



# **Final Report on Logistics Management System**

By

**Maruf Rahman Bhuiyan**

Student ID: **1730897**

**Spring, 2022**

Supervisor:

**Romasa Qasim**

**Lecturer**

Department of Computer Science & Engineering

Independent University, Bangladesh

**May 12, 2022**

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

Department of Computer Science & Engineering

**Independent University, Bangladesh**

# Attestation

I attest that this report is my work, based on responsibilities that I was assigned to during my internship period. In addition to that, I have acknowledged all material and sources used in this report.

I also certify that this report has not been submitted previously for any assessment in any other unit and that I have not forged the work of other students or persons.

However, following the internationally accepted academic guideline using other's written work is accurately cited if used in any part of this work.

---

Signature

---

Date

Maruf Rahman Bhuiyan

---

Name

# Acknowledgement

First and foremost, I desire to express my sincerest sense of gratitude to Almighty Allah because of His mercy and blessing that I have come so far. It has been a great privilege to work for E-Desh Ltd. as an intern. I have received so much support and encouragement from the individuals of E-Desh Ltd. who have years of experience in Software Development. I also would like to thank the members of E-Desh Ltd. for spending their valuable time and knowledge and was essential for the completion of this report.

I express my gratefulness to my internal supervisor, Romasa Qasim, Lecturer, Department of Computer Science and Engineering, Independent University, Bangladesh (IUB), for his invaluable instructions, continuous guidance, support, and motivation during my internship period and preparation of this report.

I besides want to express my deepest gratitude to my external supervisor and my mentor Md. Rafiul Ferdous for his continuous support and guidance throughout the completion period of the project. His support and leading ability were the driving force of this project. I also want to thank my other project members for their contribution on the project.

Finally, I proudly acknowledge the great sacrifices, good wishes, moral support, fruitful advice, inspirations, and encouragement from my family members, relatives, and friends.

Maruf Rahman Bhuiyan

May 08, 2022

# Letter of Transmittal

May 09, 2022

Romasa Qasim

Lecturer,

Department of Computer Science and Engineering

Independent University, Bangladesh

Subject: Letter of Transmittal for Internship Report, Spring 2022

Dear Ma'am,

This is to inform you that with due honor and respect, I, Maruf Rahman Bhuiyan, ID - 1730897 from the internship course of Spring 2022 Semester, Section 07, would like to submit my Internship report. This report is based on my internship program and the project I have worked on. My internship was conducted from 6th February to 28th April 2022 and it has been completed at E-Desh Ltd.

This report is based on my experience and the work I did at E-Desh Ltd. during my internship program. The primary goal for my internship was to gain knowledge by working in the software engineering industry and familiarize myself with all the different technology-related fields of the company, including research and development, documentation, software development, and to get acquainted with software development processes and practices. Throughout my internship at E-Desh Ltd. , I had to learn and adapt to the evolving technologies being used in different situations and requirements and to be able to apply them in real-life projects.

I shall be highly obliged if you are to receive this report and provide your valuable judgment. It would be my pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Sincerely,

Maruf Rahman Bhuiyan

ID - 1730897

Email: 1730897@iub.edu.bd

# Evaluation Committee

.....  
Signature

.....  
Name

.....  
Supervisor

.....  
Signature

.....  
Name

.....  
Internal Examiner

.....  
Signature

.....  
Name

.....  
External Examiner

.....  
Signature

.....  
Name

.....  
Convener

# Abstract

I carried out my internship at E-Desh Ltd. This internship opportunity gave me a chance to work with a real-life Enterprise level Web application. This report is about the Logistics Management system that E-Desh Ltd. developed for their internal use. This internship course requires me to join a company in a department of my field of study, which is my major, Computer Science, and Engineering. I have joined this company as a Full-Stack web developer intern majorly focusing on Frontend. It allowed me to gain raw firsthand experience of working in a corporate company, attend scrum meetings, requirement gathering and develop projects for the company. Therefore, this experience was challenging yet crucial as well, to help me elevate my skills and confidence for me to be ready to pursue my career in this line of work. The internship was of 3 months and the report mainly has been documented solely based on my overall learning and experiences from this course of time.

***Keywords***— logistics management system, scrum, requirements, intern, web development

# Contents

<b>Attestation</b>	<b>i</b>
<b>Acknowledgement</b>	<b>ii</b>
<b>Letter of Transmittal</b>	<b>iii</b>
<b>Evaluation Committee</b>	<b>iv</b>
<b>Abstract</b>	<b>v</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Overview/Background of the Work . . . . .	1
1.2 Objectives . . . . .	1
1.3 Scopes . . . . .	2
<b>2 Literature Review</b>	<b>3</b>
2.1 Relationship with Undergraduate Studies . . . . .	3
2.2 Related Works . . . . .	3
<b>3 Project Management &amp; Financing</b>	<b>5</b>
3.1 Work Breakdown Structure . . . . .	5
3.2 Process/Activity wise Time Distribution . . . . .	7
3.3 Gantt Chart . . . . .	7
3.4 Estimated Costing . . . . .	8
<b>4 Methodology</b>	<b>9</b>
4.1 Waterfall Methodology . . . . .	9
<b>5 Body of the Project</b>	<b>10</b>
5.1 Work Description . . . . .	10
5.2 System Analysis . . . . .	10
5.2.1 Six Element Analysis . . . . .	11
5.2.2 Feasibility Analysis . . . . .	11
5.2.3 Problem Solution Analysis . . . . .	13
5.2.4 Effect and Constraints Analysis . . . . .	13

5.3	System Design . . . . .	13
5.3.1	Rich Picture . . . . .	13
5.3.2	UML Diagrams . . . . .	15
5.3.3	Requirement Analysis . . . . .	17
5.3.4	Functional Requirements . . . . .	17
5.3.5	Non-Functional Requirements . . . . .	19
5.4	Architecture . . . . .	19
5.4.1	Client-Server-Architecture . . . . .	19
5.4.2	Implementation . . . . .	20
<b>6</b>	<b>Result and Analysis</b>	<b>24</b>
6.1	Overview . . . . .	24
6.2	Result . . . . .	24
<b>7</b>	<b>Project as Engineering Problem Analysis</b>	<b>25</b>
7.1	Sustainability of the Project/Work . . . . .	25
7.2	Social and Environmental Effects and Analysis . . . . .	25
7.3	Addressing Ethics and Ethical Issues . . . . .	26
<b>8</b>	<b>Lesson Learned</b>	<b>27</b>
8.1	Problems Faced During this Period . . . . .	27
8.2	Solution of those Problems . . . . .	27
<b>9</b>	<b>Future Work &amp; Conclusion</b>	<b>28</b>
9.1	Future Work . . . . .	28
9.2	Conclusion . . . . .	28
<b>10</b>	<b>Bibliography</b>	<b>29</b>
	<b>Bibliography</b>	<b>30</b>



# List of Figures

3.1	Work Breakdown Structure . . . . .	6
3.2	Gantt Chart . . . . .	7
5.1	Six Element Analysis . . . . .	11
5.2	Rich Picture . . . . .	14
5.3	UML Diagram . . . . .	16
5.4	Client-Server Diagram . . . . .	20
5.5	Implementation Diagram . . . . .	21
5.6	Implementation Diagram . . . . .	22
5.7	Implementation Diagram . . . . .	23

# Chapter 1

## Introduction

### 1.1 Overview/Background of the Work

"Logistics Management System" is a Enterprise Level system that is built for managing the day to day operation of a courier company delivering products/parcel all over Bangladesh. Its uses separate front end and back end solutions. React.js is used for the front end and a back end of REST API built with Asp.net. In a Courier company there are various departments which have to work in synergy to be productive and efficient in operations. This system is developed to streamline the process and customize with the business logic of the company. The whole life cycle of a product/parcel in delivery process is digitized in the system, where every action is tracked and managed. various users perform their necessary actions with in the system and all reports are also generated in the system.

### 1.2 Objectives

The main objective of the "Logistics Management System" is to help all the departments of the company to work in a streamlined process, making everything faster. Departments like Operation, Distribution Center, Processing Center, Sales, Accounts, Customer all has their separate functions to play. To achieve that the system must incorporate the whole business logic and the relation of actions among the different users and make the process faster and streamlined. Manual documentations is an error prone and a slow process, generation of reports is a major objective. For example:

- **Scoped Actions:** Different users will have scoped ability to perform certain actions and data. This will ensure data privacy, stoppage of misuse or accident of power and make the console less cluttered.
- **Invoice Label Printing:** The parcel when received by the company generates an invoice with must be stuck to the parcel for delivery. this sticker/label is needed to generate via the system.

- **Reports Generation:** Reports to track the progress of parcel, transactions etc on various criteria should be generated seamlessly.
- **Tracking:** The whole life cycle of a parcel must be tracked with last touch point.
- **Bill Calculation:** Total bill for the delivery of a parcel and total bill for customers are calculated and tracked.
- **Notifying Customer:** Customers should be notified about the progress and bills and other information.
- **New Customer Registration:** New customers can register and add pickup request.

## 1.3 Scopes

After the development of "Logistics Management System", the scopes for its users would be:

- Fully functional, scale-able, dynamic, and responsive website to interact with
- Separate user types having separate dashboard
- Reports generation
- Label generation
- Searching parcels
- Tracking parcels.
- Implementation of business logic
- Ensuring incoming data is correct

# Chapter 2

## Literature Review

### 2.1 Relationship with Undergraduate Studies

This project relates to my undergraduate studies, as I am a student of Computer Science and Engineering. The following are the two main courses to which I can relate this project:

- **CSE 303 (Database Management):** This course provided me with an understanding of database design and query, entity diagram, relations, the fundamentals of using a database management system. We learned SQL which i had to use in the back end part to query data from a SQL Server instance.
- **Web Application and Internet (CSE 309):** This is the course where the development of web applications was taught. It covered very important technologies that are highly demanding in the industry, such as HTML, CSS, Bootstrap, JavaScript, PHP, MySQL, API. As i mostly worked on front end i had to work in Reactjs which is a front end JavaScript framework. so i had an initial understanding of HTML, CSS , Bootstrap and JavaScript from the course.
- **Object-Oriented Programming (CSE 213):** In this course we learned Object Oriented Programming where we used Java to learn about class, method, access types, interface, inheritance etc. Since in the backed we used Asp.net which is a framework of C i had to use OOP to work.

### 2.2 Related Works

There are many services that currently are operational related to my project work. Major Courier or delivery companies use such systems to manage workflow and people. The following are some of the related works:

- **Redx:** Redx is a Bangladesh's local delivery company which works in the same principal and uses similar system.

- **DeliveryTiger:** DeliveryTiger is a Bangladesh's local delivery company which works in the same principal and uses similar system.
- **Fedex:** Although Fedex[1] handles international delivery the system they use is quite similar.
- **PaperFly:** PaperFly is a Bangladesh's local delivery company which works in the same principal and uses similar system.similar.

# Chapter 3

## Project Management & Financing

### 3.1 Work Breakdown Structure

A Work Breakdown Structure (WBS) is a hierarchical diagram illustrating the tasks necessary to complete complex, multi-step projects. The work breakdown structure (WBS) "decomposes" the framework of a project into manageable deliverable, it applies the divide-and-conquer paradigm to large projects. Each deliverable is assigned a task, or sequence of tasks, which can be further subdivided to meet the project's requirements. A work breakdown plan is necessary to ensure that the project is completed on time. The WBS of "Logistics Management System" project is given below:



Figure 3.1: Work Breakdown Structure

## 3.2 Process/Activity wise Time Distribution

All the activities related to this project are listed in the WBS. We as a team attempted to complete these tasks in a given time. The time for completing the project is estimated at 90 days for the first version.

Time Distribution		
Task	Days	Percentage
Initiation and planning	10	15%
Design	10	15%
Implementation	70	55%
Testing	10	15%
Total	90	100%

## 3.3 Gantt Chart

A Gantt Chart is a graphical presentation of a project schedule, commonly used in project management and is one of the most popular and beneficial techniques of showing activities (tasks or events) displayed against time. Developers and resource is allocated effectively to meet target.

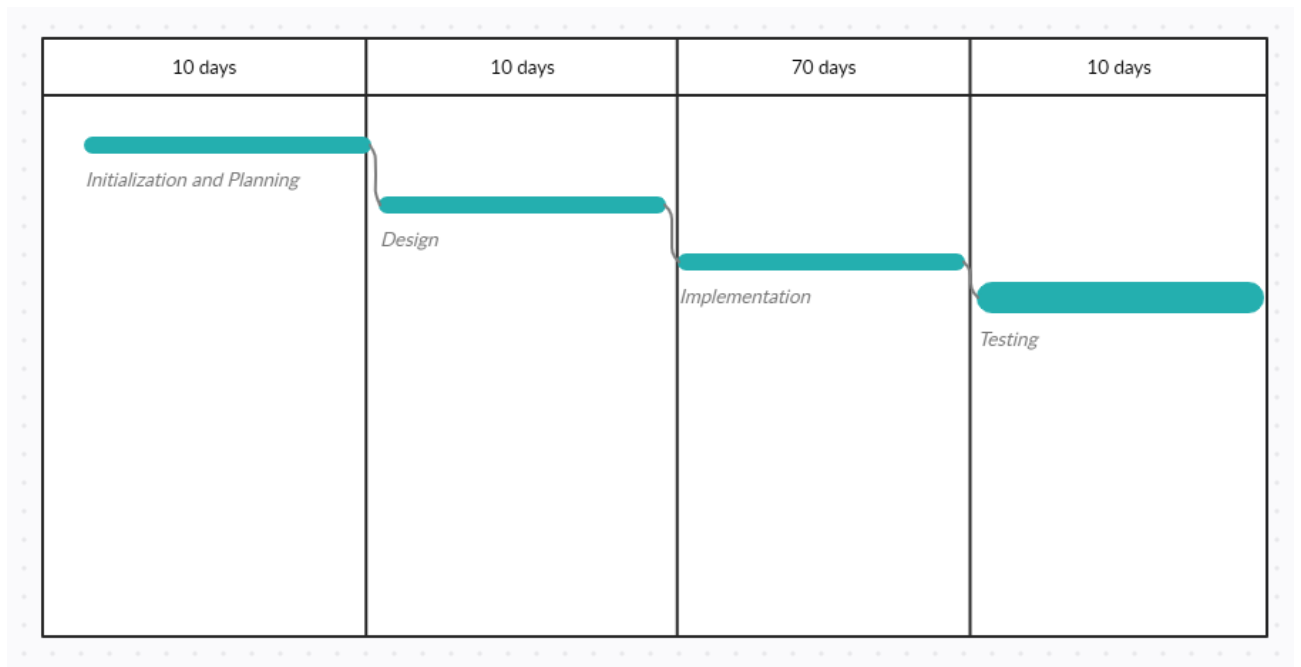


Figure 3.2: Gantt Chart



### 3.4 Estimated Costing

The System is developed by two Front-end developers , one UI/UX designer and two Back-end developers. The cost estimation depends on the salary of the developers, development resources and hosting charge. the System is hosted in Digital Ocean. It can be expanded on the changes in the project.

Cost Estimation	
Resource	Amount(Tk) monthly
Developers	120000
Equipment	10000
Hosting	8000
Total	138000

# Chapter 4

## Methodology

It is essential to establish a framework for the development of the project. As this project involves the construction of web applications, it is necessary to have a working knowledge of the World Wide Web, which significantly impacts the business community. Additionally, as the business environment evolves, the need for system development methodologies have shifted. The developer needs to be aware of these expectations to utilize the most appropriate methods, design approaches, and tools throughout the development process. Web applications are sometimes confused with websites, even though their nature is fundamentally different.

### 4.1 Waterfall Methodology

The most conventional software development methodology is the waterfall. Because of its plan-driven approach, the waterfall has been one of the most preferred methodologies for web development projects for several decades. The procedure is divided into various stages that are organized in sequential order. We felt like with a small team waterfall model would be perfect. The waterfall technique will be used in this project to ensure that the project's specified timeline is maintained progressively throughout. Before beginning the implementation process, it is necessary to assess and design the entire project. Each sector will be considered throughout the analysis phase, and the clients will approve the design. The project will next progress to the implementation phase, which is the most significant component of the whole project, and then it will be ready for testing. Testing[15] allows for the identification and correction of current bugs[16] and modifying any additional requirements from the clients. After the entire process is completed, the project will then be ready for deployment and proper management.

# Chapter 5

## Body of the Project

### 5.1 Work Description

E-Desh Ltd. is an local courier service that provides delivery services to businesses. They needed a system to replace an Indian Solution called Delhi-very. The system had to be built fast and to facilitate that they got an in-house development team. I joined when the project already started. I worked both in Front end and back end but mostly front end. we used Reactjs, Bootstrap in front end and Asp.net in back end with SQL Server as database.

### 5.2 System Analysis

Systems development is a systematic process that includes phases such as planning, analysis, design, deployment, and maintenance. System analysis is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. System analysis is conducted to study a system or its parts to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose. Analysis specifies what the system should do. This chapter contains parts of System Analysis that will help understand the project better. System analysis is important because it provides an avenue for solutions in the system through various tasks involved in doing the analysis. Requirements:

- incorporating the business logic
- making seamless connection inter-department
- tracking every action
- customers can access data and place order
- generate reports

### 5.2.1 Six Element Analysis

System Roles						
Process	Human	Non-Computer Hardware	Computing Hardware	Software	Database	Communication and Network
Registration	User	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Login	Employees and Admin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Place orders	User	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Check and Confirm orders	Employees and Admin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Add clients	Employees and Admin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Update Profile	Employees and Admin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Monitors Orders	Employees and Admin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet
Manage Accounts	Amin	N/A	Desktop/Laptop	Web- Browser	phpMyAdmin	Internet

Figure 5.1: Six Element Analysis

### 5.2.2 Feasibility Analysis

A feasibility study is critical for determining whether the proposed project's concept is viable.

An first investigation is required.

investigation of the project to see if the intended system can be implemented will be advantageous to the company Months or perhaps years of labor can be saved. Thousands or millions of dollars, as well as a lot of professional disgrace if an employee is fired. Early in the defining process, an improperly designed system is detected. The benefits of This project goes over the project in great depth. The present Logistics Management System is being investigated to evaluate the benefits and drawbacks.

the web development project's drawbacks.The organization can move on to the next step after determining which alternative appears to be more advantageous. Technical feasibility, operational feasibility, and economic feasibility are the three types of feasibility evaluations.

There are various measures of feasibility that helps to decide whether a particular project is feasible or not. Main parts of feasibility study:

- **Technical Feasibility:** Before proceeding, it is critical to assess the project's technical feasibility. It's important to think about whether the required technology and planned equipment can store the data that will be used in the project. This is necessary in order to assess the technical feasibility of the project's implementation. This technical feasibility analysis determines whether the project's development requires the use of specific resources and technology. A feasibility study also looks at the technical skills and capabilities of the technical team, whether existing technology can be used or not, how easy or difficult it is to maintain and upgrade the chosen technology, and so on.
- **Operational Feasibility:** E-Desh Ltd seeks to improve the speed and efficiency of their processes in order to meet increased delivery targets. It will take time to adopt and operate the new system efficiently, but because it is similar to the present one, it will be feasible. Clients can easily select the service of sending parcels across the country when placing an order, and all possible prices are clearly stated on the order form. During this epidemic, we anticipate that the online version of E-Desh Ltd. will produce the greatest results, and that the workflow will not be disrupted as a result of any inconvenience.
- **Economic Feasibility:** Any company considering implementing a new system is concerned about the system's economic viability. It is critical to guarantee that the new project's advantages surpass the costs connected with its execution. It's crucial to consider the whole cost of deploying the new system, which includes both software and hardware. It is not necessary to undertake continual interface maintenance for the new project, and any difficulties that develop can be addressed as they happen. This will also result in a better financial outcome because we will not have to pay a third party for software after development.

### 5.2.3 Problem Solution Analysis

It is typical to run into problems when starting a new project, which helps people to learn from their mistakes. Problem analysis is the process of understanding and defining the problem that has to be solved. The process of identifying solutions that are appropriate for the situation's needs and restrictions is known as problem solving. Several obstacles arose during the course of this project, all of which were successfully handled after numerous attempts.

The following are the two most important challenges that this initiative will address.

**Hosting Setup :** The System is hosted in Digital Ocean's Droplet where both the back end and database instances are running via Docker.

**Local Server :** We setup a Local testing environment in a local Nginx server pc with the same specification.

### 5.2.4 Effect and Constraints Analysis

Every project has its own set of limits, whether it's a budget or a deadline. Economic, political, technological, and environmental constraints can all have an impact on project resources, schedules, the environment in which the project will be performed, and even the system itself. A web developer's job is to implement uniqueness in web development within a set time range. The following are some of the limitations and their consequences:

**Budget Effect:** The entire business cycle process was disrupted as a result of the long-term epidemic. Employers were paid the same as previously, but as a result of Covid-19, the order rate fell. As a result, an online system is being constructed to aid the company's growth, and freshers are being hired to execute the tasks rather than highly experienced professionals.

**Time Effect:** According to the schedule, the project should be done in four months. The project's estimated completion time has been lowered to three months due to the company's financial troubles and a desire to restart activities in this region as soon as feasible.

## 5.3 System Design

System design process is the most creative and hardest step of a project's development process.

The design phase of any engineering product or system's development phase is the very first step in the process of developing the product or system. The effectiveness of a system's design has a significant impact on its overall efficiency. System design is a way for organizing and systematically tackling the development of a new system. System engineering is another name for it. System designers must translate an abstract logical representation of what has to be done into a physical specification when producing a physical specification for something.

### 5.3.1 Rich Picture

A rich picture is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. A rich picture helps to open discussion and

come to a broad, shared understanding of a situation. It comprises pictures, content, images, and symbols, which are all utilized to demonstrate the graphically the circumstance. A rich picture illustrates how the application works. The process beings with the user turning on the application on their device using a browser while being connected to the internet. Then they can roam around the website to get their necessary information. They can choose to view the details of a particular menu item. They can also choose the send messages to the admin via the chat application. The admin can do their part after logging in to the application.

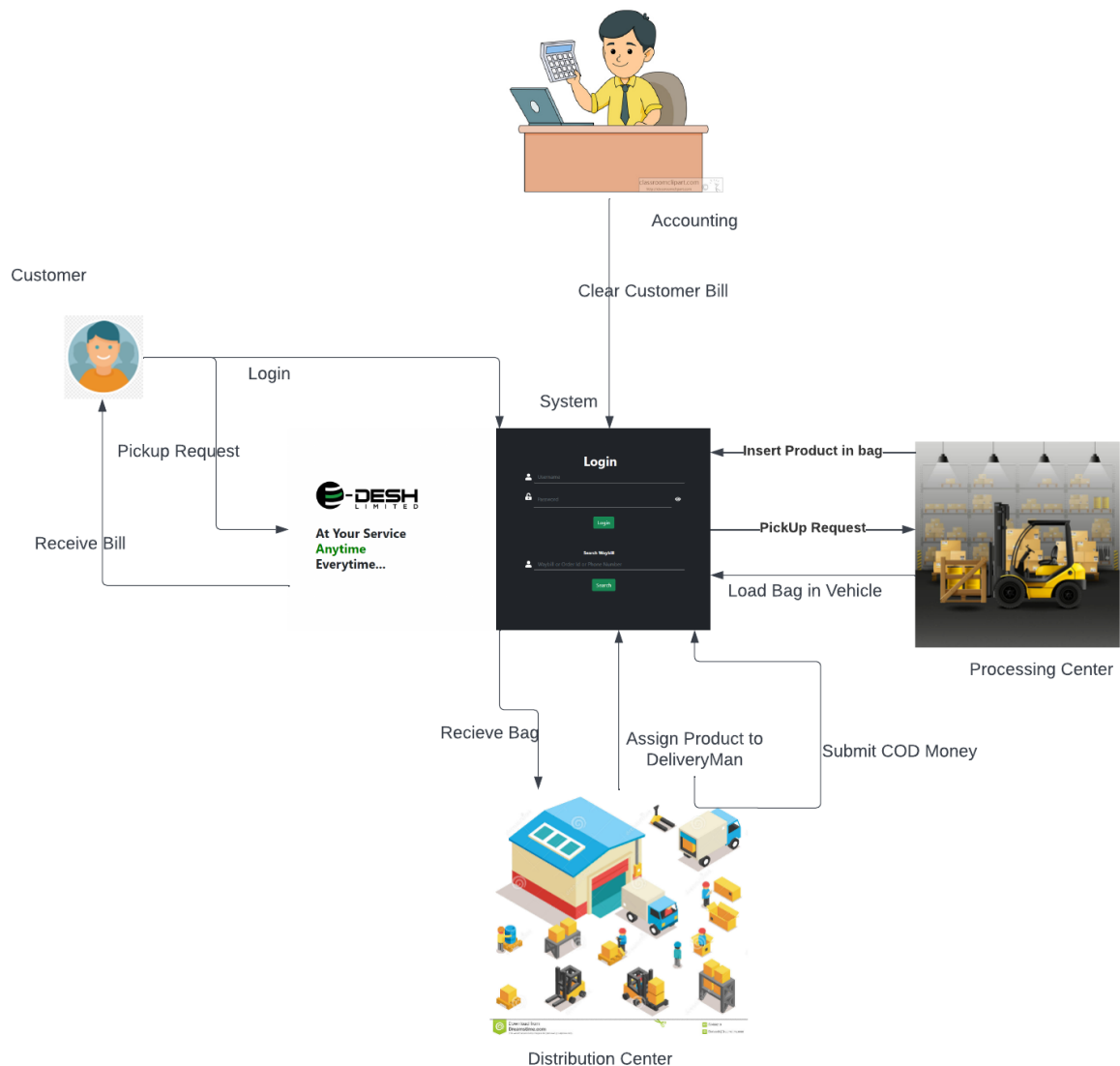


Figure 5.2: Rich Picture

### **5.3.2 UML Diagrams**

A use case diagram is a graphical representation of the possible interactions between a user and a system. A use case diagram illustrates the various use cases and user types that the system supports and is frequently accompanied by other types of diagrams. 5.3



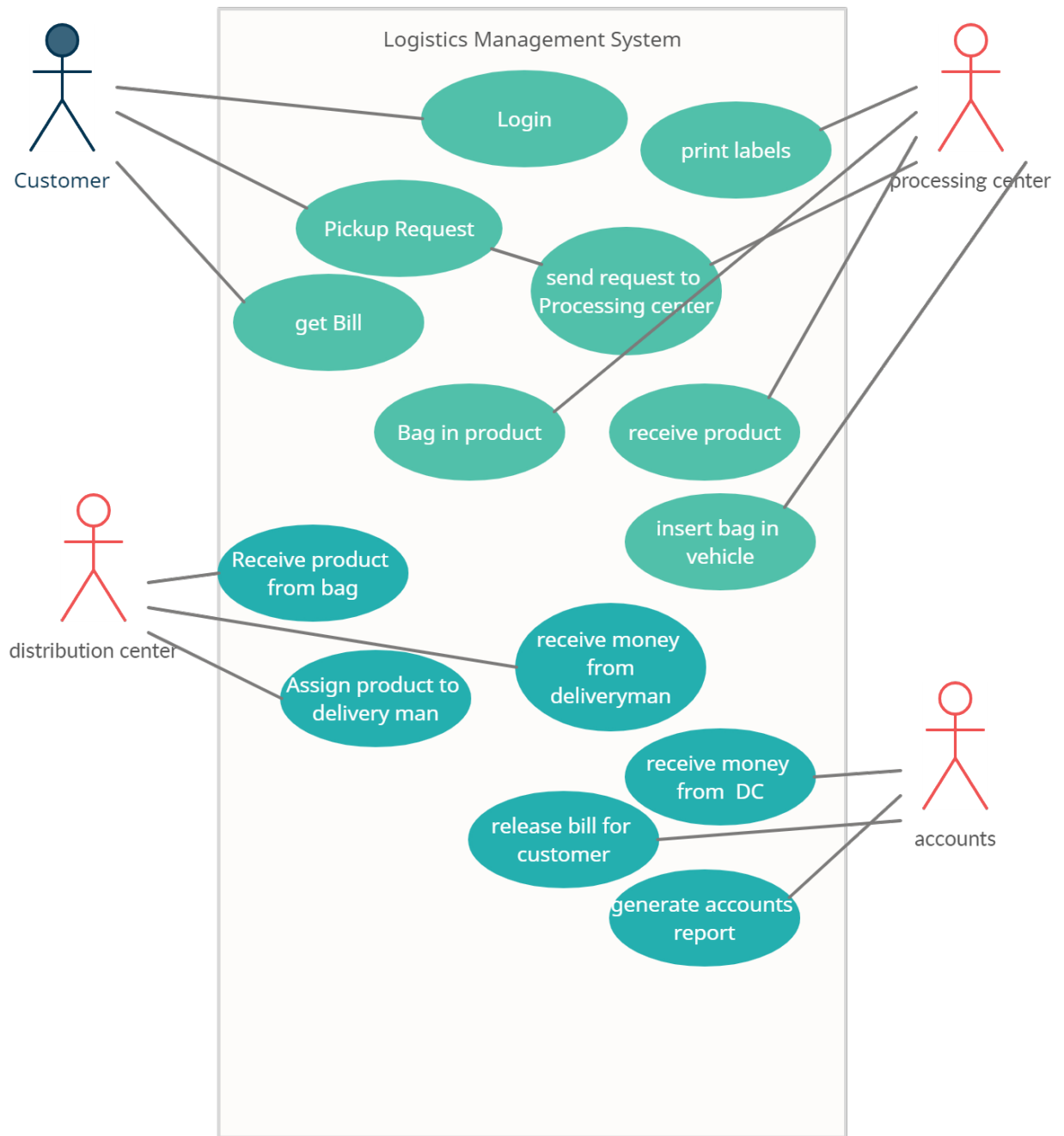


Figure 5.3: UML Diagram

### 5.3.3 Requirement Analysis

Requirements analysis, also known as requirements engineering, is used to determine the expectations of users for a new or upgraded product. It is vital to consider the needs of the clients as well as their current operating system while determining and framing the requirements for the proposed system. As a result, in this project, the needs of clients and workers for completing everyday work from home or the office were surveyed, and the project was created based on the results.

- During the pandemic, customers are expected to be able to order from the online rather than visiting the office.
- Employees will be able to log in and manage orders and other services using the system that is currently being created.
- Manual paperwork or information on clients and staff can now be stored in the database with the help of the system, decreasing the risk of information or data loss.
- The system will make generating monthly invoices for clients and updating the status of orders placed with the company uncomplicated.

### 5.3.4 Functional Requirements

1. **Customer registration:** Customers can use the system to register
2. **Login:** Customers and staff can log in, and the system's authentication validates the entered email and unique password after receiving it enables the employee to access the Web-App.
3. **Review Information:** The system will check to see if the ID and password entered are valid.
4. **Password Recovery:** If the ID is found but the password is wrong, the system will request a password recovery.
5. **Dashboard:** After logging in, the system will allow employees and administrators to access the dashboard to continue working. New order lists will be added to the dashboard on a regular basis. Information about the client, the employee, and the service provider.
6. **Table Amend:** Employees will be able to update the order table using the system.
7. **Add Clients and Services:** Employees will be able to add clients and services to the system.
8. **Billing:** Employees will be able to produce bills using the system. Employees will be able to update their profiles through the system.
9. **Admin Login:** Admins can access the system by entering their email address and password.

10. **Add Employees:** Admins will be able to add employees to the system.
11. **Delete Orders:** Admins will be able to delete orders from tables using the system.  
Admins can add new admins since the system allows it.
12. **Account Management:** The system will allow the administrator to manage accounts.
13. **Order management:** The system will allow the administrator to manage orders.

### 5.3.5 Non-Functional Requirements

1. Scalability: The system will be responsive and accessible from a variety of platforms, including computers, smartphones, and tablets.
2. Usability: The system will have a user-friendly and straightforward interface for customers, employees, and administrators.
3. Maintenance: To ensure proper operation, this system will be serviced once a year.
4. Performance: The desired performance is for the system to run smoothly with safe data storage. It should have a reasonable throughput and reaction speed, as well as no input latency.
5. Accessibility: Employees and administrators can use the system from anywhere in the world.
6. Reliability: The system will be backed up for safety reasons, and data will not be harmed in the process.
7. Data Security and Control: For any client-based organization, data security is critical. On both the server and client sides, all data is encrypted. Only the administrators will have access to all functions and core code, allowing them to change any function.
8. Efficiency: The system is built to produce a high-quality product. Duplicate re-sources processing processes are eliminated, and workflow stages are kept simple for ease of use.

## 5.4 Architecture

A system's architecture specifies the primary components, their relationships (structures), and how they interact with one another. The software architecture specifies and structures a solution that complies with technical and operational requirements. It serves as a system's blueprint. It establishes a communication and coordination mechanism among components and gives an abstraction to control system complexity. Security, performance, and manageability are just a few of the properties that software architecture optimizes. In the software industry, there are many different forms of architecture. Our solution is built on a client-server design.

### 5.4.1 Client-Server-Architecture

The client-server architecture is a distributed system structure that divides tasks or workload between resource or service providers, known as servers, and service requests, known as clients. Distributed systems use a loosely coupled collection of collaborating processors connected by a network to run the system or program. It refers to a collection of autonomously operating devices connected by a network. In a client-server design, the server hosts, manages, and distributes the majority of the resources, while the client consumes the majority of the

services. It's a sort of architecture in which one or more clients use the internet to connect to a central server. Clients do not share any of their assets with one another.

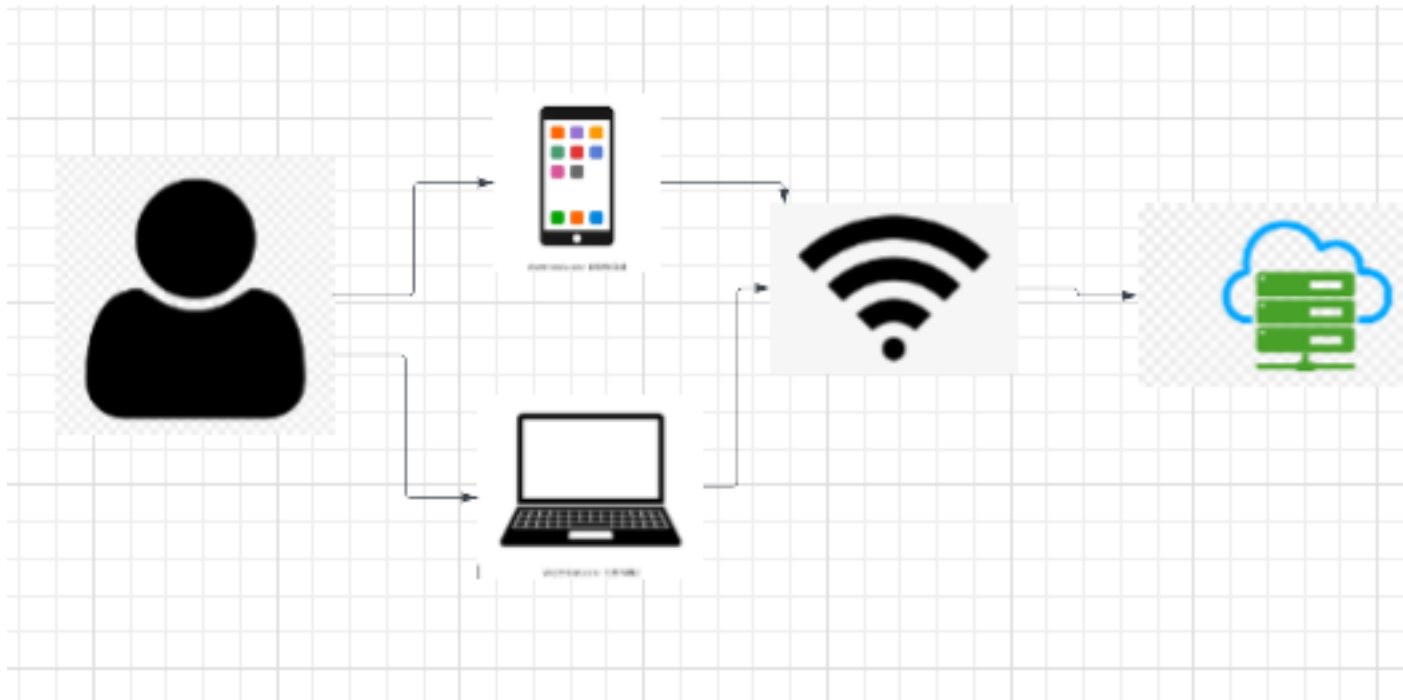


Figure 5.4: Client-Server Diagram

### 5.4.2 Implementation

## Processing Center Dashboard

Waybill, Order ID, DC Office

Export csv

Print All

CSV Template

<

1

2

>

Sl	Select	Waybill	Order ID	Client Name	Consignee Name	Details	DC Office	Pin Code	Value	Weight
1	<input type="checkbox"/>	220320PA19921	TEST111-09	Daraz	Test Consignee	shirt	All OSD P DC	3100	1200	1.7
2	<input type="checkbox"/>	220320PA64101	TEST111-10	Daraz		shirt	Manikchari DC		1200	1.7
3	<input type="checkbox"/>	220320PA71001	TEST111-11	Daraz		shirt	Manikchari DC		1200	1.7

Login Successful

## Processing Center Options

Home

Parcel List

3 PL Parcel List

Center Change

Parcel Tracking

Upload CSV

Pickup

Bag Creation

Vehicle

Office

Print All

CSV Template

<

1

2

>

Waybill	Order ID	Client Name	Consignee Name	Details	DC Office	Pin Code	Value	Weight
220320PA19921	TEST111-09	Daraz	Test Consignee	shirt	All OSD P DC	3100	1200	1.7
220320PA64101	TEST111-10	Daraz		shirt	Manikchari DC		1200	1.7
220320PA71001	TEST111-11	Daraz		shirt	Manikchari DC		1200	1.7

Kibria Jony

Figure 5.5: Implementation Diagram

21

## Processing Center Bag Creation

Kibriya Jony

### Bag Creation

Bag Creation Center:

Tongi Pz

Bag Destination Center:

Select Your Destination

Bag Description :

Bag Description

Bag Created By:

Kibriya Jony

Bag Type:

None

Submit

WayBill ID	DC ID Description	Packing Number COD	Bag Creation Center	Bag Creation Date	Bag Destination Center	Created Employee ID	Action
------------	-------------------	--------------------	---------------------	-------------------	------------------------	---------------------	--------

## Distribution Center Receive Bag

Md. Mohebur Rahman

### Welcome To Uttara DC

Confirm Way Bill Number:

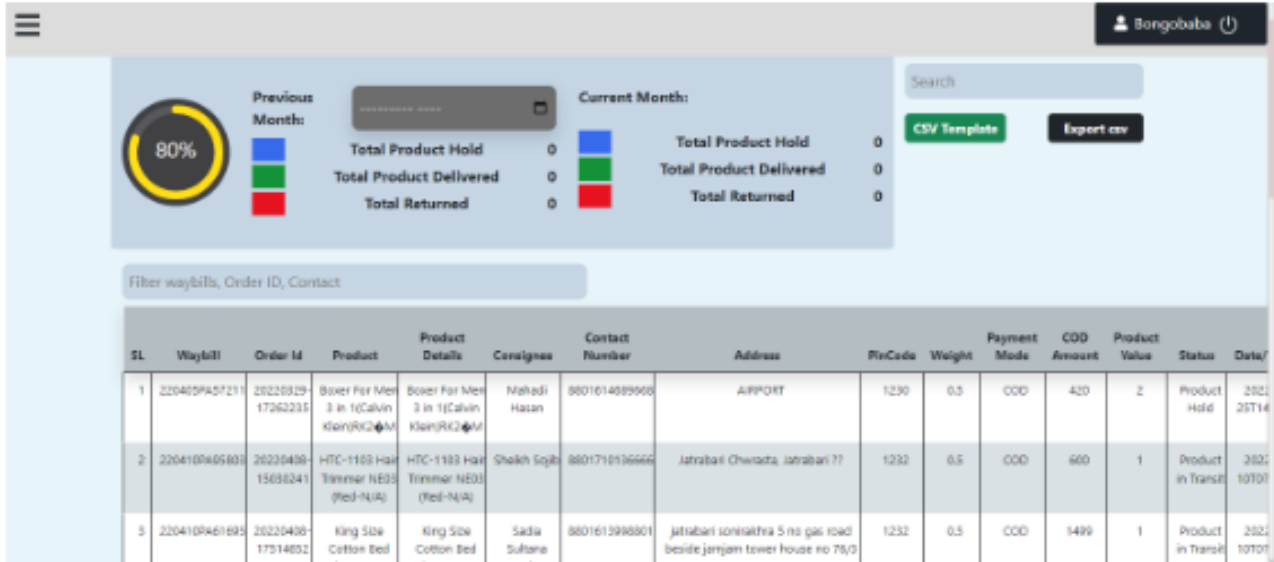
Waybill Number

Submit

WayBill	ID	Consignee NAME	contact NUMBER	DESCRIPTION	PAYMENT TYPE	PROCESSING STATUS	PROCESSING STATUS DATETIME	address	VALUE AMOUNT
220419PA72058	1071393	Sajto Dibsaith	8801752115853	723	COD	Product in Transit	2022-04-28T10:44:43	House no 117A Road OT sector 04 Uttara Dhaka	388
220419PA75850	1071396	Faiza Fabinha	8801750953362	722	COD	Product in Transit	2022-04-28T10:44:43	House 20 1st floor 5 flat 78 Road 05 Sector 06 Uttara Dhaka-1230	388
220419PA76991	1071263	Shahriya Quoraishi	8801675107373	480602	Prepaid	Product in Transit	2022-04-28T10:44:43	House 53 Road Gawair Madrashe Road Uttara Dhaka-1230	0

Figure 5.6: Implementation Diagram

Customer Dashboard



Customer Pickup Request

The Customer Pickup Request form is used to submit a request for product pickup. It includes fields for Merchant Name, Delivery Pincode, Pickup Address, Contact Number, Total Packages, Total COD Amount, Details, Product Description, Expected Pickup Date, and Special Instruction.

Field	Value
Merchant Name	Bongobaba
Delivery Pincode	
Pickup Address	
Contact Number	
Total Packages	
Total COD Amount	
Details	
Product Description	
Expected Pickup Date	mm/dd/yyyy
Special Instruction	

Figure 5.7: Implementation Diagram



# Chapter 6

## Result and Analysis

### 6.1 Overview

The overall goal of the project was to transition from a physical to an online service in order to save customers the trouble of having to physically visit the office to place package shipping orders. It's a web application written with Reactjs, BOOTSTRAP 4, and SQL Server as the database management system. The project's entire effort was primarily focused on the requirements of our company's stakeholders. The CEO and the web development team met to discuss the company's requirements and how the website should assist them. The company suffered a market decline during the epidemic, according to the CEO, and wants to expand soon. Additionally, employees will be unable to do business from home or maintain an order list throughout the pandemic.

### 6.2 Result

The online application is being created to make administrators' and customers' jobs easier and faster. It has all of the features that the company need. The web development team followed the company's input and output specifications. A dashboard and numerous forms for administrators to add clients, orders, and services, as well as a form for customers to place orders, are included in the application. The order list, customer list, and other data are all kept in the database and accessible through the user interface. Employees can also use Excel to generate all owing bills. The overall functioning of the web application has not yet been tested because it is still in development. Following the development phase's conclusion,we will move on to the testing phase of our application.

# Chapter 7

## Project as Engineering Problem Analysis

### 7.1 Sustainability of the Project/Work

The ability of a product to be maintained and enhanced is referred to as "sustainability." "Sustainable" means that a project's outputs can be used indefinitely once it is completed. Every application in today's environment must be maintained and updated on a regular basis for the benefit of its users. Each software application must be kept up to date to guarantee that it is free of bugs and that user interaction is as smooth as feasible. E-Desh's IT team will maintain and update the web application once a year, as well as make any necessary improvements.

### 7.2 Social and Environmental Effects and Analysis

**Social Effects:** This Logistics Management System is a web-based system that seeks to automate and simplify the majority of the manual processes within the firm. The major goal is to bring all of the company's business units together on one website, allowing employees to view and process information remotely during the epidemic instead of going to the office. It allows the employee to keep track of daily orders, client data, and service providers, as well as generate client bills in Excel. In short, the technology made the employee's job easier while also allowing clients to place parcel shipping orders easily online.

**Environmental Effects:** The Logistics Management System was created with the primary purpose of allowing workers to work from home during the epidemic instead of having to travel to the office.

It's a critical time for the system to perform at its best in the global Covid-19 outbreak. Employees can operate remotely while staying connected to the system. This automation of the courier service is advantageous to the environment because all administrative tasks and customer services are available online, and data is stored in a database. The technology eliminates the requirement for paper records and allows all other actions to be carried out

without the use of physical copies. As a result, the immediate area will continue to be environmentally friendly.

## 7.3 Addressing Ethics and Ethical Issues

With so much data harvesting, hacking, and cyber-crime, the world is becoming increasingly digitized. Protecting the website from hackers is essential. There are various unspoken standards and moral requirements that must be followed when designing and launching a website. The developers and the system's owner made certain that no rules were broken and that all points were taken seriously. Among them are:

**Data Storage:** Instead of storing data on premises, the database stores it securely. Data from Logistics Management Systems is securely kept in a Digital Ocean-hosted Microsoft SQL Server database that is only accessed by administrators and developers.

**Data Security:** Because all data is stored in a database that is only accessible by administrators, there is very little risk of data compromise or loss. Administrators have access to manage other users' accounts, acquire server access, and delete user data. Employees can only change or add data via the website, and users of various roles can only read data that they have access to.

# Chapter 8

## Lesson Learned

### 8.1 Problems Faced During this Period

To be successful, people must put forth a lot of effort. Working from 8:30 a.m. to 5:00 p.m. six days a week. Apart from that, there were a few more difficulties I had during my internship. These are they:

**Learning a new language:** To work on the back end, I needed to learn C. I had no previous experience with C. I was also unfamiliar with Asp.net. I was unfamiliar with the Framework's file structure, the MVC design, and how to create a Rest API in Asp.net.

**Communication Skills:** At first it was a bit difficult to communicate new idea, or understand what was the requirement but slowly i learned to open up and share thoughts more freely.

**Estimating Time for task:** I faced huge problem to estimate the time for a given task beforehand.

### 8.2 Solution of those Problems

This internship taught me how to be professional and assisted me in overcoming some of my shortcomings. I've gained new skills and information, as well as met some incredibly talented people. Given the aforementioned difficulties, I believe that the best method to overcome the discomfort of learning a new language is to commit more time and effort to it until we feel comfortable with it. Debugging errors is another hurdle that can be solved by persevering in trying to fix them without giving up. I set aside more time to learn and adapt to the new language, and I continued to debug the issues without growing discouraged.

# Chapter 9

## Future Work & Conclusion

### 9.1 Future Work

The online application is presently in development, and the company plans to add a variety of new features and modules in the future to make it even more user-friendly for employees and administrators to use, as well as for customers to submit shipping requests promptly. The web application will be updated once a year, and the company will work to improve the program's design.

### 9.2 Conclusion

The project "Logistics Management System" is the basis for this study. The project's comprehensive criteria and design are detailed in the report. The project was completed in approximately three months, and everyone on the team and coworkers was really helpful in a variety of ways. Working for E-Desh as an intern was a fantastic experience. I learned a new programming language and acquired experience working in a corporate setting throughout my internship. To overcome hurdles, I worked with my mentors and seniors throughout my assignment. Despite their hectic schedules, my supervisors were always accessible to answer any queries and help me get settled. I've honed my capacity to operate under duress and fulfill deadlines.

# Chapter 10

## Bibliography

- 1 “Fedex.” <https://www.fedex.com/en-us/home.html>.
- 2 “DHL.” <https://www.dhl.com/bd-en/home.html?locale=true>.
- 3 “Oracle.” <https://www.oracle.com/index.html>.
- 4 “SQL.” <https://en.wikipedia.org/wiki/SQL>.
- 5 “Firebase.” <https://firebase.google.com/>.
- 6 “PHP.” <https://www.php.net/>.
- 7 “HTML.” <https://html.com/>.
- 8 “CSS.” <https://www.w3.org/Style/CSS/Overview.en.html>.
- 9 “JavaScript.” <https://www.javascript.com/>.
- 10 “Front-end.” <https://frontendmasters.com/guides/front-end-handbook/2018/what-is-a-FD.html>.
- 11 “Backend.” <https://www.guru99.com/what-is-backend-developer.html>.
- 12 “World Wide Web.” <https://en.wikipedia.org/wiki/WorldWideWeb.\GoogleChrome>.” [https : //www.google.com/chrome/](https://www.google.com/chrome/).
- 13 “Mozilla Firefox.” <https://www.mozilla.org/en-US/firefox/>.
- 15 “Software Testing.” [https://en.wikipedia.org/wiki/Software\\_testing.\SoftwareBugs](https://en.wikipedia.org/wiki/Software_testing.\SoftwareBugs).” [https : //en.wikipedia.org/wiki/Software\\_testing.\SoftwareBugs](https://en.wikipedia.org/wiki/Software_testing.\SoftwareBugs).
- 16 “Bootstrap.” <https://getbootstrap.com/>.
- 18 “Software Framework.”
  - <https://codeinstitute.net/global/blog/what-is-a-framework/>.
- 19 “cPanel.” <https://cpanel.net/.33>
- 20 “SSL Certificate.” <https://www.cloudflare.com/learning/ssl/what-is-an-ssl-certificate/>.

- 21 “phpMyAdmin.” <https://www.phpmyadmin.net/>.
- 22 “HTML5.” <https://en.wikipedia.org/wiki/HTML5>.
- 23 “mySQL.” <https://www.mysql.com/>.
- 24 “Excel.” <https://www.microsoft.com/en-us/microsoft-365/excel>.