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An Undergraduate Internship Report on LC Shipment Information Capture

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An Undergraduate Internship Report on LC Shipment Information Capture

By

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Autumn, 2022

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January 24, 2023

Dissertation submitted in partial fulfillment for the degree of Bachelor of
Science in Computer Science

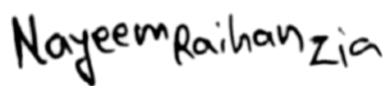
Department of Computer Science & Engineering

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Attestation

This section attests that I, Nayeem Raihan Zia, originally worked on this internship report. No devious schemes, such as plagiarism, were violated, and all cited sources are properly covered in the bibliography section. In addition, the reliability and credibility of the report's contents came from the company that I interned at, namely, **SUMMIT COMMUNICATIONS LIMITED**. You can rest assured that no third-party organizations are involved in the completion. For further assistance, kindly contact Enamul Haque, Developer, 01619521755.

Sincerely,



Signature

December 26, 2022

Date

Nayeem Raihan Zia

Name

Acknowledgement

First and foremost, my gratitude goes beyond words to Almighty Allah, as He is my everlasting source of strength in completing my internship report. His mercy has driven me to be patient, work hard, and perform my duties as an intern. In addition, I would also like to specially mention my family for the amount of love and support they have given me to ease my difficulties during this internship. My gratitude also extends to MD. Asif Bin Khaled, my internship supervisor and lecturer at the Independent University, Bangladesh, for his guidance, knowledge, time, and support until the very end. This also goes to the Department of Computer Science and Engineering for providing the necessary lessons that essentially prepared me for the knowledge and skills I needed to finish this internship. Needless to say, the entire internship program would be impossible to carry out without Summit Communications Limited's approval and the guidance of my external supervisors, Enamul Haque and Ariq Rahman. As they welcomed and acknowledged my presence at the company, I had the opportunity to see the various offices and their respective functions. Their patience and knowledge that contributed to my learning are very much appreciated. Lastly, I would like to thank Independent University, Bangladesh, for allowing me to become a student. Indeed, the university's mission and strategy were efficiently carried out.

Letter of Transmittal

January, 2022

MD. Asif Bin Khaled

Internship Supervisor Lecturer

Department of Computer Science and Engineering

Independent University, Bangladesh

Bashundhara R/A, Dhaka 1229, Bangladesh

Subject: Submission for the Internship Report

Dear Sir,

Good day!

With due respect, I humbly submit my internship report regarding LC Shipment Information Capture to you in partial fulfillment of the requirements for the degree of Bachelor of Computer Science and Engineering. This report is based on my three-month internship at Summit Communications Limited, under the guidance of Enamul Haque and Ariq Rahman. Furthermore, my internship experience and project allowed me to attain new knowledge and skills that are useful and essential in preparation for the corporate world. Still, this written report covers its purpose for my internship's overall documentation.

I would also like to express my sincere gratitude to you, Sir, for your guidance, knowledge, time, and support in making this internship a success. I persisted in my efforts to provide a thorough and outstanding report that, hopefully, met your expectations. Nevertheless, my hope continues that you will accept this.

Thank you.

Sincerely,

Nayeem Raihan Zia

ID: 1821971

Evaluation Committee

Asif Bin Khaleed

Signature

Asif Bin Khaleed 30.01.23

Name

Supervisor

30.01.2022

Signature

Md. Mahmudul Kabir peyal

Name

Internal Examiner

Hale

Signature

Mahmudul Islam

Name

External Examiner

Signature

Signature

Name

v

Convener

Abstract

Summit Communications Limited is one of Bangladesh's largest fiber optic network infrastructures. In order to continue their service, in both international and local areas, the company is looking for efficient ways to increase production management. Hence, the LC Shipment Information Capture was created to function as an Inventory Management System for the employees. Moreover, the website features include add, edit, remove, and search options while tracking down the shipping information's records. Furthermore, this internship report initially covers significant sections, such as project management, to ultimately lead to an effective system analysis and design, and product features. By the end of it, the result indicated that the website can be operated for employees' use. Still, the succeeding sections address the possible problems for long-term performance. Such problems were identified, resolved, and documented to ensure a continuous and harmonious functionality on the website. Lastly, I entailed a detailed, open, and subjective discussion regarding my internship experience.

Keywords— features, project management, results, problems, internship experience

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Chapter 1

Introduction

1.1 Background of the Work

Summit Communication Limited, also known as Scomm and SCL, gained its recognition as one of Bangladesh's largest fiber optic network infrastructures while utilizing modern technology (e.g., DWDM, IP/MOLS, SDH, and Metro Ethernet) [1]. As a result, they are able to provide high-quality service to their clients. It is not surprising that the company already provided 100 percent coverage in 2017 due to its popularity in distributing 46,500+ km of high-quality fiber optic network and voice/data gateways. Such an impressive service undoubtedly continued expanding to remote areas while maintaining its public integrity.

Surely, the fruit of their labor attracts more inquiries from clients. This includes Internet Service Providers, Mobile Network Operators, Interconnection Exchanges, International Gateways, WiMAX Operators, Government Organizations, International Internet Gateways, and Digital Cable TV Operators [2]. In order to see the impact of Scomm to contemporary society, information about the list of their clients are provided. In an effort to promote excellence, Scomm also established more services. These are the Nationwide Telecommunication Transmission Network (NTTN) and Gateway licenses, International Terrestrial Cables, International Internet Gateway, Interconnection Exchange, National Internet Exchange, and Summit Towers Limited. This expansion created a great opportunity for internet services and international bandwidth services to be available.

Now, the hope to develop a digital Bangladesh continues to thrive. Scomm is expected to manage current clients while catering to new ones as its popularity grows. This complicates ensuring smooth and easy management throughout the entire supply chain. Furthermore, the availability of the different services and the inquiries of local and international clients require shipments. Handling both issues can have serious consequences for the company's performance rate and production costs. Scomm, fortunately, decided to utilize an Inventory Management System and attempt to resolve such issues. As an intern, it was my duty to create a web-based

application that mainly extracts or tracks down shipping information. Hence, the LC Shipment Information Capture was created.

1.2 Objectives

The main objective of this internship is to create a web based application for the company. This allows to:

1. Input data in the system to record and track down shipping information.
2. Inspect data to further edit or make changes of the shipping information.
3. Remove any unnecessary data from the system that are irrelevant to the inventory.

1.3 Scopes

The following are intended to be explored in this internship report:

1. Login Page - This is used for employees to login to the system.
2. Registration Page - This is used for new employees to register and access the system.
3. Search Page - This is used for employees to search and further inspect the item's inventory.
4. Shipment Information Page - This is used for employees who wish to see the records of an item or track down its progress.
5. Edit Information Page - This is used for employees who are tasked with updating inventory information for a specific item.
6. Create Information Page - This is used for employees to create a new inventory.

Chapter 2

Literature Review

2.1 Relationship with Undergraduate Studies

Throughout this internship, Summit Communications Limited used programs such as C, asp.net, SQL, and HTML. On the other hand, Visual Studio, Microsoft SQL, and Server Management Studio 18 function as software. I was able to visualize my project beforehand because most of these were discussed in the major courses from previous semesters. For instance, HTML, CSS, and SQL were covered in Web Application and Internet (CSE 309).

Moreover, some of the sections within the respective chapters were also quite familiar to me because they were also heavily tackled in specific major courses. The course System Analysis and Design (CSE 307) already covers a huge portion of the internship report, such as the Rich Picture, Six Element Analysis and Feasibility Analysis, Functional and Non-Functional Requirements, UML Diagrams. Finally, Software Engineering (CSE 451) provided an overview of the models that can be used in Chapter 4, also known as the methodology.

2.2 Related works

This section of the internship report discusses projects that are similar to the LC Shipment Information Capture. These are:

Inventora. This is a website that serves as a one-stop shop for business owners and manufacturers [3]. It lets users keep track of materials from start to finish and gain control of businesses. In addition, Inventora ensures the following: (1) compute the Cost of Goods Sold (COGS), which assists business owners in determining retail and wholesale prices; (2) integrate in multiple virtual platforms for the availability of inventories in products; (3) record raw materials; (4) allow for the viewing of sales and customers; and (5) analyze businesses for a better understanding of sales reports and provide solutions to correct errors.

Anchanto. A company that is increasingly becoming known in eCommerce. Popular companies such as HP, Panasonic, Nestle, etc. have already joined Anchanto. By definition, this website provides visibility, incredible performance, and optimization for eCommerce [4]. It offers a variety of company types and industries to provide business opportunities for its customers. In relation to its inventory, Anchanto features order management, an operations experience, warehouse management, a digital shield, a control tower, and parcel tracking. Its significance in record keeping and tracking benefits both the company and the customers, as it also provides solutions for sales errors.

BigSeller. The website is specifically designed for businesses in Southeast Asia. It provides a solution for eCommerce sales [5]. One of the important features of this website is the ability to create a list and process the orders across multiple eCommerce channels. Products are exposed in sales channels, resulting in increased sales. Furthermore, BigSeller also counterbalances the inventory of its users and tracks products and business performance. Small business owners will have a great opportunity to grow their business, especially on popular online platforms.

In conclusion, the works discussed above suggest that an Inventory Management System (IMS) predominates eCommerce. Although they operate differently from one another, their functionality is relatively similar. The included features, such as tracking records, serve as innovative and efficient control tools for business owners. Indeed, this outperforms the complexities of businesses, particularly virtual platforms. It is only a matter of time before we can hope that IMS will gain recognition for new and upcoming businesses. Now, Summit Communication Limited acknowledges the importance of this powerful system for their company. Products in both international and local markets need to be systematically organized in order to avoid risks in production and sales. As an intern, it was my duty to create a similar and independent IMS that has features to accurately record, edit, and remove data from shipping information from their company inventory.

Chapter 3

Project Management & Financing

3.1 Work Breakdown Structure

Work Breakdown Structure (WBS) is a popular method to manage complex projects by breaking down components in a hierarchical structure [6]. This creates easier and more comprehensive tasks for teams to accomplish as it also allocates resources, designates responsibilities, and asserts control over the project. Through incorporating WBS, the project's cycle and timeline would be evident from start to finish. The figure below represents the WBS of this internship report.

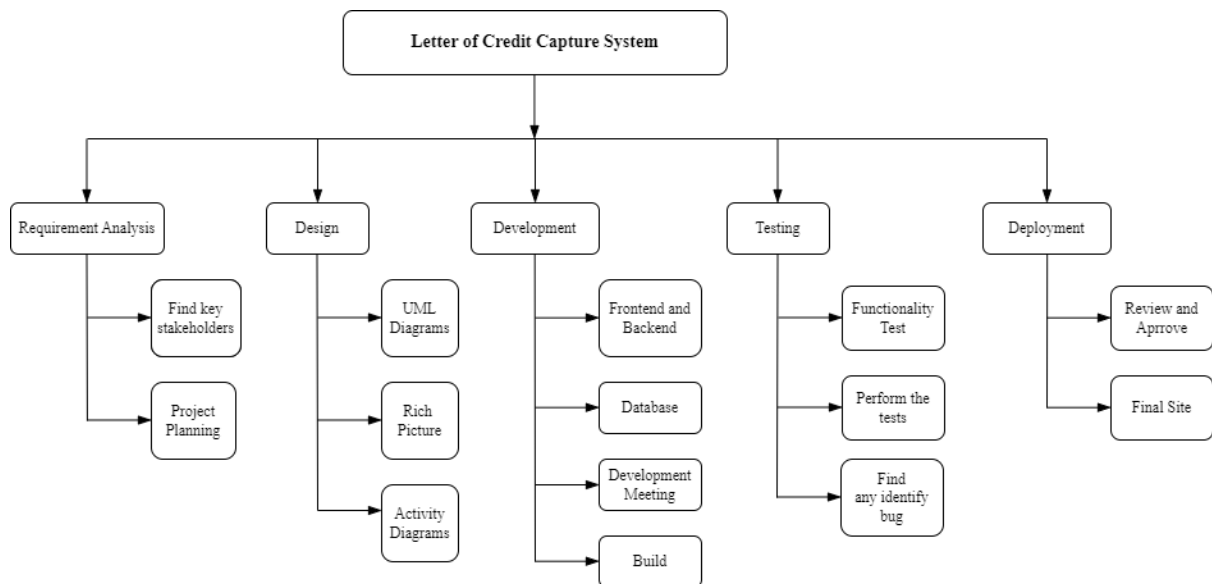


Figure 3.1: Work Breakdown Structure

3.2 Activity wise Time Distribution

The project was scheduled to be completed in a little more than three months. More importantly, time distribution utilizes the Critical Path Method to determine the effective scheduling necessary to complete the project [7]. This enables me to visualize the progress of each activity from an early start to an early finish and from a late start to a late finish. It is important to emphasize that finding the floats is the most important part of this process as it targets the crucial activities that are determined by the critical paths. To get this, I subtracted late finishing from early finishing and late starting from early starting. The figures below represent the legend and critical paths for this internship report. The boxes are purposely designed to showcase the procedure of determining the critical paths because the method uses a forward and backward pass. By doing so, I was able to identify the critical paths for this project. The color red are the critical paths with floats shown as zero. This indicates that I needed to extensively work on those projects to ensure no delays. Therefore, the critical paths of this project are requirement analysis, design, development, and deployment, while the non-critical path is testing. Once followed properly, it is expected that I could complete the project in 88 days.

Early Start	Activity	Early Finish
Float		Float
Late Start	Duration	Late Finish

Figure 3.2: Legends for Critical Path

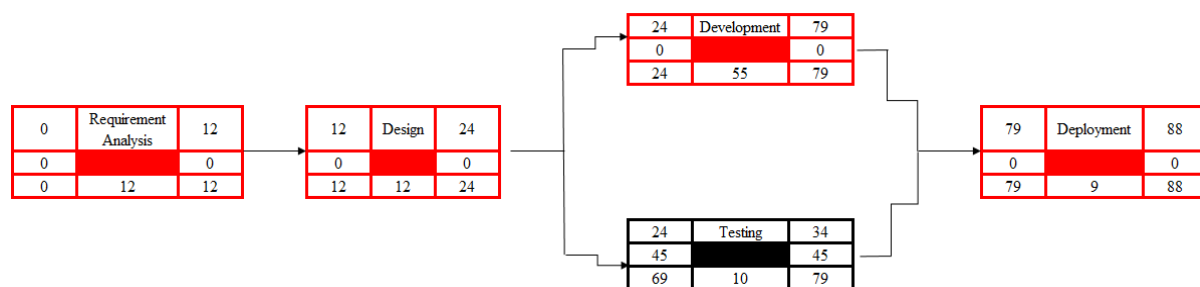


Figure 3.3: Critical Path

3.3 Gantt Chart

Another essential component for project management is the Gantt chart. This is an alternative method for viewing activities in relation to time [8]. The left chart showcases the activities, while the chart above showcases the time scale. Moreover, the chart serves as a chance to acquire additional information about the project and its progress. Again, it is worth noting that the

project is expected to be completed in a little more than three months, or specifically 98 days. The figure below represents the Gantt chart for this internship report.

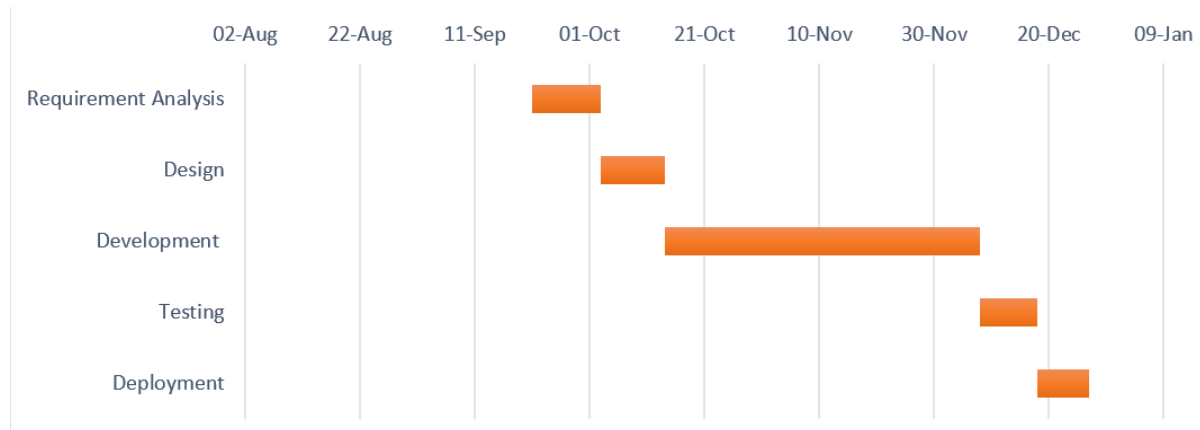


Figure 3.4: Gantt Chart

3.4 Activity wise Resource Allocation

The activities are divided into five core functions with 100 work percentages to fulfill. These are:

1. **Requirement Analysis.** At the beginning of the work, all the requirements were discussed with the clients.
2. **Design Layout.** The rich picture and UML diagrams were created before the website design phase.
3. **Development.** The project was developed with a frontend, backend, and database being created. Every week, the project progress was shown to the external supervisor during office hours.
4. **Testing.** The project/website was tested simultaneously as it was being developed. Any errors or bugs that were found were properly identified and solved.
5. **Deployment.** After the website was done, it was finally ready to be deployed.

As mentioned, the total float provided the critical paths. Some of these five core functions needed to be done with extra effort in order to assure in meeting the deadlines. The chart below represents the Activity wise Resource Allocation for this internship report.

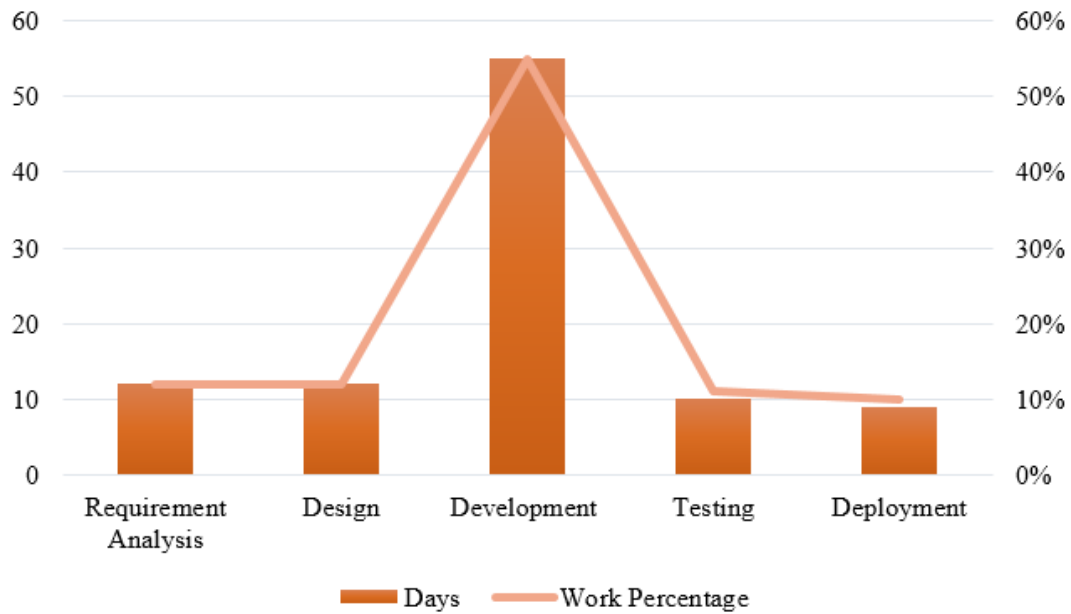


Figure 3.5: Activity wise Resource Allocation

3.5 Estimated Costing

This section does not need to show an estimated costing. As of now, the available hardware and software in the company were enough to create an Inventory Management System. Although this can surely be changed upon further upgrades.

Chapter 4

Methodology

This report incorporates the Waterfall methodology for project management. By definition, it follows a linear sequential approach from start to finish [9]. The developmental process flows like a waterfall and is evident in stages. It is important to note that each stage must be completed before starting the next project. The following are the stages of the Waterfall project management, also in accordance with the cited source:

1. Requirement Analysis.
2. Design.
3. Implementation.
4. Verification or Testing.
5. Deployment and Maintenance.

Following such methodology has its advantage as it is presented with a track record. It would be easy to detect errors in the first and second stages and remove any faulty codes in the next stage. More so, its structure actually helps during a project's progression as it shows the goals to be achieved. However, it also holds its fair share of disadvantages and commonly, it is the inability to go back to a previous stage once coding has started. Since everything is planned from the beginning, errors are expected to meet. The figure below represents the stages of the waterfall method.

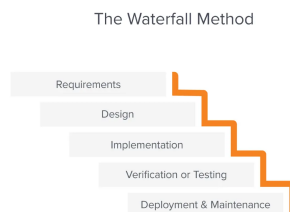


Figure 4.1: The Waterfall Method

Chapter 5

Body of the Project

5.1 Work Description

LC Shipment Information Capture serves as an inventory system for the company. This stores all of their bulk shipment information for the products that they are intended to sell. As mentioned in the objectives from Chapter 1, its relatedness includes the add, edit, delete, and search features, which enable data to be systematically presented on the website. Furthermore, it is fundamentally developed in Visual Studio and Microsoft SQL Server Management Studio. The experience of handling both of them was strenuous on my part, but nevertheless, I was determined to finish this project. In addition, asp.net served as the framework that utilized codes from C Sharp, HTML, Bootstrap, and SQL. Despite my familiarity with these usages, applying them in a functional company is a grueling task that requires an extreme amount of effort, patience, and skill.

5.2 Requirement Analysis

Rich Picture

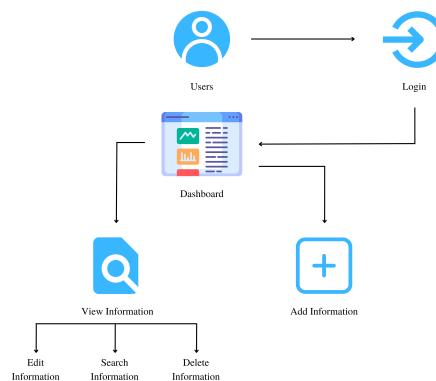


Figure 5.1: Rich Picture

Functional and Non-Functional Requirements

Functional Requirements

Function	LOGIN OR REGISTRATION
INPUT N/A	Process: visit the login page, then login or if it is a new user, they must register first.
Pre-conditions	Users must access the internet through desktop or laptop.
Post-conditions	Users are allowed to access the shipping information page.

Function	SHIPMENT INFORMATION PAGE
INPUT N/A	Process: visit the index page.
Pre-conditions	Users must access the internet through desktop or laptop.
Post-conditions	Users must have a brief idea about the next process.

Function	ADD NEW INFORMATION
INPUT N/A	Process: A form is filled and new information is created through the form.
Pre-conditions	Users must access the internet through desktop or laptop.
Post-conditions	Users enter data to the form and the new information is successfully added.

Table 5.1: Functional Requirements

Non-functional Requirements

The following are the non-functional requirements for the system's initial operation:

1. **Performance.** The website must have excellent performance. There shouldn't be any lag or slow down when a page is loaded.
2. **Security** The security of the data is available making sure no third party can get access to the data.
3. **Availability.** The Website would run and be able to be used anytime of the day, 24/7.
4. **Reliability.** The website should be reliable. It shouldn't have any bugs or problems.

5.3 System Analysis

5.3.1 Six Element Analysis

The table below represents the Six System Analysis:

Process	Human	Non-Hardware	Computing Hardware	Software	Database	Communication Network
Login	Employee	N/A	Laptop	Website	Microsoft SQL Server	Internet
View Information	Employee	N/A	Laptop	Website	Microsoft SQL Server	Internet
Add Information	Employee	N/A	Laptop	Website	Microsoft SQL Server	Internet
Edit Information	Employee	N/A	Laptop	Website	Microsoft SQL Server	Internet
Search Information	Employee	N/A	Laptop	Website	Microsoft SQL Server	Internet

Table 5.2: Six System Analysis

5.3.2 Feasibility Analysis

A feasibility study conducts a practical assessment of a project [10]. A thorough investigation will determine the viability and liability, which can further help the management decide whether the system is fit to develop or not. This allows the company to objectively foresee the strengths and weaknesses of the proposal. Initially, any company that invests time, effort, and financial resources wants to envision its success and benefits. Through a feasibility study, an outline is developed that tackles effective opportunities and underlying threats for the project. Upon improvements, this can enhance the existing system until it is developed into a new one. Furthermore, the following are decisions that were taken into consideration for this project:

1. **Technical Feasibility.** The required equipment should be determined during the implementation of this project. Its utilization also aids in safely storing and securing data. In the case of Summit Communications Limited (Scomm), they are equipped with the necessary hardware and software.
2. **Operational Feasibility.** This allows a user- friendly interface. This system allows employees of Scomm to gain access to the inventory. From this, they can easily gather a product's information to be processed for shipment. It is also worth mentioning that employees must be connected to the internet in order to access the website.
3. **Economic Feasibility.** One of the primary concerns in the fundamental step of creating this system has to do with its resources. This analyzes the cost, such as the software and hardware costs, and benefits for this project. In regards to Scomm, there was no need to ensure labor as there were no additional costs.
4. **Schedule Feasibility.** The time for the internship is 3 months, which is an estimate of 90 days. It will be possible to finish the project in around that time. All the work will be accomplished within that time frame for this project.

5.3.3 Problem Solution Analysis

At the beginning of the internship, there was a discussion about the requirement analysis with the project supervisor. I was assigned the task of becoming acquainted with, comprehend-

ing, and knowledgeable about the.net framework, CRUD functions, and MVC architecture. It may appear to be a simple task, but I am preparing for the project later on because this is an effective method for continuous and intense work. In reality, this task alone is arduous, as it is new to me. To make matters worse, I also had to code in C Sharp, which is also something unfamiliar to my knowledge. My abilities were seriously tested as time passed. I felt stuck even when the project's workload heightened. I had to always be mindful of the task that my project supervisor gave me in the first place as the steps guided me to complete the codes. There was, indeed, a lot of practice on how to do the codes using the framework. Through accepting failures and embracing patience, I was able to resolve faulty codes and fix bug problems.

5.3.4 Effect and Constraints Analysis

Constraint 1: Time Effect: Three months were allotted for the project, and it was finished around that time period.

Constraint 2: Budget : The budget was not affected.

Constraint 3: Database Effect: SQL was used as the database.

5.4 System Design

UML Diagrams

The figures below represents the UML Diagrams:

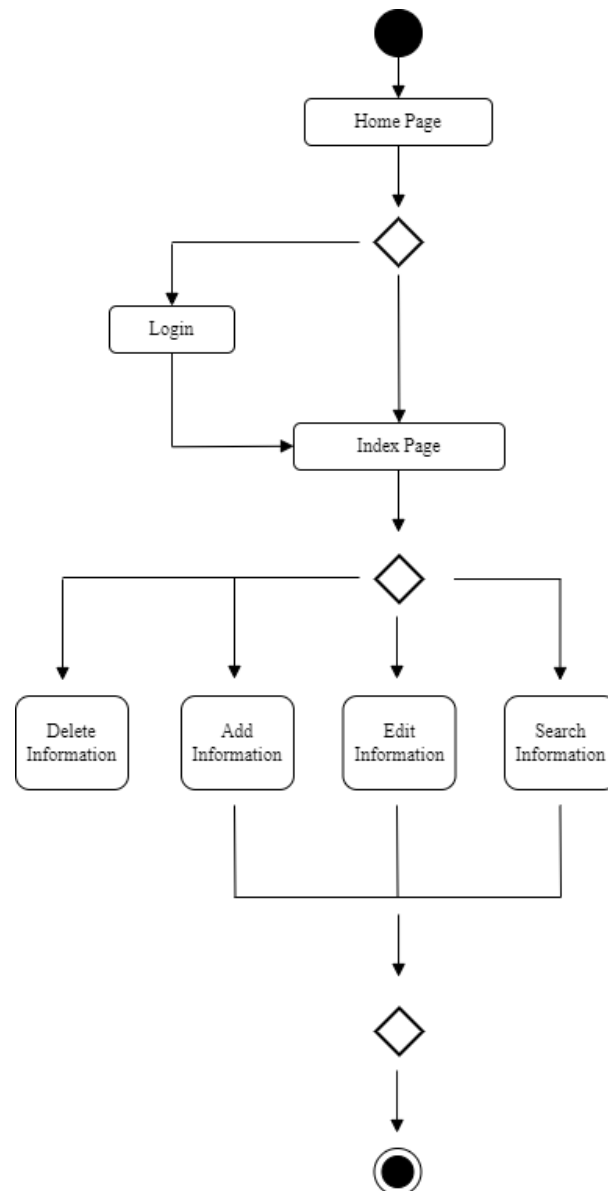


Figure 5.2: Activity Diagram

Architecture

For the frontend, HTML, CSS, and Bootstrap were used, while the backend used the ASP.NET Framework and SQL through coding in C Sharp. Asp.net is a framework developed by Microsoft that serves as a way to run programs on Windows.

5.5 Implementation

The figures represents the implementation of the project:

Registration

Create

Login

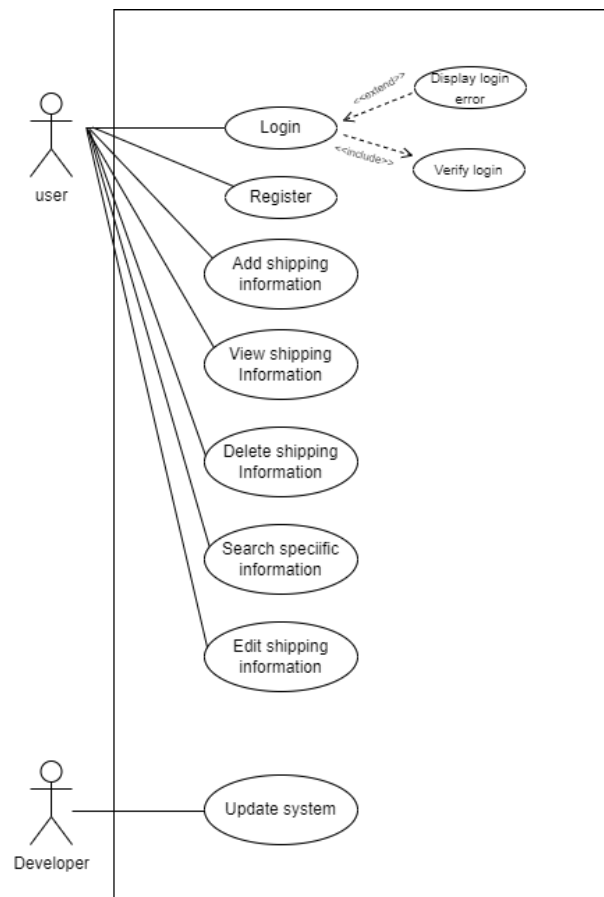
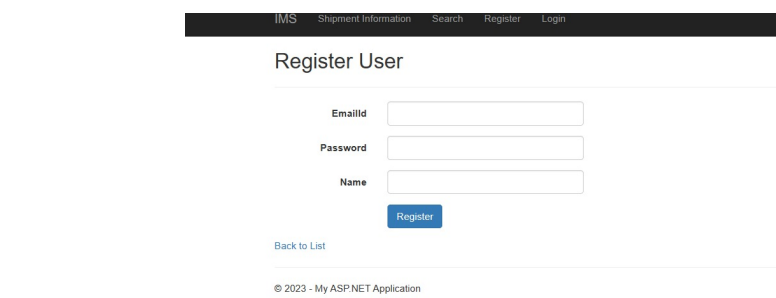


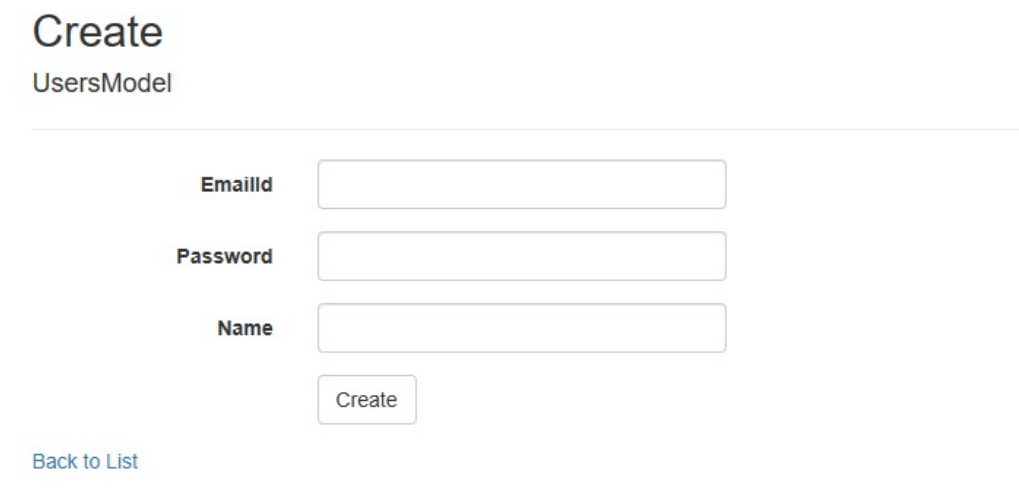
Figure 5.3: Use Case Diagram

Add



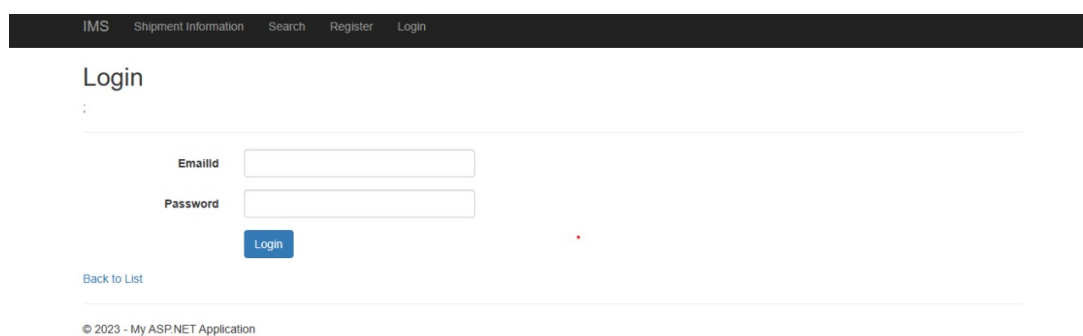
The screenshot shows a web application with a dark navigation bar at the top containing the links: IMS, Shipment Information, Search, Register, and Login. Below the navigation bar, the page title is "Register User". The form contains three input fields: "EmailId", "Password", and "Name". Below these fields is a blue "Register" button. At the bottom of the form, there is a link "Back to List" and a footer "© 2023 - My ASP.NET Application".

Figure 5.4: Login Page



The screenshot shows a web application with a dark navigation bar at the top containing the links: IMS, Shipment Information, Search, Register, and Login. Below the navigation bar, the page title is "Create UsersModel". The form contains three input fields: "EmailId", "Password", and "Name". Below these fields is a "Create" button. At the bottom of the form, there is a link "Back to List".

Figure 5.5: Create Page



The screenshot shows a web application with a dark navigation bar at the top containing the links: IMS, Shipment Information, Search, Register, and Login. Below the navigation bar, the page title is "Login". The form contains two input fields: "EmailId" and "Password". Below these fields is a blue "Login" button. At the bottom of the form, there is a link "Back to List" and a footer "© 2023 - My ASP.NET Application".

Figure 5.6: Login Page

[IMS](#) [Shipment Information](#) [Search](#) [Register](#) [Login](#)

Add Shipment Information

[< Go Back](#)

Shipment Information

FinalProformaInvoice_BOQ_F

ProformaInvoiceNumber

ProformaInvoiceDate

ProformaInvoiceValue

Incoterms

BTRC_NOC_RequestDate

BTRC_NOC_Number

BTRC_NOC_Date

BTRC_NOC_ActualReceivedDate

BTRC_NOC_ExpiryDate

LetterOfCreditNumber

[Save](#)

[Back to List](#)

Figure 5.7: Add Information Page

Chapter 6

Results & Analysis

The website includes add, edit, delete, and search information, as well as record tracking features. These effectively covered the scopes and objectives outlined in Chapter 1. Some of its features were similar to those of the websites indicated in the literature review, but it remains an independent inventory system for the company. Moreso, the LC Shipment Information Capture utilizes C Sharp, HTML, Bootstrap, and SQL. After the Requirement Analysis stage, I experienced difficulties but eventually managed them. There were numerous faulty codes and bugs that needed to be fixed. After consulting with my project supervisors and self-practice, I was able to continue with the project. The codes were tested every time to ensure no problems would occur in the succeeding features. The project was simultaneously developed and tested to make sure there were no bug issues as soon as possible.

Chapter 7

Project as Engineering Problem Analysis

7.1 Sustainability of the Project/Work

It is highly recommended to discuss the sustainability of the project in order to address its continued benefit to the users. One should not merely focus on the system's development after finishing deployment. The significance of the Inventory Management System, or even this whole point of the internship, is to ensure a long-term reliance on the company's production. The following covers the sustainability of the project:

Community Sustainability. Clients will see a drastic improvement in the company's product shipping. This can further manage its production reports, and employees will be able to add more products to clients who wish to purchase them. Although there is a clear advantage for the clients, there is no doubt that employees will mostly benefit from this system. Employees will undoubtedly be able to access the website via any device or browser with an internet connection. This can surely improve their productivity as it systematically outlines the necessary shipping information inside the inventory. Moreover, there is also no need to go through the hassle of tracking down its record because the system functions to do so.

Financial Sustainability. Indeed, effective work productivity reflects an increase in the company's profits. Their initiative to maximize customer support can result in satisfaction due to the well-organized management of the service. Furthermore, more budget will be allocated so that the system can be maintained and upgraded.

Organizational Sustainability. The company's development team will have to continue the maintenance and upgrade of the system. It is also plausible to expand the team members to ensure improvements. Since the system is independently operated by the company, more functionalities should be added after frequent improvements while minimizing the errors reported

by the employees. Alertness in guaranteeing the system's functionality to properly work is prioritized daily to avoid any delays in the shipping information.

7.2 Social and Environmental Effects and Analysis

As Summit Communications Limited implemented the system, the following addresses the social and environmental effects:

Social Effects. Resolving the difficulties associated with shipping production will have positive effects on the company. To be more specific, more manufacturing products will increase the production cost. In addition, the employee will be able to access full control of the shipping information. Its systematized ability gives them the opportunity to add, edit, and remove information from the collected data. Lastly, customer support will be handled more efficiently from employees through archiving from the inventory's record.

Environmental Effects. The implementation of this project shifted from a paper-based to a technological-based inventory. Not only does it reduce the company's resource budget, but it also significantly impacts the environment in a "greener" way. This effect is also reflected within the office when they are able to adapt to this new approach. For instance, an employee noticed an error after printing a customer's shipping information. It is normal to detect mistakes and edit the information but this unfortunately accumulates more documents to be printed. This also increases paper waste because printed documents won't be reused, especially for reports. The system will avoid decluttering papers until their usage has diminished.

7.3 Addressing Ethics and Ethical Issues

Due to the drastic advancement in technology, it is inevitable for websites and software developments to be liberated from serious threats. Such threats include unauthorized data collection and hacking that can be publicized on the internet in various ways. This ongoing concern must be constantly addressed through ethical principles in order to avoid compromising any data in the system. Moreover, developers are obliged to seriously follow the codes of conduct for systems to be released and their development. Hence, the following are taken into consideration:

Data Security. The SQL server collects and stores the database from this project. The server provides features that ensure data security. This consists of authorization, protection against malicious acts and encryption of data. The documents, such as the shipping information, and codings will strictly remain hidden in public.

Data Storage. In any technical difficulties the system will possibly face, the SQL server will restore and recover the database. During its operation, the database will automatically be offline. Hence, the shipping information has a low risk of loss.

Data Collection. The system will only collect the employee's information, such as their respective names and email address, for work purposes. The employees will also follow the terms and conditions set by the company, entrusting and permitting data collection to the system before registering. They will have their full ownership of any personal information that is irrelevant for work. The system is not affiliated with any service, business, or any third-party access other than Summit Communications Limited.

Chapter 8

Lesson Learned

8.1 Problems Faced During this Period

Before starting this internship, controlling my apprehension was difficult. This was the time when I was juggling all of the accumulated knowledge from the major courses, but something within me was preventing me from sorting out my thoughts. Perhaps adapting to a routine through online classes minimized my social interaction. I did not know what to expect in an onsite working environment while doing my internship responsibilities. In the initial period, I visited their office, which gave me the company's laptop. The seniors also oriented me about the company, pay, and details for my assigned project. It made me more apprehensive as I slowly realized that this project would be challenging. Unfortunately, I tested positive for Co-Vid 19 after my visit and was forced to return home for two weeks. I was not able to properly establish rapport with my seniors, fellow interns, and other employees, as well as successfully operate the codes for the system. To make matters worse, the virus made me bed-ridden for days, and as a consequence, I delayed both of my academic and internship responsibilities. Even though my senior continued to inform, guide, and correct me for my projects, doing all of these would've been preferable. Subsequently, I frequently visited my office. I want to express my gratitude for the employees, especially my seniors, and co-interns, throughout the succeeding period. I was constantly having trouble with the codes, yet they were all helpful and patient with me. Relatively, learning while applying the codes was troublesome and, at some points, discouraging. I also had to continue my other academic duties, such as major exams, while working on my project.

8.2 Solution of those Problems

An effective solution to the mentioned problems is to stay resilient. My apprehension and hopes were significantly tested in every period of this internship but it does not necessarily indicate for me to give up. With the use of technology, I was able to communicate with my seniors, especially inquiries for my project. I was aware that I need more patience for my project, so, I took the initiative to also work and practice on the codes at home. With time

management, I allowed myself to counterbalance with my responsibilities and prioritized what should be done. I took those difficulties and discouragement as an opportunity to purposely improve on my work. During this process, it drove me to communicate more with my seniors. It should always be worth remembering that those errors from my codes are an indicator that I actually did something. The overall experience surely helped me improve my performance.

Chapter 9

Future Work & Conclusion

9.1 Future Works

The goal of the LC Shipment Information Capture is to utilize a new and independent inventory system for Summit Communications Limited. The project will significantly improve the production management as it systematically organizes the shipping details. Certainly, this newly developed system is merely in the preliminary stage and ultimately seeks improvements in order to strengthen its contribution to the company. In the future, I recommend adding more features while focusing on capturing the most important and necessary functionalities. For instance, it would be better to work on the user interface to enable a more user-friendly interface for the employees. Relatively, planning out the website's appearance would give extra points because good work design impacts the personal effectiveness of an employee. It is also wise and efficient to include a "forgot password" option on the login page. This would make employees feel less worried about errors in accessing the website. I am hoping that the future development of this system can be available on mobile devices, as the website is only limited to desktop and laptop computers. Lastly, some Inventory Management Systems have an amazing feature that systematically analyzes the business algorithms to ensure an increase in production and correct errors. I hope to see that implemented in the future in order to strengthen the company.

9.2 Conclusion

In general, my internship was such an interesting experience. I can definitely say that the skills and knowledge I gained in classes are not enough to compensate for the corporate world. It also eradicated my apprehension about being in a working environment, as I was given the opportunity to professionally operate my project. Because Computer Science encompasses a wide range of opportunities for individuals, it is important to remember that the knowledge you gain at university will not provide you with everything you need to know. I had to teach myself some of the programs and software to operate the system. I had to endure a lot of bug problems and faulty codes in order to successfully program my project. Additionally, the challenges I

faced impacted my self-development in a positive way. I worked under stressful conditions yet remained disciplined to accomplish the necessary tasks. Lastly, one must establish meaningful communication with the professionals around them. My project supervisor provided me with the guidance that I needed throughout my internship. Therefore, this internship allowed me to gain confidence and prepare for my professional career.

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The student modified the internship final report as per the recommendation made by his or her academic supervisor and/or panel members during final viva, and the department can use this version for achieving.

Asif Bin Khaled 30.1.23

Signature of the Supervisor

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