokey Min, (2009) *"Application of a decision support system to strategic warehousing decisions"*, International Journal of Physical Distribution & Logistics Management, Vol. 39 Issue: 4, pp.270-281

Chapter 3

Technical Background

Requirements Analysis

Functional Requirements

Functional requirements are working modules in a certain program or in a system. The function must be able to operate itself and able to display an output, also it must meet the user expectations.

In the upcoming version 2 of the project, there are some new and improved functionalities that will be implemented on the system like:

- **Sign-up:**
  - Students will only be need to define their student number and password in the sign-up form to enable them to post and to make their resume evaluated online.
- **Announcement Editing:**
  - The counselor will be available to add, update and delete announcements in the website

- **Improved Viewing:**
  - The counselor will be able to view the resume without downloading the file.

- **Search resume:**
  - The counselor will be able to search resumes uploaded and evaluated resume in the database

- **Check Evaluation:**
  - The students will be able to view the evaluated result of the given resume is "tiger ready" or if the given resume is needed to be improved.

Non-Functional Requirements

Non-functional requirements is another part of requirement analysis in creating system. It is a special characteristics that must be attributed to the system.

- **Availability**
  - The system is capable to be available to all users at all times and can be accessed everywhere.

- **Maintainability**
  - The system is flexible to be modified for changes and must be repairable when issues comes out of the system.

- **Reliability**
  - The system must be capable to work consistently and must not fail at operational level.
  - The system can produce data backups and event logs.

- **Usability**
  - The user interface of the system must be consistent and applied aesthetics. Also the user of the system is able to use with common knowledge.

- **Security**
  - The system must implement authentication to the users and provides privacy of the data being uploaded.
  - The system is to be protected to common attacks such as cross-site scripting and SQL injection.

Methodology

       The proponents used Agile methodology because it react quickly to changes which make it adaptive. This method is designed to accept adjustments for future refinement.The method assist the proponents to create a new plan based on the new information. The proponent chose this method because it is easy to follow and there is a continuous planning and feedback providing visibility and transparency
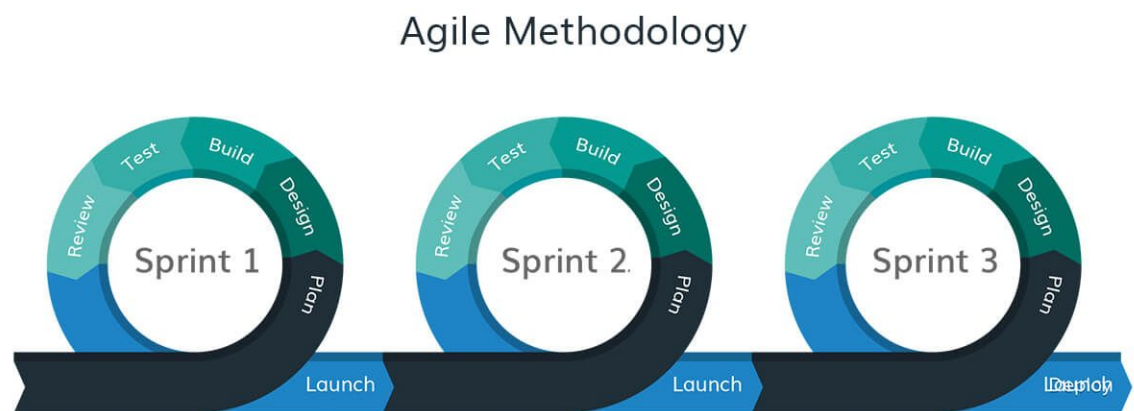

Fig 3.1 Agile Methodology Process

       Qualitative method was the research method used when the proponents conducted the interview with the acting director of UST counselling and career center - career services, with this research method the proponents gathered a lot of critical information such as improving the process of evaluating the students' resume and refining the system interface.The proponents also achieved the problem and concerns, The method was used to guide the proponents to identify the weakness of the system and the inadequacy to build up.

System Design

Use Case Diagram

Fig 3.2 Use Case Diagram of the users of the website

In the figure 3.2, the use case shows that there are 3 actors who will use the website, the counselor, student, and the admin. Each actor has its different roles to play and capabilities to do.
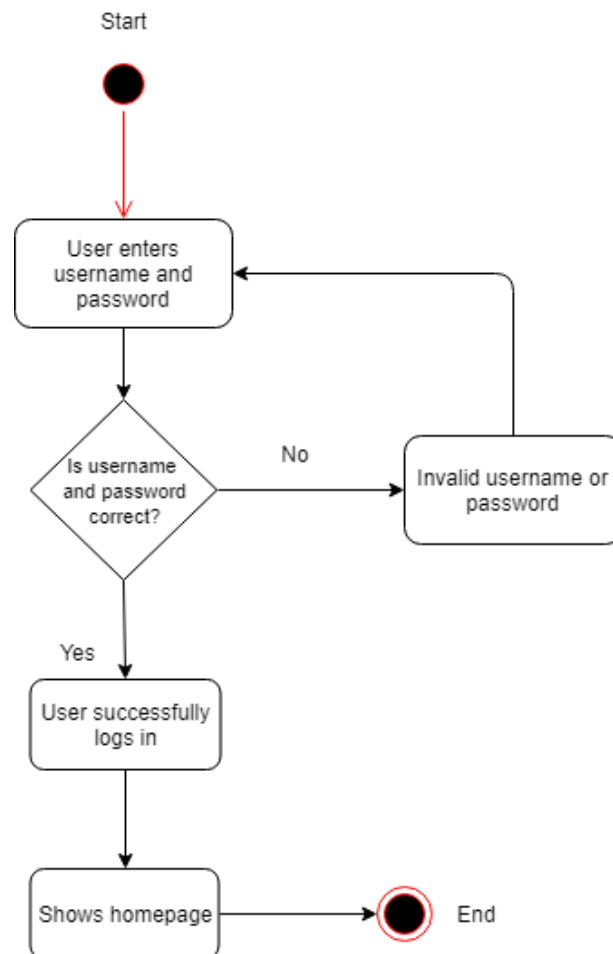
Activity Diagram

Fig 3.3 Activity diagram for login

In the figure above, it shows the process of how the user logs in to the account. The counselor enter correct credentials in order to access _ of the website. If the counselor enters invalid email or password, he/she will have to re-input the credentials needed.
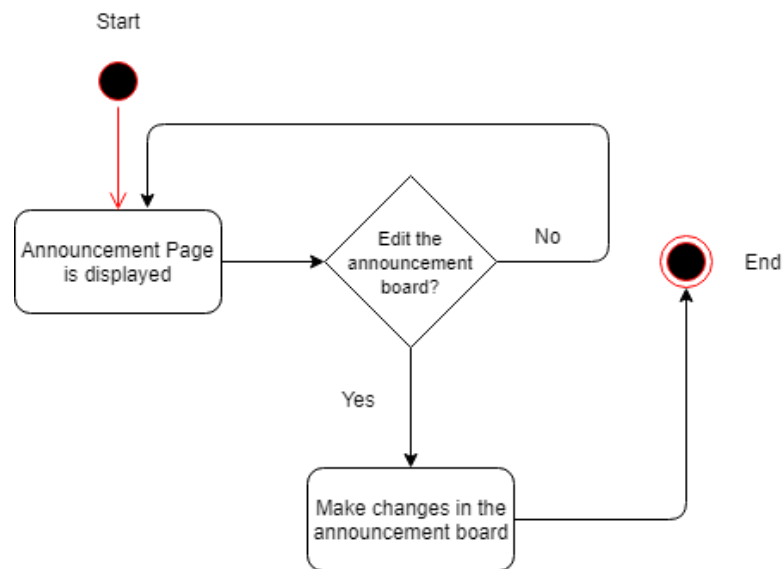
Fig 3.4 Activity diagram for editing announcements

In the figure above, it shows the process of how the user logs in to the account. The counselor enter correct credentials in order to access _ of the website. If the counselor enters invalid email or password, he/she will reinput again the credentials needed.
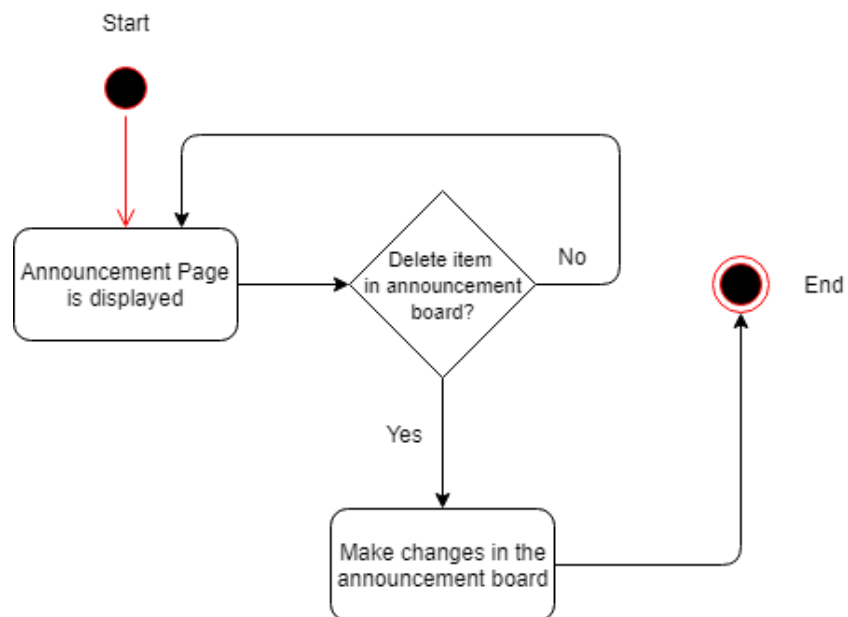
Fig 3.5 Activity diagram for deleting announcements

In the figure above, the admin will add a user in the user accounts. In the manage account page, the admin will be given a choice if he/she will make additional user in the accounts.
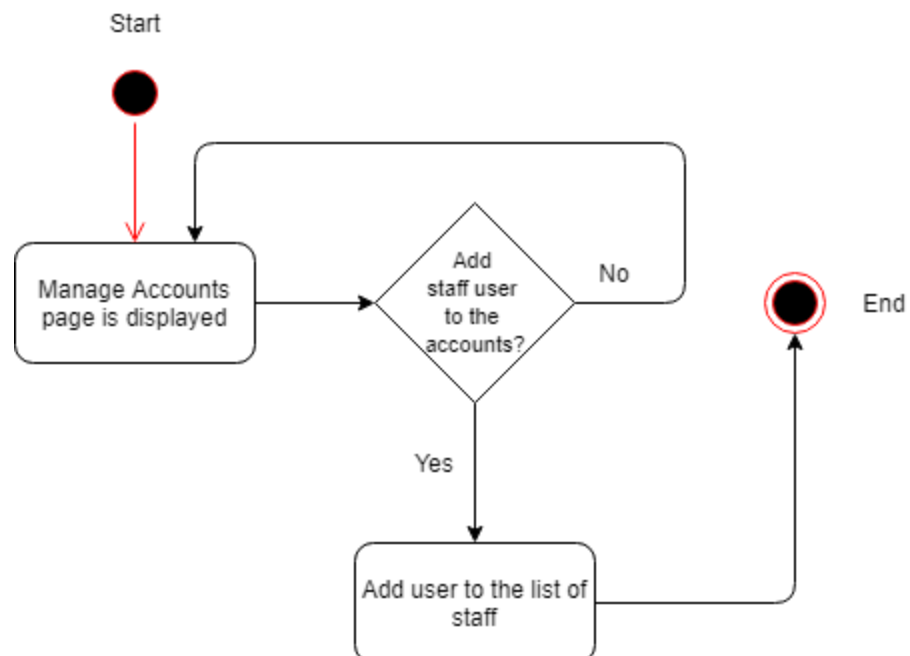
Fig 3.6 Activity diagram for adding user account

The next figure above, the admin will add a user in the user accounts. In the manage account page, the admin will be given a choice if he/she will make additional user in the accounts.
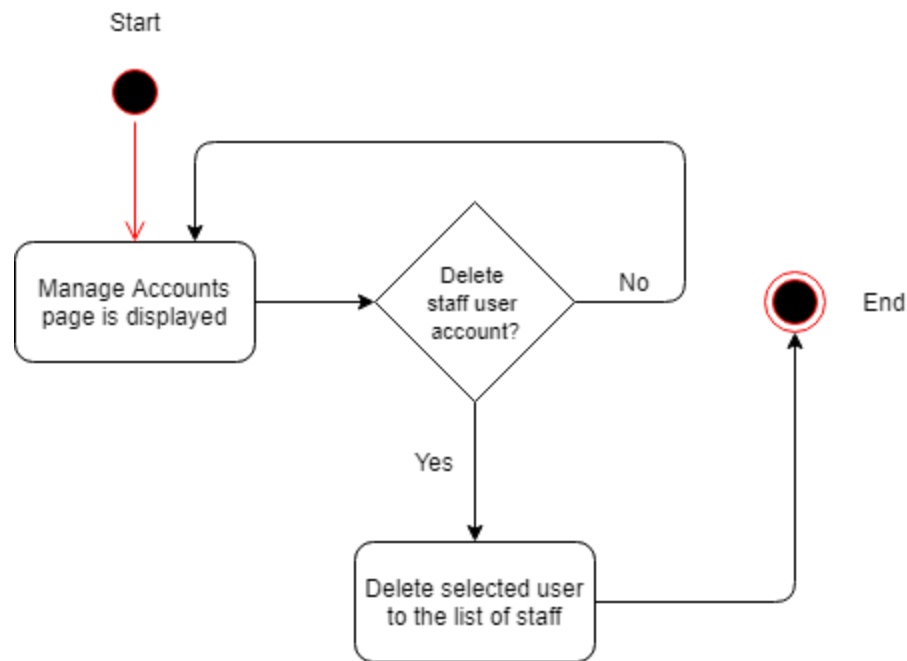

Fig 3.7 Activity diagram for deleting user account

In the figure above, the admin will add a user in the user accounts. In the manage account page, the admin will be given a choice if he/she will make additional user in the accounts.

System Sequence Diagram
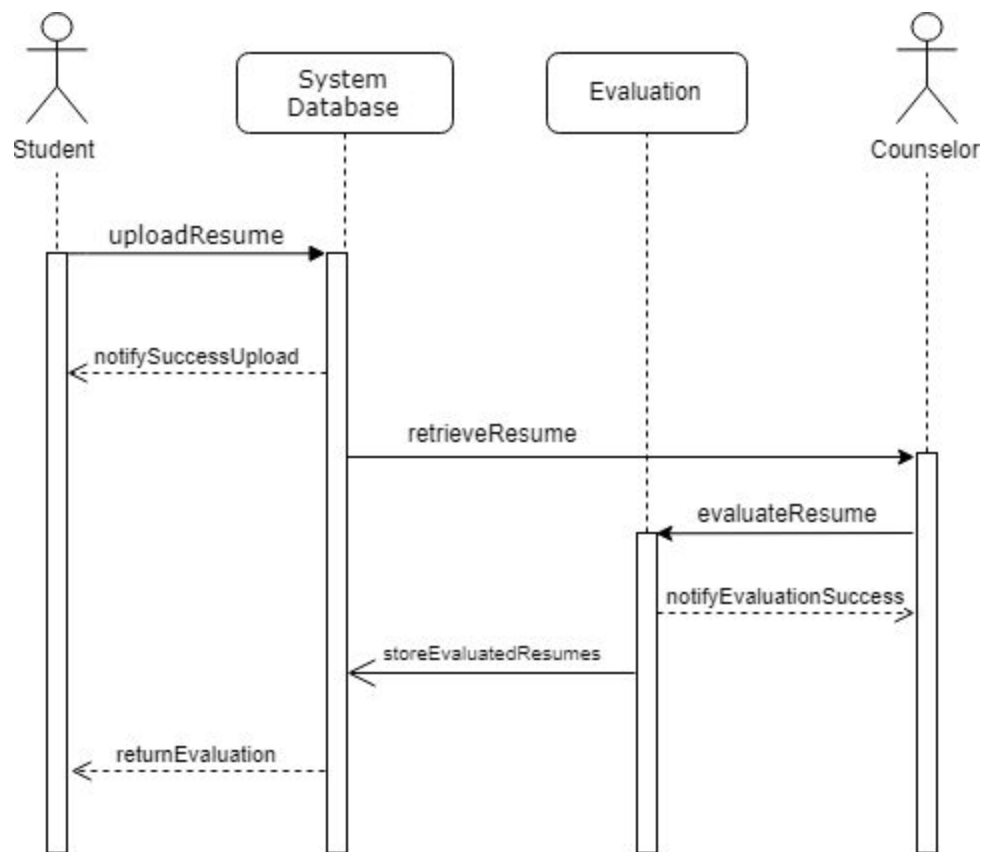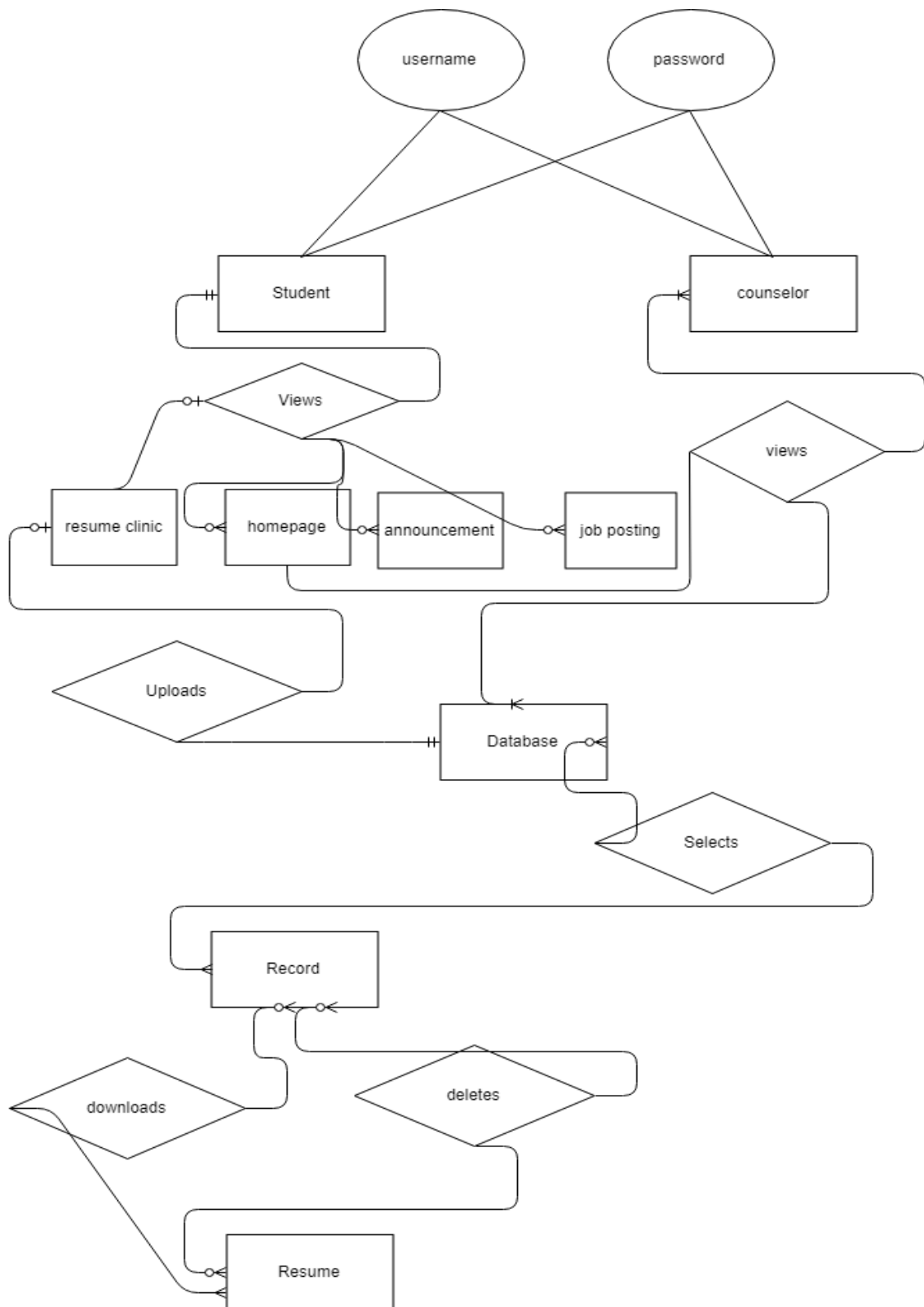

Fig 3.8 Activity diagram for deleting user account

Fig 3.9 Activity diagram for deleting user account

Development Plan

Development section shows the mockups and interface of the developing website. It describe on how the user can interact with the each function in each page.
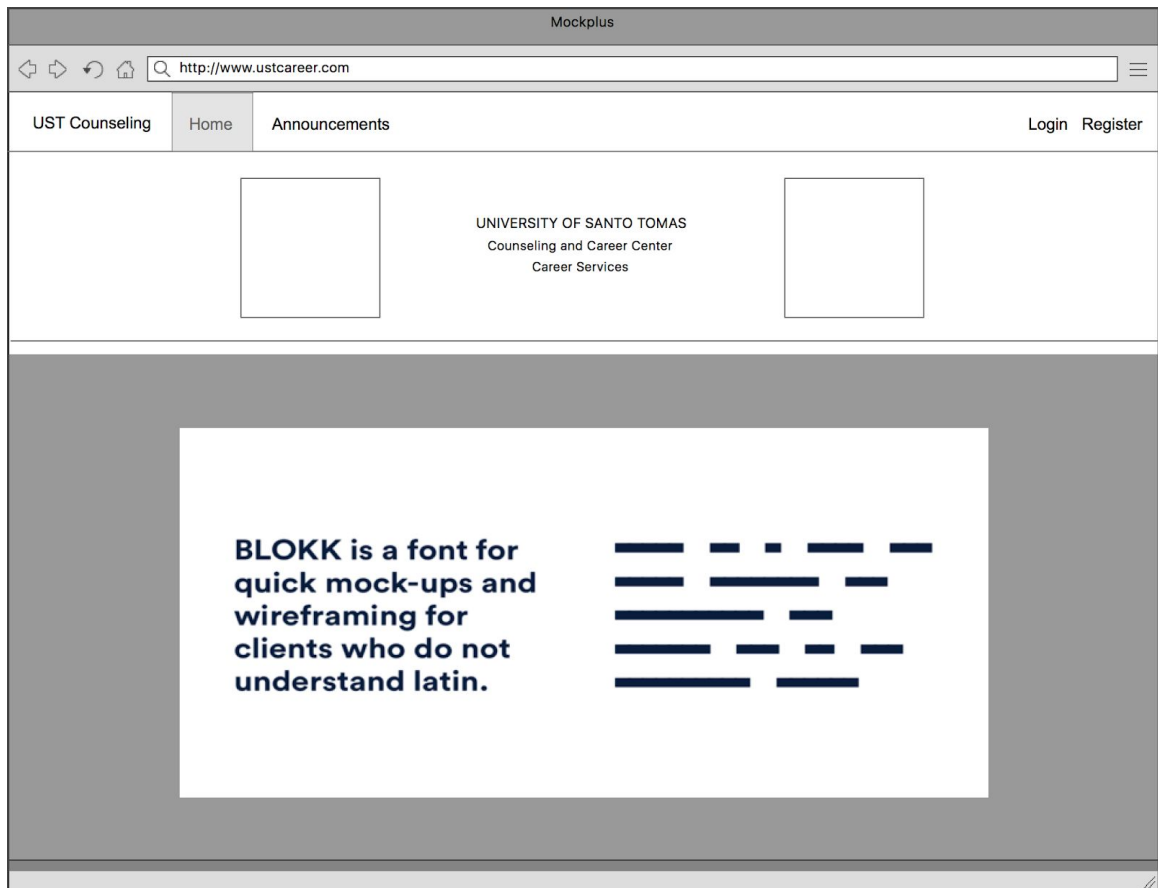
Fig 4.1 Home page for all of the viewers
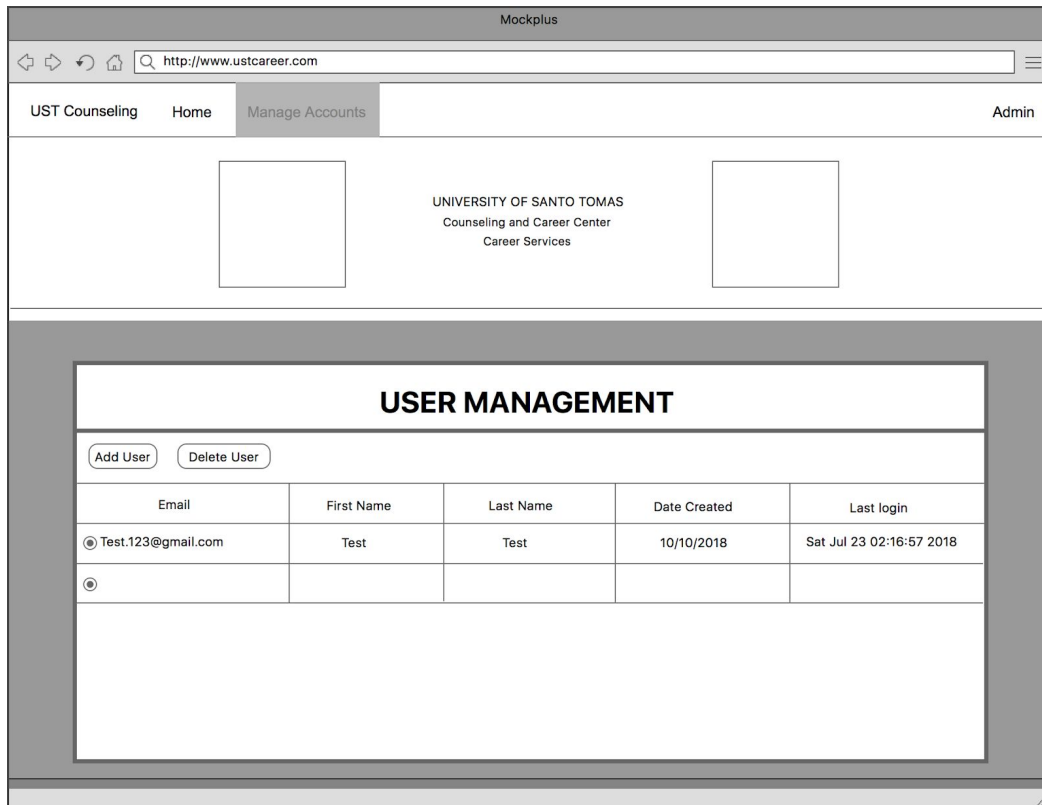
Fig 4.2 Manage Accounts Page for Admin

Fig 4.3 Add User for admin

Mockplus

http://www.ustcareer.com

UST Counseling   Home   Manage Accounts   Admin

Delete User

Add User   Delete U   Last login

Email   Sat Jul 23 02:16:57 2018

Are you sure you want to delete this account?

Test.123@gmail.com

Ok   Cancel

Fig 4.4 Delete User for admin
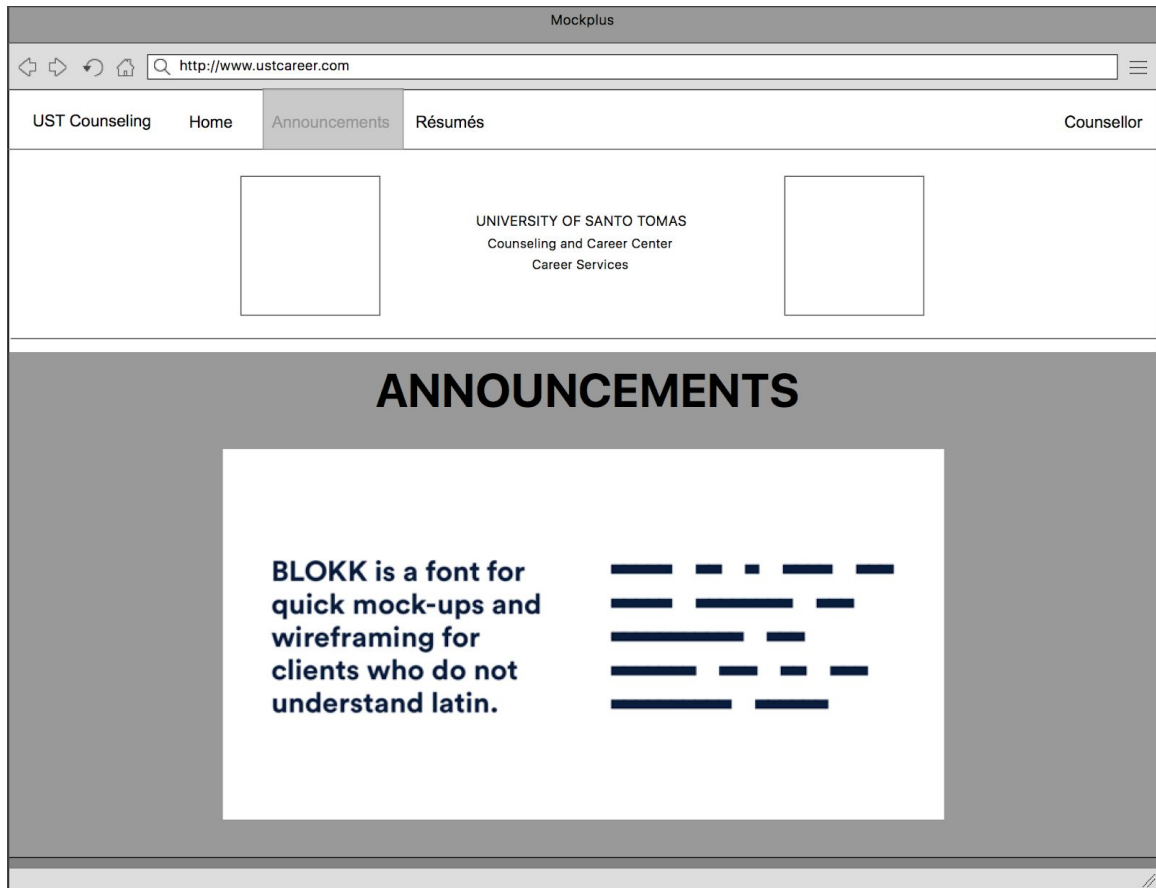
Fig 4.5 Announcements page for all viewers

Fig 4.6 Make Announcement page for counsellor

Fig 4.7 Non-evaluated résumés page for counsellor

Mockplus

http://www.ustcareer.com

UST Counseling   Home   Announcements   Résumés   Admin

Non-Evaluated Résumés

Evaluated Résumés

Career Services

EVALUATED RÉSUMÉS

NICOLAS SANTIANO

BSIT   DELETE

DATE SUBMITTED: 06/12/2018

ÄNGELO LIM

BSIT   DELETE

DATE SUBMITTED: 07/23/2018

Fig 4.8 Evaluated résumés page for counsellor

Fig 4.9 Login page for all users

Fig 4.10 Register page for all students

Test Plan

The System's test plan shall be conducted in two ways. The master plan and the acceptance plan. It is suggested for at least one tester or specialist to do the testing.

The master plan includes the unit testing, integration testing and system testing:

- Unit Testing

  The system uses PHP as the main programming language with a framework of Laravel for the web application. The testing will start by going through each functions accordingly.

- Integration Testing

  Integration testing will be done as soon as unit testing is finished and there are no errors found while checking each file. This stage includes running the web application to check if combining or integrating the files does not generate any defect.

The acceptance testing will be done by the actual users or by the client. This checks the validity of the system, whether the features or what the system has to offer, is acceptable in terms of the requirements given by the client. It will only be completed if the user, under the testing, is satisfied with the result.

In each development phase, tests will be planned and indicated as complete by certain criteria. Test factors are based upon test strategy and for some test methods, also the test coverage. The factors that will govern when testing is complete are as follows:

- Unit Testing

  When the website's system has been tested and the errors have been fixed or logged and are scheduled to be fixed at a specific date in the future, testing can be considered complete.When at least 99% of the code and critical sections have been tested and when all the major and minor bugs have been found and fixed, testing can be considered complete.

- Integration Testing

All functions and modules, and if the processes are completed without errors will be tested in order for the Integration testing to be considered complete.

Acceptance Testing
- Acceptance testing is completed when the client is satisfied with the website and the desired results.

Test Cases

Test Case # 1
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering valid email address and password	1. Visit the website 2. Navigate to login page 3. Input valid email address 4. Input valid password 5. Click Login button	Email: nicolas@test.com Password: 123123	Login must be successful	Login is successful.	
Post condition: User can access the home page					

Test Case # 2
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering valid email address and a	1. Visit the website 2. Navigate to login page 3. Input valid email	Email: nicolas@test.com Password:	Login must not be successful	Login is not successful	

blank password	address 4. No password input 5. Click Login button					

Post condition: User will stay on the login page

Test Case # 3
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering blank email address and a valid password	1. Visit the website 2. Navigate to login page 3. Input invalid email address 4. Input valid password 5. Click Login button	Email: Password: 123123	Login must not be successful	Login is not successful	

Post condition: User will stay on the login page

Test Case # 4
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering blank email address and a blank password	1. Visit the website 2. Navigate to login page 3. Input invalid email address 4. Input invalid	Email: Password:	Login must not be successful	Login is not successful	

	password 5. Click Login button					

Post condition: User will stay on the login page

Test Case # 5
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering valid email address and a invalid password	1. Visit the website 2. Navigate to login page 3. Input valid email address 4. Input invalid password 5. Click Login button	Email: nicolas@test.com Password: 123122	Login must not be successful	Login is not successful	

Post condition: User will stay on the login page

Test Case # 6
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid email address and a valid password	1. Visit the website 2. Navigate to login page 3. Input invalid email address 4. Input valid password 5. Click Login	Email: nicolastest.com Password: 123123	Login must not be successful	Login is not successful	

	button				

Post condition: User will stay on the login page

Test Case # 7
Test Scenario: Check Login Functionality
Test Case Actor: All Users

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid email address and a invalid password	1. Visit the website 2. Navigate to login page 3. Input invalid email address 4. Input invalid password 5. Click Login button	Email: nicolastest.com Password: 123122	Login must not be successful	Login is not successful	

Post condition: User will stay on the login page

Test Case # 8
Test Scenario: Check Register Functionality
Test Case Actor: All viewers

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering valid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input valid credentials 4. Click register button	First Name: John Michael Last Name: Dela Cruz Email: johnmichael.delacruz.iics@ust.edu.ph	Register Must be successful	Register is successful	

		Password: 123123			

Post condition: User will have a notification saying "Account has been created"

Test Case # 9

Test Scenario: Check Register Functionality

Test Case Actor: All viewers

Pre condition: User must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input invalid credentials 4. Click register button	First Name: Last Name: Dela Cruz Email: johnmichael.delacruz.iics@ust.edu.ph Password: 123123	Register Must not be successful	Register is not successful	

Post condition: User will stay on the register page

Test Case # 10

Test Scenario: Check Register Functionality

Test Case Actor: All viewers

Pre condition: User must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input invalid credentials 4. Click register button	First Name: John Michael Last Name: Email: johnmichael.delacruz.iic	Register Must not be successful	Register is not successful	

		s@ust.edu.p h Password: 123123			

Post condition: User will stay on the register page

Test Case # 11
Test Scenario: Check Register Functionality
Test Case Actor: All viewers

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input invalid credentials 4. Click register button	First Name: John Michael Last Name: Dela Cruz Email: Password: 123123	Register Must not be successful	Register is not successful	

Post condition: User will stay on the register page

Test Case # 12
Test Scenario: Check Register Functionality
Test Case Actor: All viewers

Pre condition: User must visit the website

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input invalid credentials 4. Click register	First Name: John Michael Last Name: Dela Cruz Email:	Register Must not be successful	Register is not successful	

	button	johnmichael.delacruz.iics@ust.edu.ph Password:			

Post condition: User will stay on the register page

Test Case # 13

Test Scenario: Check Register Functionality

Test Case Actor: All viewers

Pre condition: User must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response on entering invalid credentials in register page	1. Visit the website 2. Navigate to register page 3. Input invalid credentials 4. Click register button	First Name: Last Name: Email: Password:	Register Must not be successful	Register is not successful	

Post condition: User will stay on the register page

Test Case # 14

Test Scenario: Visit Announcements page

Test Case Actor: All viewers

Pre condition: User Must visit the website					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when clicking Announcements	1. Visit the website 2. Click Announcements on the navigation bar		User will be able to view the announcements page	User is successful in viewing the page	

Post condition: User can access the announcements page

Test Case # 15
Test Scenario: Visit Create Submission page
Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when clicking Create Submission	1. Visit the website 2. Click Create Submission on the navigation bar	E-mail: johnmichael.delacruz.iics@ust.edu.ph Password: 123123	User will be able to view the Create Submission page	User is successful in viewing the page	
Post condition: User can access the Create Submission page					

Test Case # 16
Test Scenario: Create Submission Functionality
Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing valid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input valid credentials 4. Upload résumé 5. Click submit	First Name: John Michael Middle name: Valencia Last Name: Dela Cruz	User will be successful in submitting a résumé	User is successful in submitting a résumé	

		Student Number: 2015084960 Course: BSIT Contact Number: 0977748371 2 E-mail address: [johnmichael .delacruz.iic s@ust.edu.p h](mailto:johnmichael.delacruz.iics@ust.edu.ph) Résumé file: resume.pdf			
Post condition: User will be notified when they uploaded their résumé					

Test Case # 17

Test Scenario: Create Submission Functionality

Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Valencia Last Name: Dela Cruz Student Number: 2015084960 Course: BSIT Contact	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	

		Number: 09777483712 E-mail address: johnmichael.delacruz.iics@ust.edu.ph Résumé file: resume.docx			

Post condition: User will stay on the Create Submission page

Test Case # 18

Test Scenario: Submit Résumé Functionality

Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Last Name: Dela Cruz Student Number: 2015084960 Course: BSIT Contact Number: 09777483712 E-mail address: johnmichael	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	

		.delacruz.iic s@ust.edu.p h Résumé file: resume.docx			

Post condition: User will stay on the Create Submission page

Test Case # 19
Test Scenario: Submit Résumé Functionality
Test Case Actor: Students

Pre condition: User Must be a student account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Last Name: Student Number: 2015084960 Course: BSIT Contact Number: 0977748371 2 E-mail address: johnmichael .delacruz.iic s@ust.edu.p h Résumé file: resume.docx	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	

Post condition: User will stay on the Create Submission page

Test Case # 20
Test Scenario: Submit Résumé Functionality
Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Last Name: Student Number: Course: BSIT Contact Number: 09777483712 E-mail address: johnmichael.delacruz.iics@ust.edu.ph Résumé file: resume.docx	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	
Post condition: User will stay on the Create Submission page					

Test Case # 21   Test
Scenario: Submit Résumé Functionality
Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Last Name: Student Number: Course: Contact Number: 09777483712 E-mail address: johnmichael.delacruz.iics@ust.edu.ph Résumé file: resume.docx	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	
Post condition: User will stay on the Create Submission page					

Test Case # 22   Test
Scenario: Submit Résumé Functionality
Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing	1. Visit the website 2. Click Create	First Name:	User will not be	User is not successful	

invalid credentials and file on submitting a résumé	Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	Middle name: Last Name: Student Number: Course: Contact Number: E-mail address: johnmichael.delacruz.iics@ust.edu.ph Résumé file: resume.docx	successful in submitting a résumé	in submitting a résumé	
Post condition: User will stay on the Create Submission page					

Test Case # 23

Test Scenario: Submit Résumé Functionality

Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when providing invalid credentials and file on submitting a résumé	1. Visit the website 2. Click Create Submission in the navigation bar 3. Input invalid credentials 4. Upload résumé 5. Click submit	First Name: Middle name: Last Name: Student Number:	User will not be successful in submitting a résumé	User is not successful in submitting a résumé	

		Course:			
		Contact Number:			
		E-mail address:			
		Résumé file: resume.docx			
Post condition: User will stay on the Create Submission page					

Test Case # 24

Test Scenario: Visit Jobs Page

Test Case Actor: Students

Pre condition: User Must be a student account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when clicking Jobs	1. Visit the website 2. Click jobs in the navigation bar	E-mail: johnmichael.delacruz.iics@ust.edu.ph Password: 123123	User will be successful in Viewing the page	User is successful in viewing the page	
Post condition: User should access the jobs page					

Test Case # 25

Test Scenario: Visit Jobs Page

Test Case Actor: Counselor

Pre condition: User Must be a counsellor account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response	1. Visit the website	E-mail:	User will	User is	

when clicking Jobs	2. Click jobs in the navigation bar	counselor@test.com Password: 123123	be successful in Viewing the page	successful in viewing the page	

Post condition: User should access the jobs page

Test Case # 26

Test Scenario: Visit Manage Accounts Page

Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when Manage Accounts	1. Visit the website 2. Click Manage Accounts in the navigation bar	E-mail: admin@test.com Password: 123123	User will be successful in Viewing the page	User is successful in viewing the page	

Post condition: User should access the Manage Accounts page

Test Case # 27

Test Scenario: Manage Accounts Functionality

Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when adding users	1. Visit the website 2. Click Manage Accounts in the navigation bar 3. Click add users 4. Enter valid credential of user 5. Click Add	First name: Test Last name: Test E-mail: test@test.com Password:	The user will be able to add a user account	The user successfully added a user account	

		123123			

Post condition: The admin will be notified "successfully created an account"

Test Case # 28
Test Scenario: Manage Accounts Functionality
Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when adding users	1. Visit the website 2. Click Manage Accounts in the navigation bar 3. Click add users 4. Enter invalid credential of user 5. Click Add	First name: Last name: Test E-mail: test@test.com Password: 123123	The user will not be able to add a user account	The user is not successful in adding a user account	

Post condition: The admin will stay in the user creation page

Test Case # 29
Test Scenario: Manage Accounts Functionality
Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when adding users	1. Visit the website 2. Click Manage Accounts in the navigation bar 3. Click add users	First name: Last name: E-mail:	The user will not be able to add a user account	The user is not successful in adding a user	

	4. Enter invalid credential of user 5. Click Add	test@test.com Password: 123123		account	

Post condition: The admin will stay in the user creation page

Test Case # 30
Test Scenario: Manage Accounts Functionality
Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when adding users	1. Visit the website 2. Click Manage Accounts in the navigation bar 3. Click add users 4. Enter invalid credential of user 5. Click Add	First name: Last name: E-mail: Password:123123	The user will not be able to add a user account	The user is not successful in adding a user account	

Post condition: The admin will stay in the user creation page

Test Case # 31
Test Scenario: Manage Accounts Functionality
Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when adding	6. Visit the website 7. Click Manage	First name:	The user will not be	The user is not	

| users | Accounts in the navigation bar
8. Click add users
9. Enter invalid credential of user
10. Click Add | Last name:

E-mail:

Password: | able to add a user account | successful in adding a user account | |

Post condition: The admin will stay in the user creation page

Test Case # 32
Test Scenario: Manage Accounts Functionality
Test Case Actor: Admin

Pre condition: User Must be a admin account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when deleting users	1. Visit the website 2. Click Manage Accounts in the navigation bar 3. Select user to be deleted 4. Click delete 5. Click ok in the notification		The user will be able to delete a user account	The user successfully deleted a user account	

Post condition: The admin will be notified "successfully deleted an account"

Test Case # 33
Test Scenario: Visit Create Announcements Page
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when visiting Create Announcements Page	1. Visit the website 2. Click Create Announcements Page	E-mail: counsellor@test.com Password: 123123	The user will be able to navigate the create announcements page	User is successful in viewing the page	

Post condition: User should access the Create Announcements Page

Test Case # 34
Test Scenario: Create Announcements Functionality
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account

Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when Creating an announcement	1. Visit the website 2. Click Create Announcements Page 3. Input title and body 4. Click submit	Title: Title Body: Body	The user will be able to create an announcement	User is successful in creating an announcement	

Post condition: User will be notified "successfully created an announcement"

Test Case # 35
Test Scenario: Create Announcements Functionality
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when Creating an announcement With no entries	1. Visit the website 2. Click Create Announcements Page 3. No input in the title and body 4. Click submit	Title: Body:	The user will not be able to create an announcement	User is not successful in creating an announcement	
Post condition: User will be notified "Please provide an input"					

Test Case # 36
Test Scenario: Create Jobs Functionality
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when creating a job listing	1. Visit the website 2. Click Create Jobs Page 3. Input the body and title 4. Click submit	Title: test Body: body	The user will be able to create a Job listings	User is successful in creating a job listing	
Post condition: User will be notified "successfully created an list"					

Test Case # 37
Test Scenario: Create Jobs Functionality
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when creating a job listing	1. Visit the website 2. Click Create Jobs Page 3. Input the body and title 4. Click submit	Title: Body:	The user will not be able to create a Job listings	User is not successful in creating a job listing	
Post condition: User will be notified "Please provide an input"					

Test Case # 38
Test Scenario: Visiting the None-Evaluated Résumés
Test Case Actor: Counselor

Pre condition: User Must be a Counselor account					
Test Case	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
Check response when visiting the none evaluated résumé page	1. Visit the website 2. Click none-evaluated resumes	E-mail: counsellor@test.com Password: 123123	The user will be able to visit the page	User is successful in viewing the page	
Post condition: User will be notified "Please provide an input"					

Implementation Plan

This section will explain how the project development plan will be executed. Gantt chart will also be included in this section to explain time differences of the modules will be done.

Schedule Allocation

As seen below is the Gantt Chart created to help the proponents assess how long the project will take, as well as to manage, plan and schedule effectively.

Task Name	Aug 2018		Sep 2018				Oct 2018				Nov 2018				Dec 2018	
	3W	4W	1W	2W	3W	4W	1W	2W	3W	4W	1W	2W	3W	4W	1W	2W
Concept Planning	████	████														
Research				██												
Client Finding					██	██										
Client Approval							██									
Chapter 1								██								
UI Development									██	██	██	██				
Chapter 2										██						
Main System Development										██	██	██	██	██		
Chapter 3											██	██				
Document and Title preparation													██			
Presentation														██		
Document Revisions															██	██
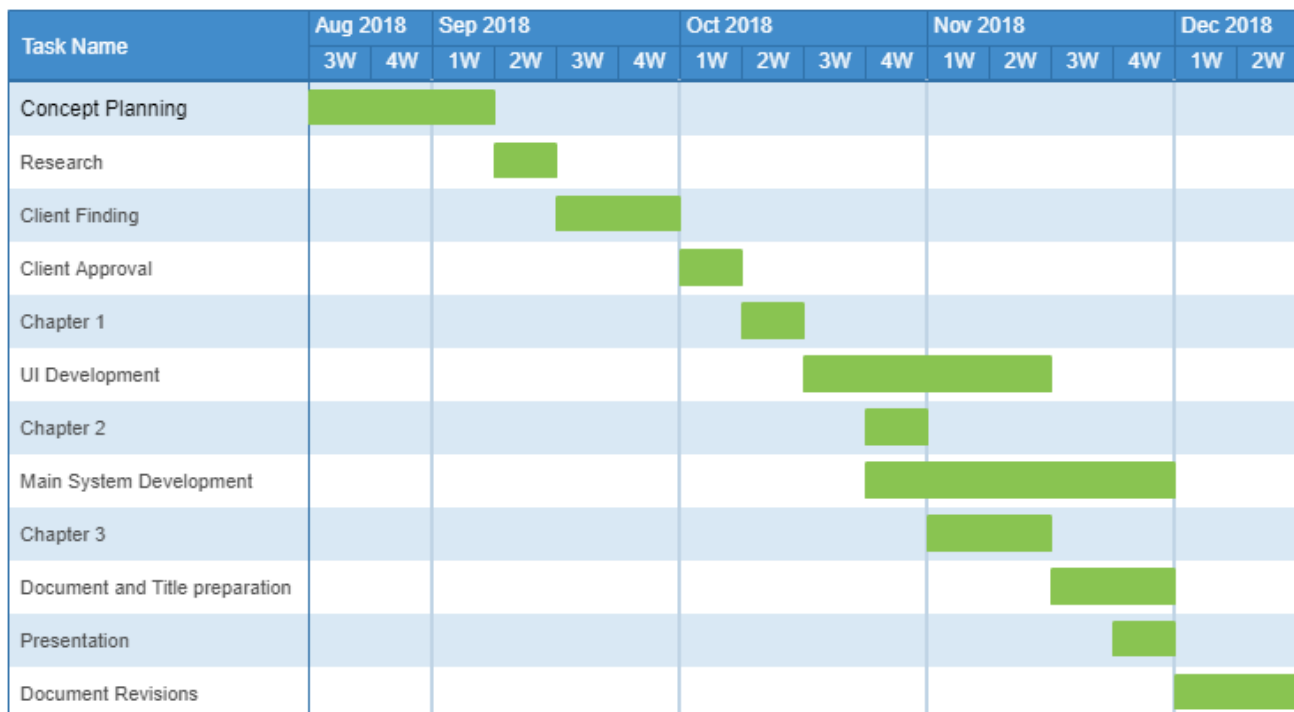
Fig 6.2 Gantt Chart for first part of the Thesis

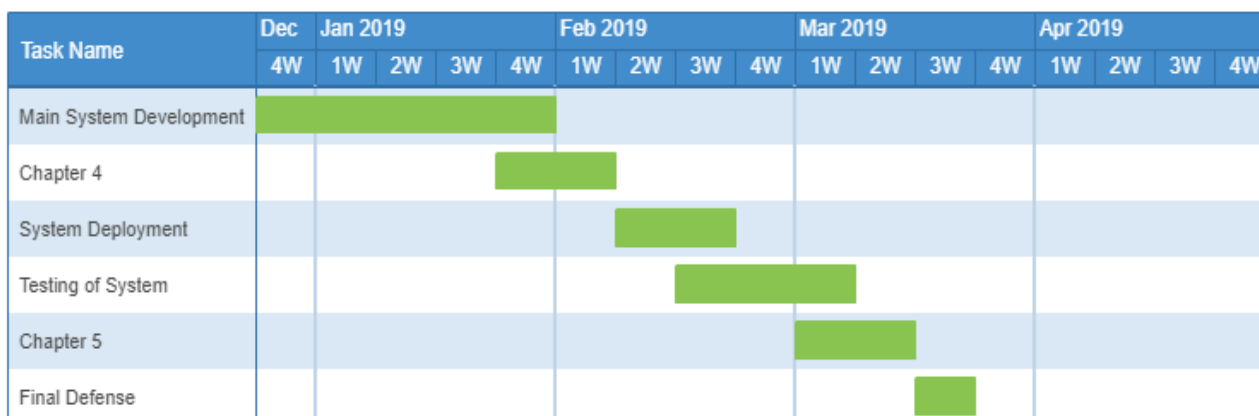| Task Name	Dec	Jan 2019				Feb 2019				Mar 2019				Apr 2019			
	4W	1W	2W	3W	4W	1W	2W	3W	4W	1W	2W	3W	4W	1W	2W	3W	4W
Main System Development	███	███	███	███													
Chapter 4					███	███											
System Deployment						███	███										
Testing of System								███	███								
Chapter 5										███	███						
Final Defense												███					

Fig 6.3 Gantt Chart for second part of the Thesis

External Interface

The UST Counseling and Career Center - Career Services Website has three (3) users namely Admin , Student, and the Staff . The admin's capability to the system is that they can add staff account to the list of users. Students role is to view the website, upload their resume and to check if the resume is evaluated. They also can view announcement posted and job listings posted by the Staff. The staff's role is to assess the resume uploaded to the website and also they can post announcements and job listings.

Internal Interface

Below is an organizational chart which shows the hierarchy of members for the project it also identifies the members job.The group is composed of five members.
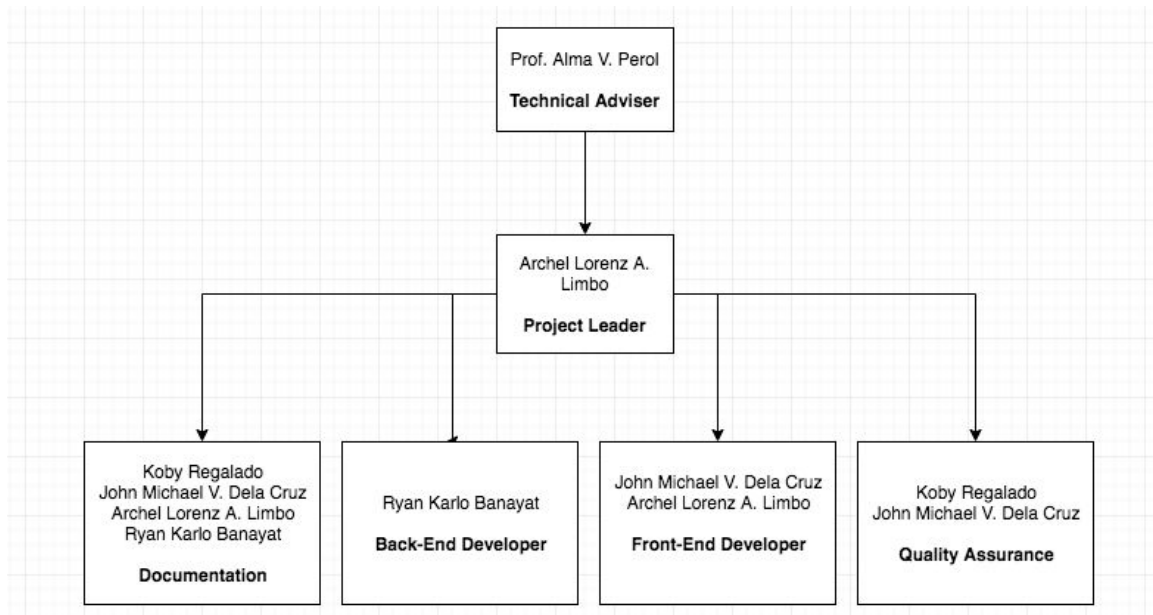
Fig 6.1 Internal Interface Structure

Feasibility Studies

Operational Feasibility

With the UST Guidance and Counseling Online Career Clinic's website to be improved, this study discusses about the new system would affect both the client and users of the proponents' project. In terms of Operational Feasibility, to be discussed by the group is the opportunities identified during scope definition and as well as how the proposed system will satisfy the requirements identified during the phase of development.

Performance, Input and Output

A remake of the evaluation process is to be created as well   as a Decision Support System (DSS) supported website would be developed in a way to improve the process of evaluation. Furthermore, There will be a redesign of the website appearance itself for a new and improved look and feel to satisfy the user's aesthetics and website experience.

Control and Security

      User management is also in development whereas different roles are to be implemented such as the Admin (Database Admin), Staff (Counselor), General Users (students). On the other hand, a security protection from common attacks like cross-site scripting and SQL injection would be implemented as well.

Economical Feasibility

      The hosting for the UST Guidance and Counseling center's Online Career Website is to be supported by the UST's Santo Tomas e-Service Providers or STEPS. Therefore, UST Guidance and Counseling will not be charged.

Technical Feasibility

      No system requirements will be needed since the website itself only requires at least a connection through the internet and a website browser.

Project Deliverables

DELIVERABLE	DESCRIPTION	DELIVERY DATE
Chapter 1	This chapter contains the Project Context, Purpose and Description, Objectives, and the Scope and Limitations of the project	
Chapter 2	This chapter contains the literatures with references related to the project.	
Chapter 3	This chapter contains requirements for the project, project plans, and methodology.	