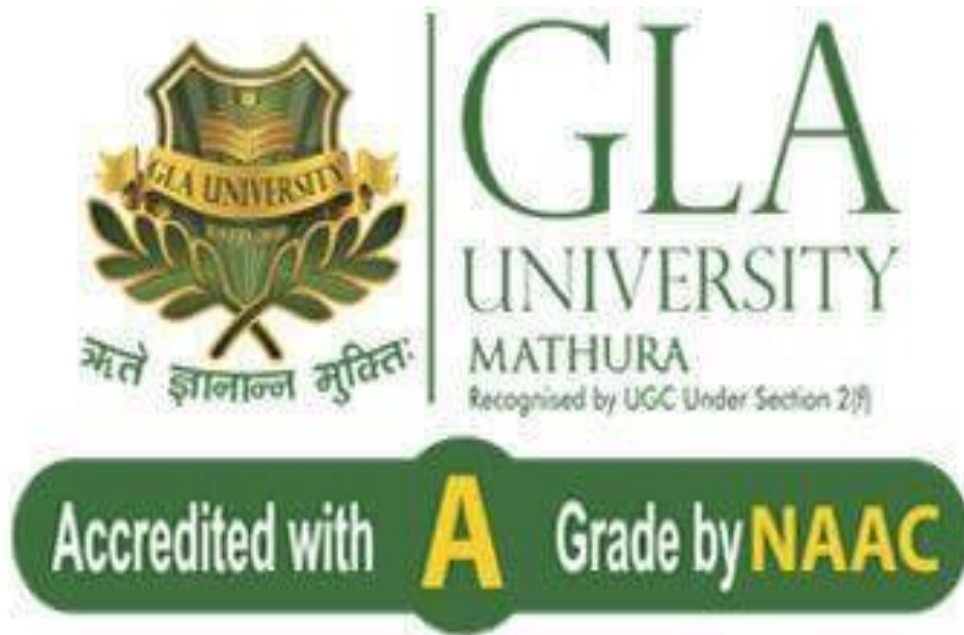# MINI PROJECT-II REPORT

# (2020-21)

# *COURIER SERVICE*



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# **Contents**

# Abstract

A courier service was developed to offer a faster and more secure alternative to the usual mail service that had been the only delivery service for so long. Traditional mail services are known for having slow delivery times and can incur expenses if items are large or heavy; couriers seemed to be the perfect alternative and despite it being slightly more expensive than normal postage it is beneficial for certain deliveries.

Courier services became increasingly popular with the arrival of Internet shopping. Being able to order large and multiple items from online sellers required specialist delivery services that would enable customers to not only receive their items but also enable online sellers to offer things such as next day delivery. Something that is only possible with a courier service.

Courier services are particularly useful for people that sell products online. A courier service is a service that allows someone to send a parcel or consignment from one location to another. Senders have the option to have their parcels collected by a courier or drop their parcel off at a nearby location to be picked up later by the courier. Courier services are currently multi-billion dollar industries that help the wheels of business to turn smoothly. So, we have developed a courier service system.

# 1.     Introduction

Courier services are a more specialized delivery service that businesses and individuals turn to when they need a package or a document to reach its destination quickly. Courier is a booming industry in today's world, with the rapid development of e-business, shorter product and technology life cycles and higher customer expectations, courier service has become more and more popular.

In a large world like ours, sending packages from place to place by a third party is inevitable since package owners cannot be able to tour round all the desired destinations within the required period. The courier service systems provide the service but with less efficiency in terms of delivery, comfort, cost estimation from the users' point of view, and tracking of items in dispatch.

This project will be divided into major modules:-


1.Admin module

2.User module

## 1.1. Objective

We are living in an age where people want and expect instant gratification in everything. Therefore, people are having low level of patience in everything. This is a major reason as to why people demand a quick delivery of their courier and parcel. This incessant demand of quick deliveries from the customers has made life difficult for the courier companies. Nowadays, courier companies face a lot of problems such as missed deliveries, right resource allocation, lost packages, etc.

We have already entered the 21st century, we do not appreciate responses like Sorry, Misrouting, Confusion, Late deliveries, loss of Packets, No-response, No feedback etc. We have tried to create a system to avoid all these situations and provide ease and comfort to the customers. From any organization, we are committed to render "A" class services to all our customers.

The main objective of our project titled Courier Service is:- *"To have good communication between admin and customer so that the customers don't need to pick their parcel as soon as it arrives, they will be notified and then they can collect it at any time. All the transactions are stored in the database."*

# 2.       Requirement Analysis

## 2.1 Hardware Requirements Specification:

Processor          : Intel Pentium III or later

Main Memory (RAM)      : 256 MB

Cache Memory      : 512 KB

Monitor      : 14 inch Color Monitor

Keyboard      : 108 Keys

Mouse      : Optical Mouse

Hard Disk      : 160 GB

## 2.2 Software Requirements Specification:

Front End/Language      : HTML, CSS, Javascript

Back End/Database      :  PHP, Xampp, MySQL

Operating System      : Windows 8, 9, 10, XP

## *2.3* Technologies Used

This Courier Service Project is made by using **PHP and My sql**.

**HTML:** HTML stands for **H**yper**t**ext **M**arkup **L**anguage, and it is the most widely used language to write Web Pages.

- **Hypertext** refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.

- As its name suggests, HTML is a **Markup Language** which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.



Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

- HTML is the *language* for publishing web pages on the WWW (World-Wide Web).

9

- HTML is a *Document Description Language* (aka *Document Markup Language*). HTML is NOT a programming language like C/C++/C#/Java, which is used to implement programming algorithm.

- You need a web browser to view the HTML pages. The web browsers do not display the HTML tags, but uses the tags to interpret the content of the web pages.

- An HTML document is a text document, and it is human-readable.

HTML was originally developed by **Tim Berners-Lee in 1990.** He is also known as the father of the web.

**Applications of HTML**

There are lot more things you can do with HTML.

- You can publish documents online with text, images, lists, tables, etc.

- You can access web resources such as images, videos or other HTML document via hyperlinks.

- And many more…….

**Advantages of HTML:**

- It is easy to learn and easy to use.

- It can be integrated with other languages like CSS, JavaScript etc.

**Disadvantages:**

- HTML can create only static webpages so for dynamic web page other languages have to be used.

- Large amount of code has to be written to create a simple web page.

- Security feature is not good.

## Css:

CSS is short for Cascading Style Sheets, and is the preferred way for setting the look and feel of a website. Cascading Style Sheets (CSS) is a markup language responsible for how your web pages will look like. It controls the colors, fonts, and layouts of your website elements.
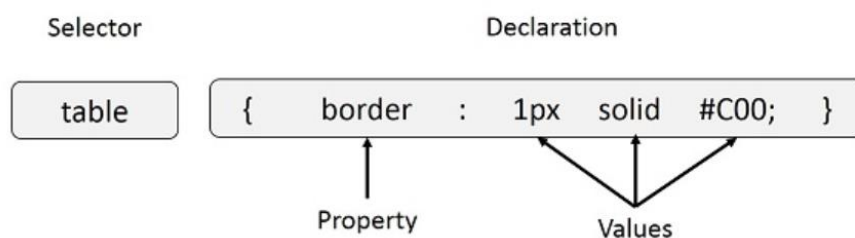
## CSS - Syntax

A CSS comprises of style rules that are interpreted by the browser and then applied to the corresponding elements in your document. A style rule is made of three parts −

- **Selector** − A selector is an HTML tag at which a style will be applied. This could be any tag like <h1> or <table> etc.
- **Property** − A property is a type of attribute of HTML tag. Put simply, all the HTML attributes are converted into CSS properties. They could be *colour*, *border* etc.
- **Value** − Values are assigned to properties. For example, *colour* property can have value either *red* or *#F1F1F1* etc.

You can put CSS Style Rule Syntax as follows −

selector {property: value}



## Types of CSS

There is three type (ways to use) of Cascading Style Sheets

- Inline CSS

- Internal or Embedded CSS

- External CSS

## How to use CSS in HTML?

As we know there is 3 type or ways to use CSS in HTML – inline, internal and external. Let's See one by one how use it with HTML code (tags).

**Inline CSS**

With inline CSS you have to dine a CSS in the HTML tag, for example, you are using <p> tag than inside opens this tag have to write style = "property: value;">. See the below example a using CSS (colour, font-size, font-style, test-align) with HTML.

**Internal or Embedded CSS**

It's also a single HTML document CSS same as inline CSS. What is Single HTML documented – When a CSS and HTML code inside the same file. Internal CSS (Embedded CSS) and inline CSS both are example of it.

To define an Internal CSS, you need to use **<head>** tag and inside it uses **<style>…</style>**. here is One concept come a "class", you have to use the class attribute to give a particular identity of the tag. So, it will change only the single tag. In this example using a <div> tag, which is stand for division or a section in an HTML document.

**External CSS**

The last and most important External CSS, it uses a separate class and link to HTML page. The separate CSS class only contain a style property with the help of tag attributes of HTML (For Example class, id, etc).

The CSS file extension is dot CSS and you can give any name of it, for example "**style.css** ".
To Link a **Cascading Style Sheets,** you have to use **<link>** tag in a **<head>** tag with the file path.

**Cascading Style Sheets –**style.css

**Advantages of CSS**

- Easy maintenance
- Fast webpage loading

**Disadvantages of CSS**

- Cross-Browser Issues
- Comes in Different levels – CS, CS1 to CS3

**Why CSS used in HTML?**

A CSS is used in with HTML code make your website more attractive. Without using CSS code in HTML webpage look very ugly, everything will be messed. CSS is controlling a tag (property) of HTML.

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## Javascript:

**JavaScript is a client-side scripting language of web developed by Netscape in 1995 with the name LiveScript. JavaScript is used to build interactive websites with dynamic features and to validate form data. JavaScript is high-level, dynamic and browser interpreted programming language, supported by all modern web browsers. Apart from web browser, JavaScript is also used to build scalable web applications using Node JS. JavaScript is also being used widely in game development**

**and Mobile application development.**

**JavaScript** is also known as the **Programming Language of web** as it is the only programming language for Web browsers. JavaScript is *an object-based scripting language* which is lightweight and cross-platform. The programs in this language are called scripts. They can be written right in a web page's HTML and run automatically as the page loads. Scripts are provided and executed as plain text. They don't need special preparation or compilation to run. The browser has an embedded engine sometimes called a "JavaScript virtual machine".
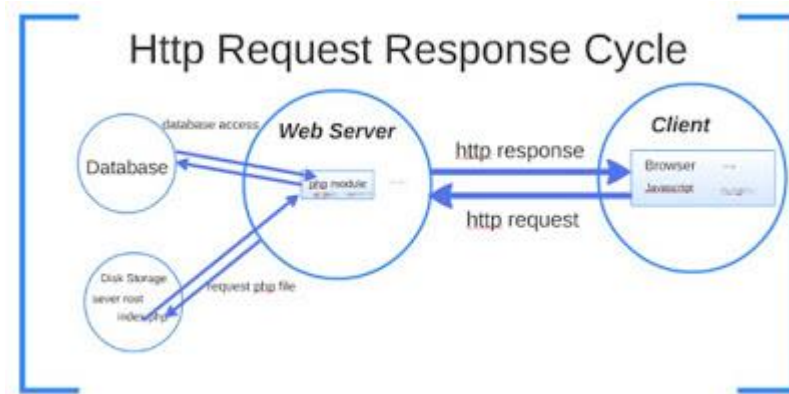
 **PHP:**  PHP is a server-side scripting language. That is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages.

- PHP scripts can only be interpreted on a server that has PHP installed.
- The client computers accessing the PHP scripts require a web browser only.
- A PHP file contains PHP tags and ends with the extension ".php".

A PHP file can also contain tags such as HTML and client side scripts such as JavaScript.

- **HTML is an added advantage** when learning PHP Language. You can even learn PHP without knowing HTML but it's recommended you at least know the basics of HTML.
- **Database management systems** DBMS for database powered applications.
- For more advanced topics such as interactive applications and web services, you will need **JavaScript and XML**.

The flowchart diagram shown below illustrates the basic architecture of a PHP web application and how the server handles the requests.

14

Http Request Response Cycle

## What is XAMPP?

It is a **free** and **open-source** cross-platform webserver solution stack package developed by Apache Friends that consists of the Apache HTTP Server, MariaDB & MySQL database, and interpreters for scripts are written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB & MySQL (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely **easy** for developers to create a local web server for testing and deployment purposes.

**PHP using WAMP Server**

If you're working on a project for the production environment and have a PC running the Windows OS then you should opt for **WAMP server** because it was built with security in mind. You can use this method to run PHP scripts you may have obtained from somewhere and need to run with little or no knowledge of PHP. You can execute your scripts through a **web server** where the output is a web browser.

Let's have a look at the steps involved in using WAMP Server:

1. **Install the Server Software**
2. **Set up the Server**

15

3. **Save PHP Scripts**

4. **Run PHP Scripts**

5. **Troubleshoot**

Now let's move ahead with our PHP Tutorial and find out the suitable IDE for PHP.

**PHP IDE**

In order to remain competitive and productive, writing good code in minimum time is an essential skill that every software developer must possess. As the number and style of writing code increases and new programming languages emerge frequently, it is important that the software developers must opt for the right **IDE** to achieve the objectives.

An **Integrated Development Environment** or IDE is a self-contained package that allow you to write, compile, execute and debug code in the same place. So let's have a look at some of the best IDE's for PHP:

- **PHPStorm**
- **Netbeans**
- **Aptana Studio**
- **Eclipse**
- **Visual Code Editor**
- **ZendStudio**

## THE SQL LANGUAGE

SQL is a language for relational database. SQL is a non-procedural i.e., when we use SQL we specify what we want to be done not how to do it.

## 2.4. <u>Feasibility Study</u>

Feasibility study is the process of determination of whether or not a project is worth doing. Feasibility studies are undertaken within tight time constraints and normally culminate in a written and oral feasibility report. I have taken a fixed time in feasibility study with my co- developer. The contents and recommendations of this feasibility study helped us as a sound basis for deciding how to precede the project. It helped in taking decisions such as which software to use, hardware combinations, etc.

### 2.4.1 Technical feasibility:

This is concerned with specifying equipment of software and hardware that will successfully satisfy the user requirements. The technical needs of the system may vary considerably, but might include:

- The facility to produce output in a given time.

- Response time under certain condition.

- Ability to produce a certain volume of transaction at a particularspeed.

- In examining technical feasibility, configuration of the system is given more importance than the actual make of hardware. The configuration should give the complete picture about the system requirements. What speeds of input and output should be achieved at particular quality of printing.

According to the definition of technical feasibility the compatibility between frontend and back-end is very important. In our project the compatibility of both is very good.                                                                17

The speed of output is very good when we enter the data and click button then the response time is very fast and give result very quick. In ever find difficulty when we use complex query or heavy transaction. The speed of transaction is always smooth and constant. This software provides facility to communicate data to distant location.

## Summary of Modules

- **Login Page**
- The page where the admin user submits their system credentials to access the admin side of the system.

- **Home Page**
  - The page where the admin user is being redirected by default after logging into the system. This page displays a summary of the data of the system.

- **New Branch Page**
  - The page where the admin submits the information on the new branch of the courier company.

- **List of Branches Page**
  - The page where all the branches of the courier company are listed and managed.

- **New Branch Staff Page**
  - The page where the system admin creates a new user for the specific branch of the company.

- **Branch Staff List Page**
  - The page where all of the staff users of the system in all

branches are listed and managed.

- **New Parcel Page**

  - The page where can system users submit the information of the parcels such as the sender and recipient details.

- **Parcel List Page**

  - The page where the parcels are listed and managed.

- **Parcel View Modal**

  - The page that shows the parcel's details.

- **Track Parcel Page**

  - The page that displays the movement of the client's packages or parcels.

- **Report Page**

  - The page where the printable list of the transaction of the courier company with the clients is listed.

# 3.    SOFTWARE DESIGN

A software design document (SDD) is a written description of a software product, that a software designer writes in order to give a software development team overall guidance to the architecture of the software project. An SDD usually accompanies an architecture diagram with pointers to detailed feature specifications of smaller pieces of the design. Practically, a design document is required to coordinate a large team under a single vision. A design document needs to be a stable reference, outlining all parts of the software and how they will work. The document is commanded to give a fairly complete description, while maintaining a high-level view of the software.

There are two kinds of design documents called HLDD (high-level design document) and LLDD (low-level design document).

The SDD contains the following documents:

1. The **data design** describes structures that reside within the software. Attributes and relationships between data objects dictate the choice of data structures.

2. The **architecture design** uses information flowing characteristics, and maps them into the program structure. The transformation mapping method is applied to exhibit distinct boundaries between incoming and outgoing data. The data flow diagrams allocate control input, processing and output along three separate modules.

3. The **interface design** describes internal and external programinter faces, as well as the design of human interface.    20

Internal and External interface designs are based on the information obtained from the analysis model.
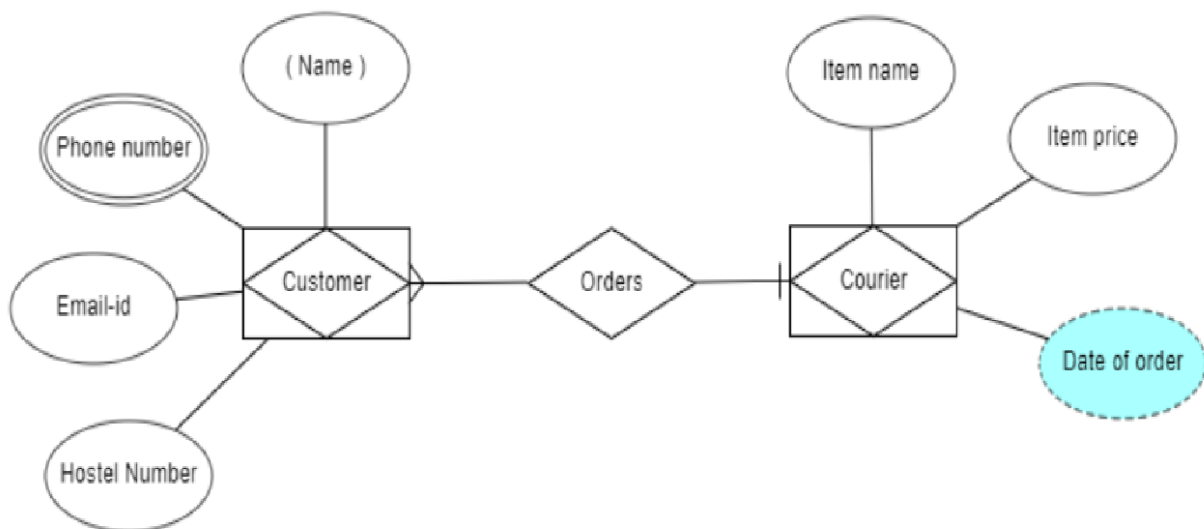
4. The **procedural design** describes structured programming concepts using graphical, tabular and textual notations. These design mediums enable the designer to represent procedural detail that facilitates translation to code. This blueprint for implementation forms the basis for all subsequent software engineering worked.
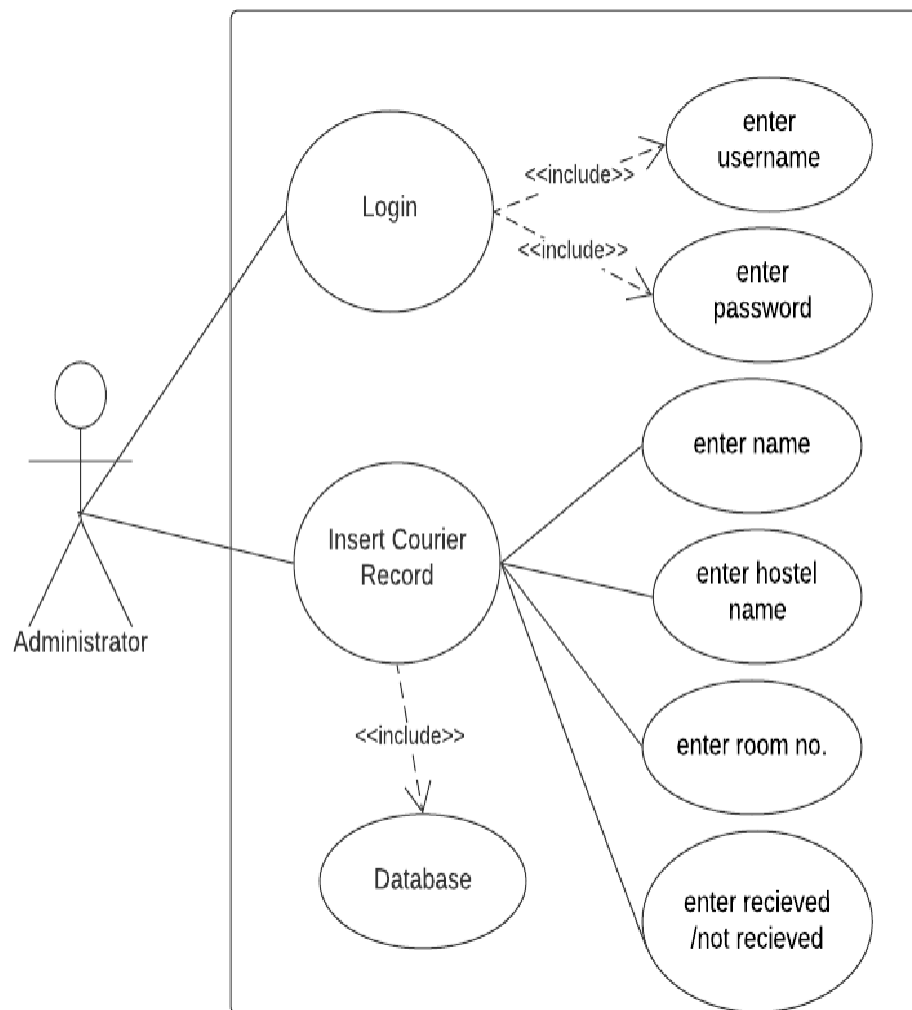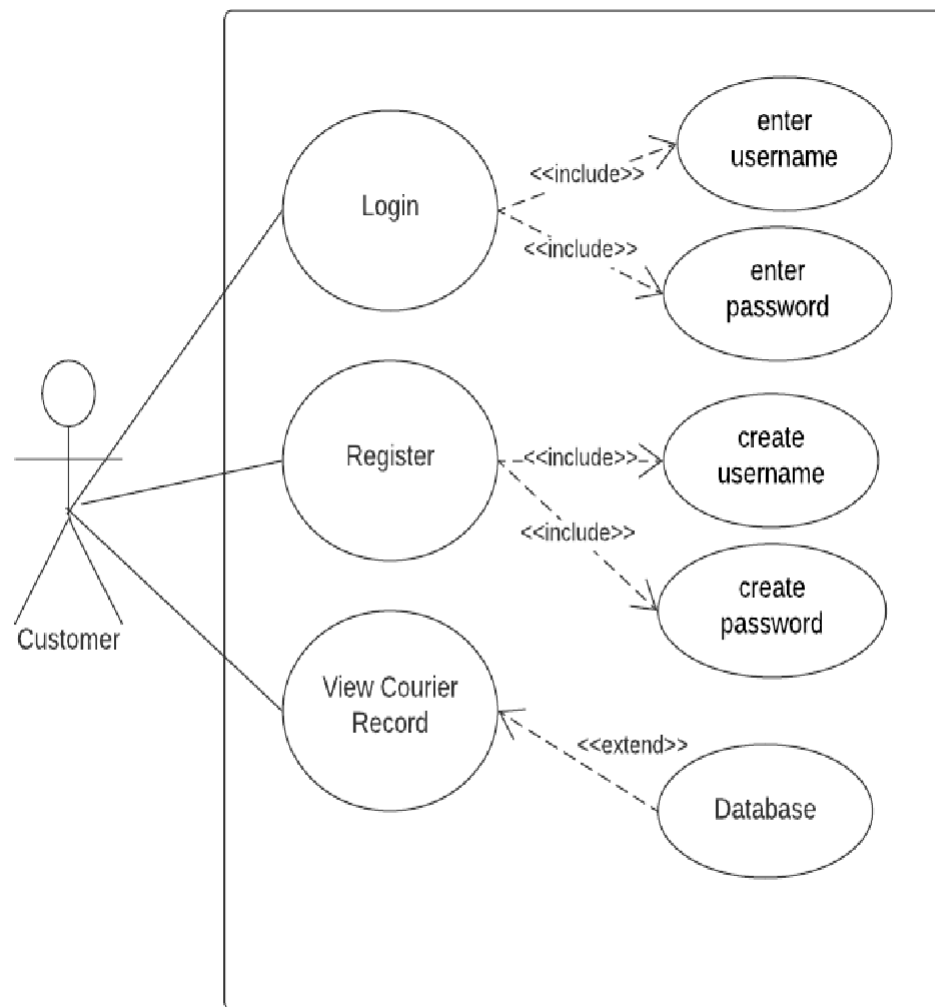
## 3.1 Data Flow Diagram(DFD):

## 3.1.1 0-Level DFD



Zero Level DFD - Courier Management System

## 3.2 ER Diagram:

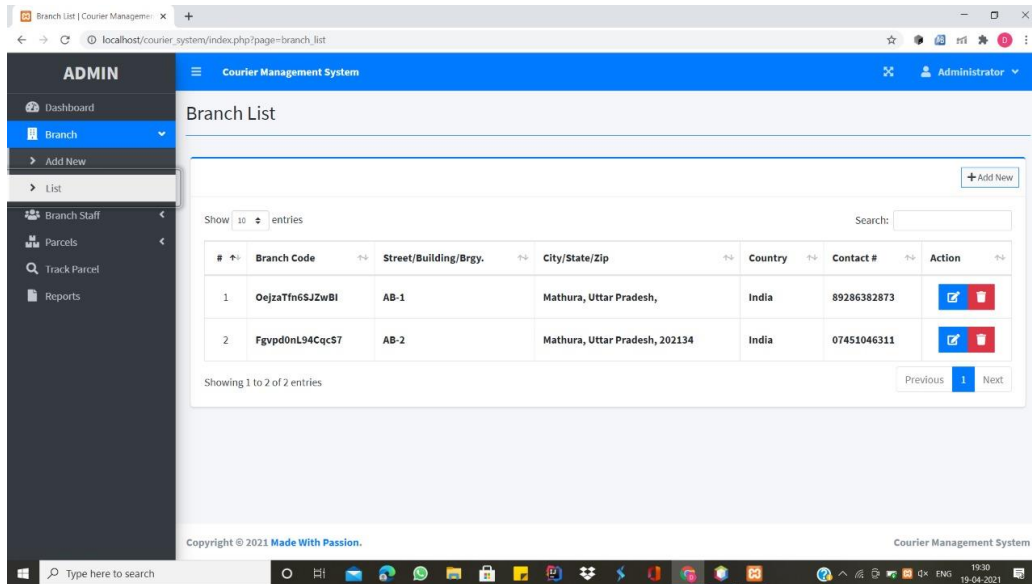## 3.3 Use Case Diagram:

## 3.3.1 Use Case Diagram of Admin Page

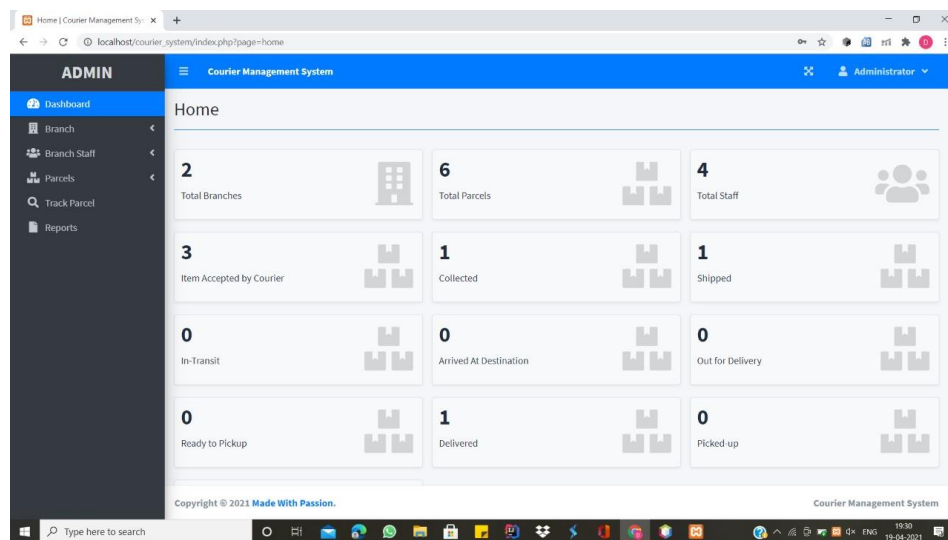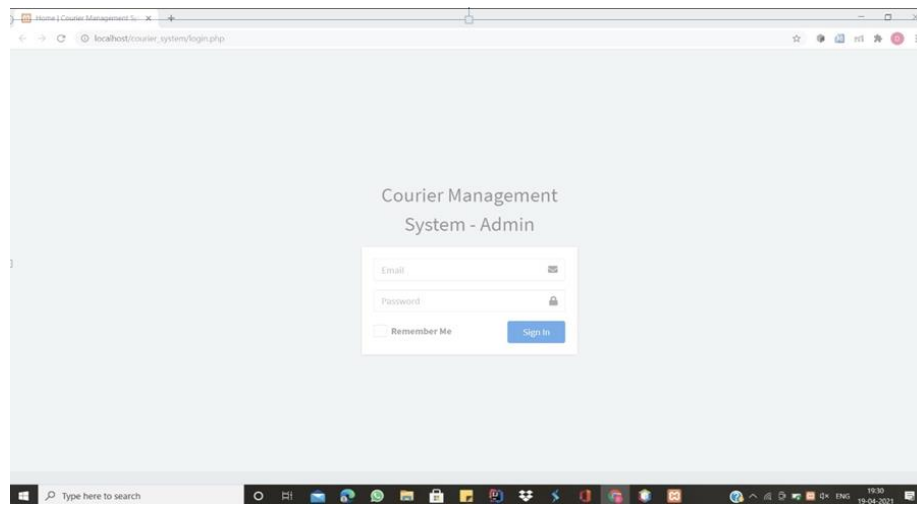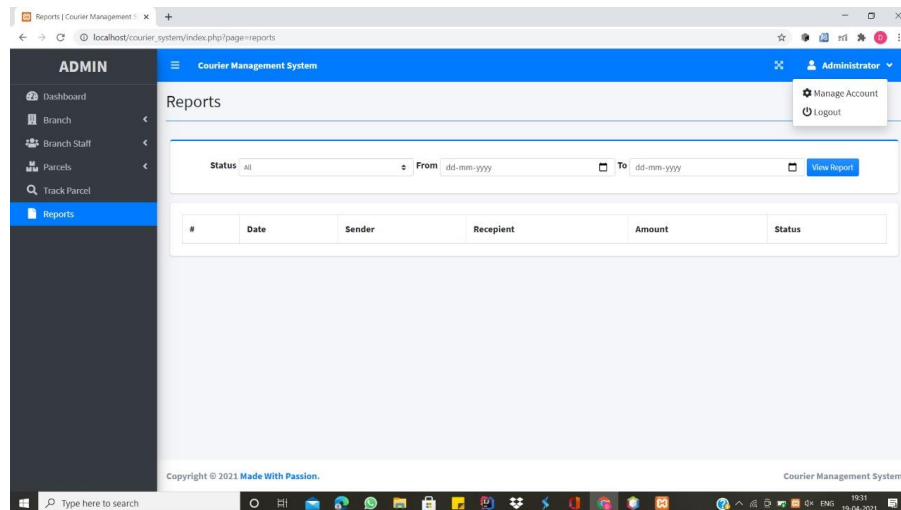## 3.3.2 Use Case Diagram of Student Page

# 4. Screenshots

## 1. User Interface

## 2.Admin Login

## 3.Reports



- ## *Completed Work of the Project*
  1. In "php" folder:
     a. 'index.php' added
     b. 'admin login.php added
     c. Branch_list added
     d. Reports.php aded

  2. In "html and css" folder
     a. UI of admin portal and management
     b. Index page
     c. Report page
     d. Admin dashboard

  3. Mini Project Synopsis.pdf added

4. Student Details added

- ## _Remaining Work of the Project_

    1. Connection of pages
    2. Connectivity of database
    3. Changes and modifications regarding the test
       results are left to be implemented
    4. Testing
    5. Admin module to check components like track id,
       collected items, shipped items, delivered items are left
       to design.

# 6. References

We referred to the following resources:

- ➢ Google search
- ➢ YouTube videos
- ➢ Websites : https://www.w3schools.com/
  https://www.beta-labs.in/
  http://www.mongodb.com/
  https://reactjs.org/

# *THANK YOU!*