“M- TICKET BOOKING SYSTEM”

Thesis submitted in partial fulfilment

of the requirements of the degree of

Bachelor of Technology

in

Cloud Technology & Information Security (CTIS)

by

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CERTIFICATE

This is to certify that the dissertation entitled **"M- TICKET BOOKING SYSTEM"** is a bona-fide work of "**Prajwal Choudhary (URN No.: 2020-B-19022000), Nikshay Jain(URN No.: 2020-B-02022003) and Abhishek Kolte (URN No.: 2020-B-28022000B)**" submitted to the School of Engineering, Ajeenkya D Y Patil University, Pune in partial fulfilment of the requirement for the award of the degree of **"Bachelor of Technology in Cloud Technology & Information Security (CTIS)"**.

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Declaration of Originality

I, **Prajwal Choudhary (URN No.: 2020-B-19022000), Nikshay Jain(URN No.: 2020-B-02022003) and Abhishek Kolte (URN No.: 2020-B-28022000B)**, hereby declare that this dissertation entitled "***M – Ticket Booking System"*** presents my original work carried out as a bachelor student of School of Engineering, Ajeenkya D Y Patil University, Pune, Maharashtra. To the best of my knowledge, this dissertation contains no material previously published or written by another person, nor any material presented by me for the award of any degree or diploma of Ajeenkya D Y Patil University, Pune or any other institution. Any contribution made to this research by others, with whom I have worked at Ajeenkya D Y Patil University, Pune or elsewhere, is explicitly acknowledged in the dissertation. Works of other authors cited in this dissertation have been duly acknowledged under the sections "Reference" or "Bibliography". I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission.

I am fully aware that in case of any non-compliance detected in future, the Academic Council of Ajeenkya D Y Patil University, Pune may withdraw the degree awarded to me on the basis of the present dissertation.

Date:

Place: Lohegaon, Pune

_____ _____

Prajwal Choudhary **Abhishek Kolte**

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Nikshay Jain

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I would like to say that it has indeed been a fulfilling experience for working out this Internship/Project.

Prajwal Choudhary

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Abstract

This system it has a facility about the analysis and prediction of train and bus. Passengers can easily see book there ticket as per there convenience. GUI of system is easy to understand by passengers. At one time passenger can book ticket for 5 people. The M-Ticket Book System for Trains and Bus is an automated system designed to simplify and streamline the ticket booking process for train and bus travellers. This system is intended to provide an efficient and convenient solution to booking train tickets. The system includes a user-friendly interface for passengers to book tickets and a backend database for managing and storing passenger information and booking details. This paper presents the development of an M Ticket booking system for bus and train transportation. The proposed system aims to provide a convenient and user-friendly experience for customers to book and purchase their tickets using their mobile phones.

Index Terms - M Ticket booking system, Bus, Train, Client-server model, Real-time updates, Instant confirmation, Scalability, User evaluation.

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List of Abbreviations

GUI	Graphical User Interface
GPS	Global Positioning System
GEO	Geographical Coordinates
SDLC	Software Development Life Cycle
DFD	Data Flow Diagram

CHAPTER 1

INTRODUCTION

1.1 Project Overview

1. The Cloud-Based M-Ticket Booking System, which provides a convenient way for users to book tickets for the train and bus.
2. This system is designed to be user-friendly, that allows users to search for train and bus any by location, date.
3. It also enables users to view the availability of tickets, select their seats, and pay for their tickets.
4. The system also provides users with real-time updates on the status of their bookings and sends them notifications about any changes or updates to their tickets.
5. This helps to reduce the possibility of double bookings or any confusion regarding the event.
6. The cloud-based nature of the system means that it is accessible from anywhere with an internet connection.
7. This makes it possible for users to book without the need to visit a physical booking office or stand in long queues.
8. The m-ticket booking system is designed to be user-friendly and easy to use. It offers a variety of features that make the ticket booking process simple and straight forward.
9. Overall, the m-ticket booking system offers a convenient and efficient way for travellers to book train and bus tickets on the go.
10. With its cloud-based architecture, it provides a reliable and accessible solution for those who need to book tickets quickly and easily.

CHAPTER 2

EXISTING SYSTEM AND PROPOSED SYSTEM

2.1 Existing System

1. In Existing system, it does not have facility about to analysis and prediction of the train and bus.
2. In Existing system, we can't see exact time of train and bus.
3. We can't see the exact location of train and bus.
4. Existing system id not user-friendly, it difficult for user to handle the system.
5. With the endless increase in the strength of the passengers sometimes it not load pages fastly.
6. It is worst to select the train/bus source and destination location.

2.2 Proposed System

1. In Proposed system it has a facility about the analysis and prediction of train and bus.
2. Passengers can easily see book there ticket as per there convenience.
3. GUI of system is easy to understand by passengers.
4. At one time passenger can book ticket for 5 people.
5. The M-Ticket Book System for Trains and Bus is an automated system designed to simplify and streamline the ticket booking process for train and bus travellers.
6. This system is intended to provide an efficient and convenient solution to booking train tickets.
7. The system includes a user-friendly interface for passengers to book tickets and a backend database for managing and storing passenger information and booking details.

CHAPTER 3

REQUIREMENTS

3.1 System Requirement

The requirement definition is concerned with the analysis of the existing system with the aim of determining and structuring the requirement of the proposed system. It is achieved with the aid of user requirement. The Analysis stage was specifically carried out in focus of the functionality dataflow at Young Legacy Line Transport Division.

3.2 Requirement Specification

Requirement Specification a complete description of the behaviour of a system to be developed and may include a set of use cases that describe interactions the users will have with the software. In addition it also contains non-functional requirements. Non-functional requirements impose constraints on the design or implementation (such as performance engineering requirements, quality standards, or design constraints) .

3.3 Functional Requirements

Functional requirements define the specific functions that the system performs, along with the data operated on by the functions. The functional requirements are presented in scenarios that depict an operational system from the perspective of its end users. Included are one or more examples of all system features and an enumeration of all the specific requirements associated with these features.

- The system shall incorporate mechanism to authenticate its users
- The system shall verify and validate all user input and should notify in case of error detection and should help the user in error correction

- The system shall allow sharing of files in the system
- The system shall allow quick messages to be exchanged without face to face interaction

3.4 Non-Functional Requirement

Non-functional requirements address aspects of the system other than the specific functions it performs. These aspects include system performance, costs, and such general system characteristics as reliability, security, and portability. The non-functional requirements also address aspects of the system development process and operational personnel. It includes the following:

- The system shall be user friendly and consistent
- The system shall provide attractive graphical interface for the user
- The system shall allow developer access to installed environment
- The system shall target customer base.

3.5 Domain requirements

This system will not be in a position to operate in environments which are not accessible to internet. The system will also require the user to have access to a computer/a laptop, a smart phone or any other device that has internet access. The system will be by those people basic computer skills. People with visual impairments will not use the system unless there is assistance from people without visual challenges.

3.6 Database requirements

A common repository of data will be needed. This implies that the new system will require a database for data storage and retrieval for the purposes of processing and feedback information. The database will require a number of tables to record various entries that the uses will enter into the system.

CHAPTER 4

OBJECTIVE

4.1 Objective

The primary objective of this system is to provide a hassle-free and efficient method for booking train tickets for passengers. Additionally, this system aims to:

1. Reduce the time and effort required for booking train tickets.
2. Automate the ticket booking process to improve efficiency.
3. Ensure accuracy in ticket booking details.
4. Provide a secure system for storing passenger data and ticket booking information.

4.2 Survey

Passengers frequently need to know about their ticket reservation status, ticket availability on a particular train/bus or for a place etc. The number of the reservation counters available to the passengers and customers are very less. On most of the reservation systems there are long queues, so it takes a long time for any individual to book the ticket. As now there are no call centres facilities available to solve the queries of the passengers. The online train/bus ticket reservation system aims to develop a web application which aims at providing trains details, availability, as well as the facility to book ticket in online for customers. So, we thought of developing a web based application which would provide the users all these facilities from his terminal only as well as help them in booking their tickets. The Application was to be divided into two parts namely the user part, and the administrator part. And each of these has their corresponding features. We decided to give the name of the website “M-Ticket System”. The online ticket reservation system is developed using Html, CSS, Bootstrap with PHP, MySQL as the backend.

4.3 Problem Statement

1. **Single Platform Multiple Booking Types:**

If we are willing to book multiple platforms then we need to get different system for different event.

2. **Slot Management: Close Bookings:**

There is an issue if we plan vacation and want to prevent booking on specific days. In this case definitely require a system to solve this issue.

3. **Booking cancellation and schedule of bus, shows etc.:**

There is a need of system which provide cancellation for tickets, also the upcoming bus and event schedules.

4.4 Analysis

M-Ticket system is an online ticket booking website, which is capable of booking ticket and search the train/bus availability. This website is mainly created to fulfil the following requirements, it comprises of the following properties:-

- A central database that will store all information.
- An online website that will provide real- time information about the availability of tickets their prices.
- Every registered user is able to view his booking id that has been made in his/her name.
- Every registered user can change his password any time he wants to change.
- Every guest user can search train availability, price of the ticket, arrival and departure time, distance between source and destination etc.
- Every registered user has the facilities to print his ticket any time he wishes.

Administration login

- In admin mode the administrator can make changes in details.
- He can also view all booking that has been made by different users.
- The booking window contains all the facilities at one place, the user can simply login to his account and can book his ticket.

CHAPTER 5

METHODOLOGY

5.1 Overview

The m-ticket booking system for bus and train is a desktop application that allows serves to book tickets for their desired destinations. The system is designed to simplify the ticket booking process by providing an easy-to-use interface for users to search for available tickets, and print tickets. The system is developed with the aim of providing a hassle-free and convenient booking experience for users. The application will be developed using a programming language such as Java, and it will be built with a graphical user interface (GUI) to enable users to interact with the system easily. The system will require users to create an account, which they can use to log in to the application and book tickets. Users will be able to search for tickets by selecting their preferred departure and arrival locations. The application will also include an admin panel, which will be used to manage ticket inventory, view all bookings, and generate revenue statements. The admin panel will be accessible to authorized personnel only, and it will require secure login credentials.

5.2 System Architecture

5.2.1 Admin Module:

- When system open the main display, it will show admin login and user login option.
- While click on admin login admin enter username and password.
- After click on login button admin will logged in.
- After login admin can see admin Dashboard.
- At dashboard admin will see 2 options view all bus booking and view all train booking.
- While click on view all bus booking it will show table of all bus booking by user.
- While click on view all train booking it will show table of all train booking by user.
- While click on logout option it will logged out admin.

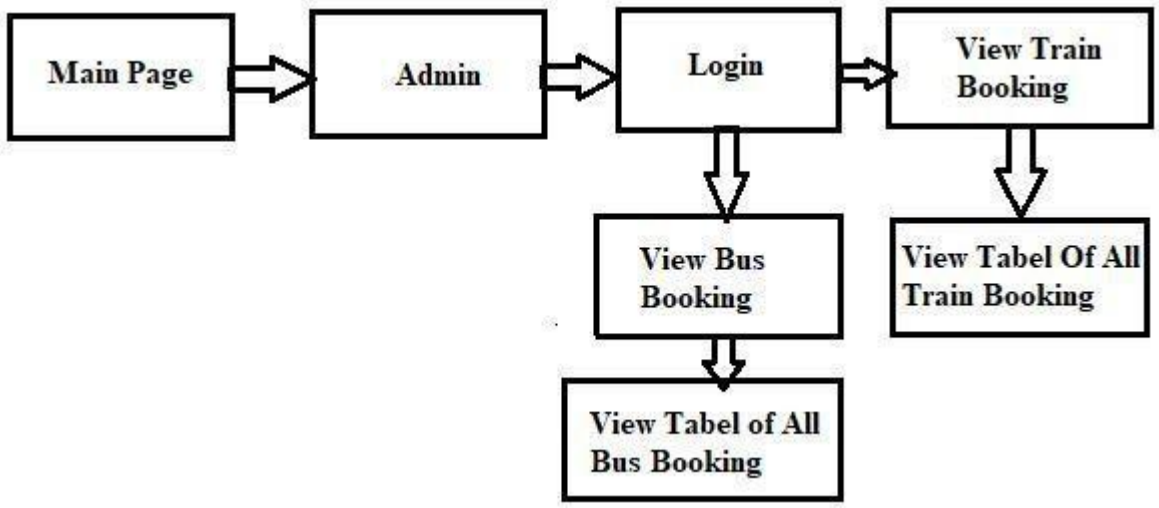

Fig1: Admin Module Architecture

5.2.2 User Module

- When system open the main display, it will show admin login and user login option.
- At login page of user, it will see 2 options login and registration.
- So new user can register on registration option.
- While click on user login user enter username and password.
- After click on login button user will logged in.
- After login user can see user Dashboard.
- At dashboard user will see 2 options book ticket for bus and book ticket for train.
- After click on book ticket for bus option it navigate to book ticket section, where it fill source and destination location, name, no of ticket(one customer can book 5 ticket only).
- While click on submit button ticket will book and display
- Customer can print there book ticket.
- After click on book ticket for train option it navigate to book ticket section, where it fill source and destination location, name, no of ticket(one customer can book 5 ticket only).
- While click on submit button ticket will book and display
- Customer can print there book ticket.
- While click on logout option it will logged out user.

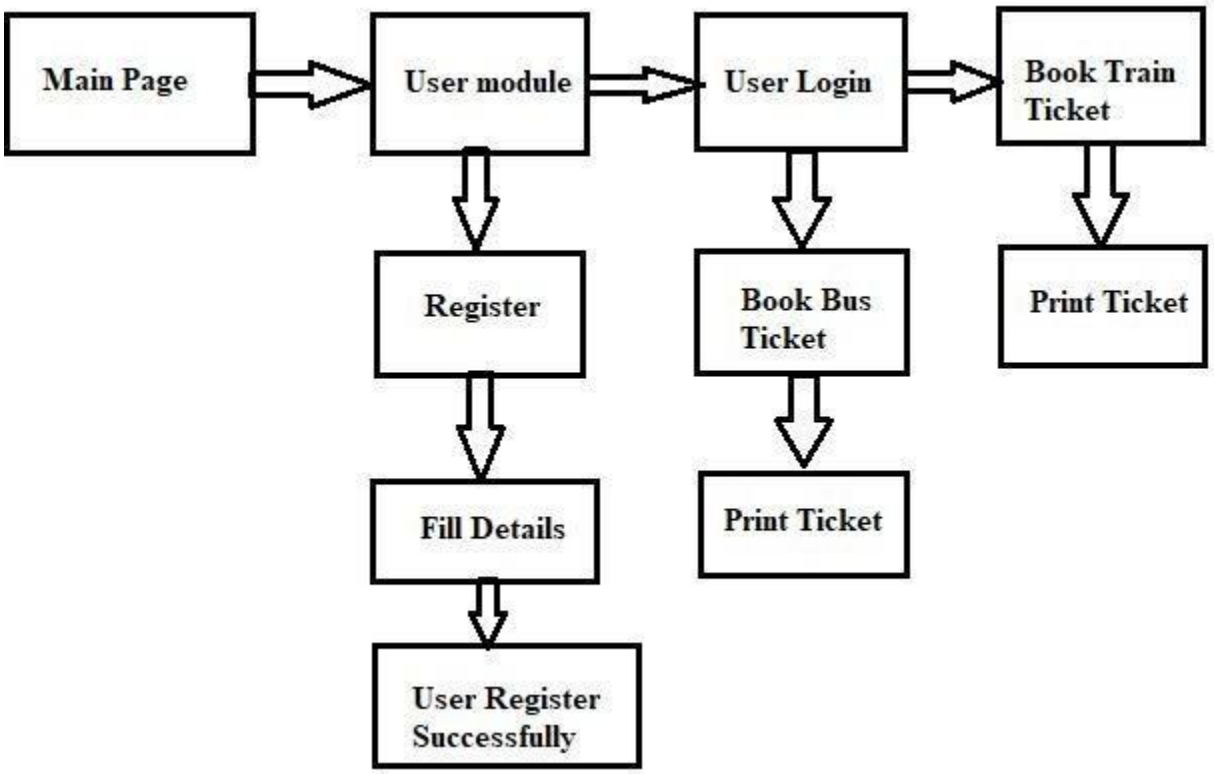

Fig2: User Module Architecture.

CHAPTER 6

ALGORITHM AND FLOWCHART

6.1 Algorithm

Step 1: Start

Step 2: Login as User/Admin

Step 3: If User login it see 2 option Book Train Ticket or Book Bus Ticket

Step 4: If it click on book train ticket it show related option

Step 4.1: while click on print option receipt will show

Step 5: If it click on book bus ticket it show related option

Step 5.1: while click on print option receipt will show

Step 6: If it click on register option register form will show after click on submit user will register successfully.

Step 8: If Admin login it see 2 option View Train Booking or View Bus Booking

Step 9: After click on Log out User/ Admin Back to Main Page.

6.2 Flow chart

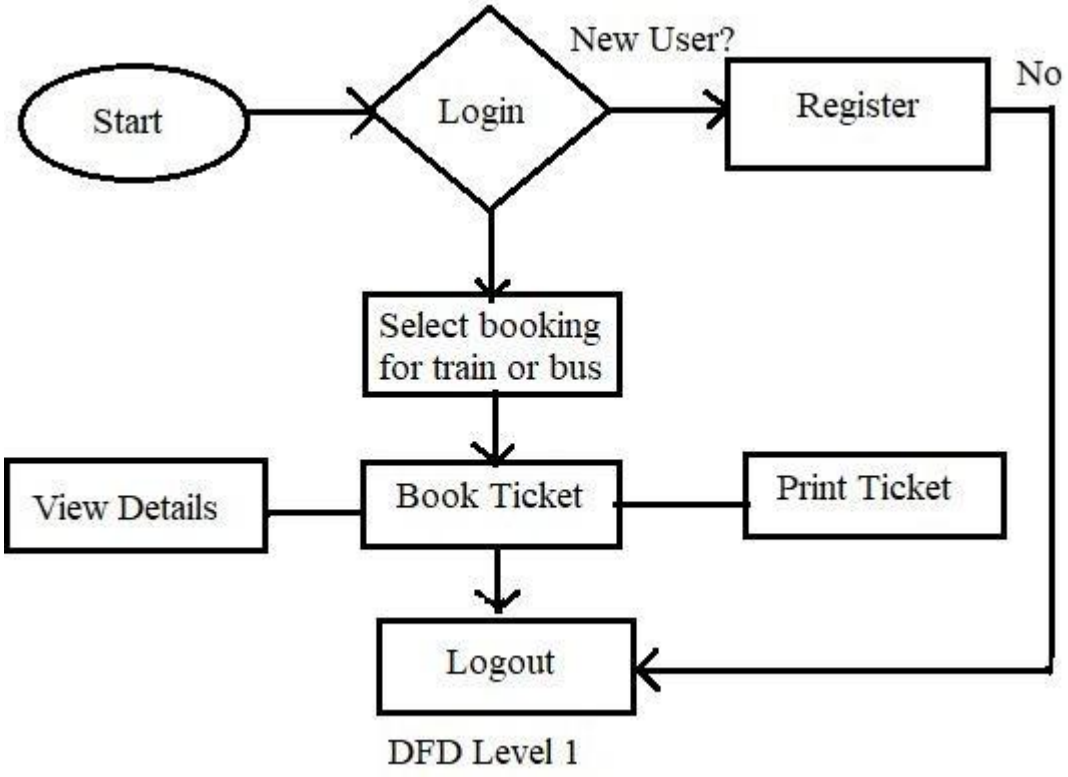

Fig 3: Flowchart.

CHAPTER 7

UML DIAGRAM

7.1 Use-Case Diagram:

7.1.1 Admin Module

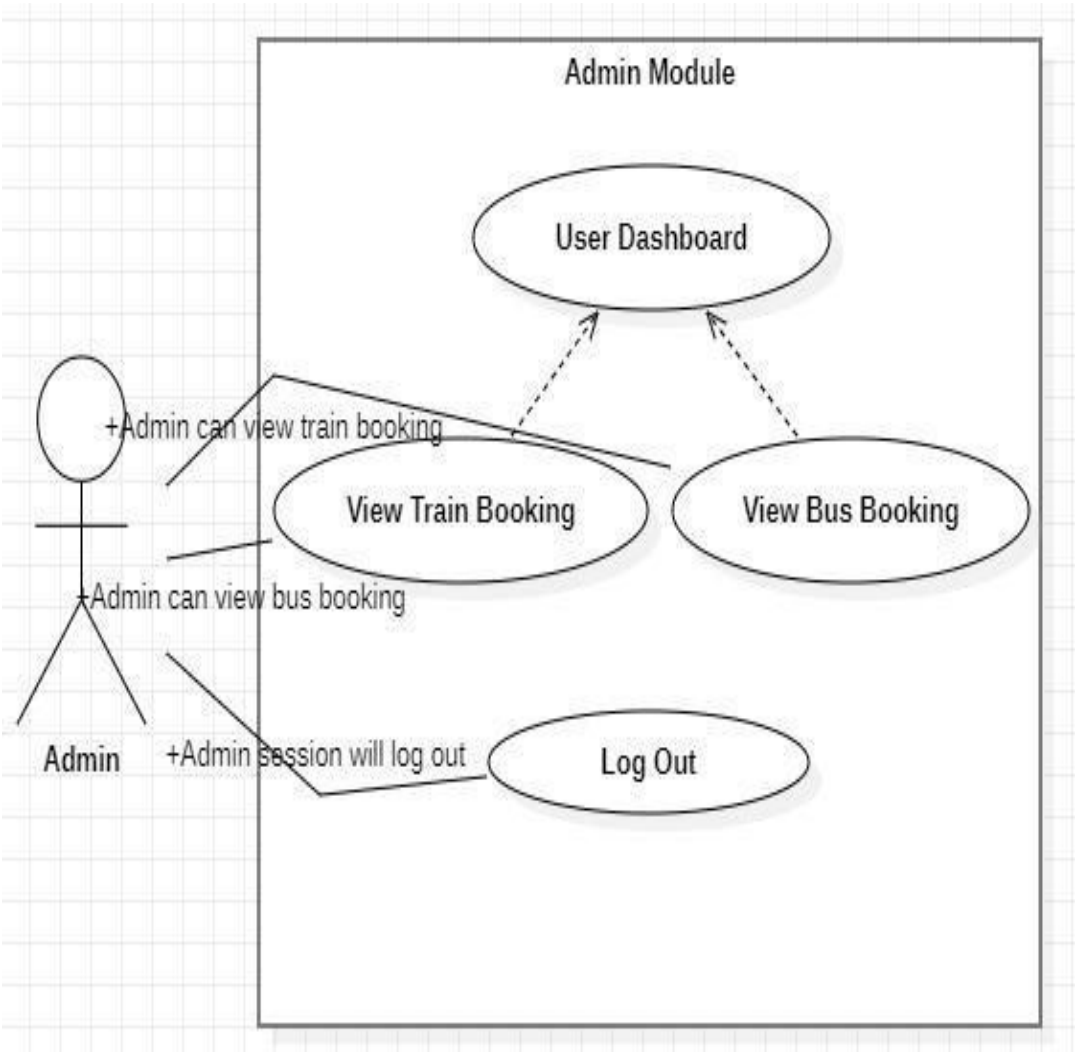

Fig 4: Use-case Diagram for admin Module

7.1.2 User Module

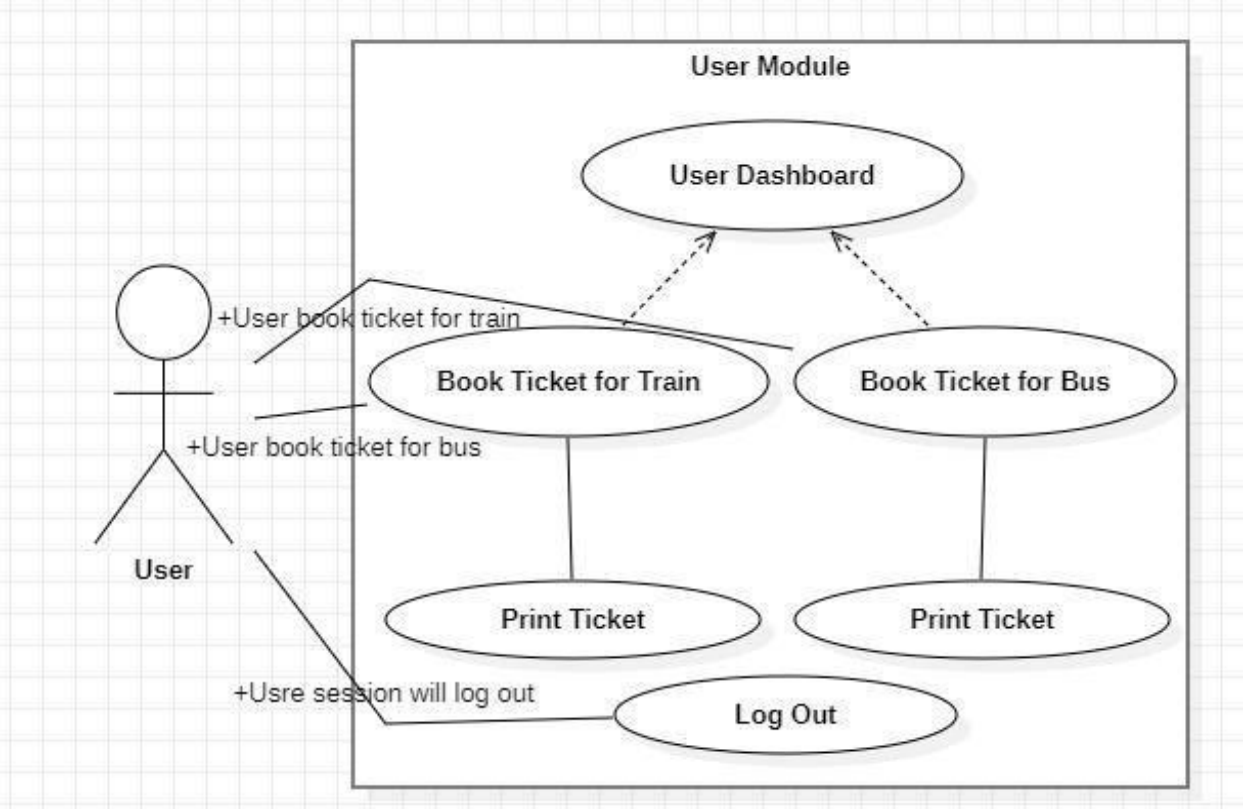

Fig 5: Use-case Diagram for Admin Module

7.2 Sequence Diagram:

7.2.1 Admin /User Module

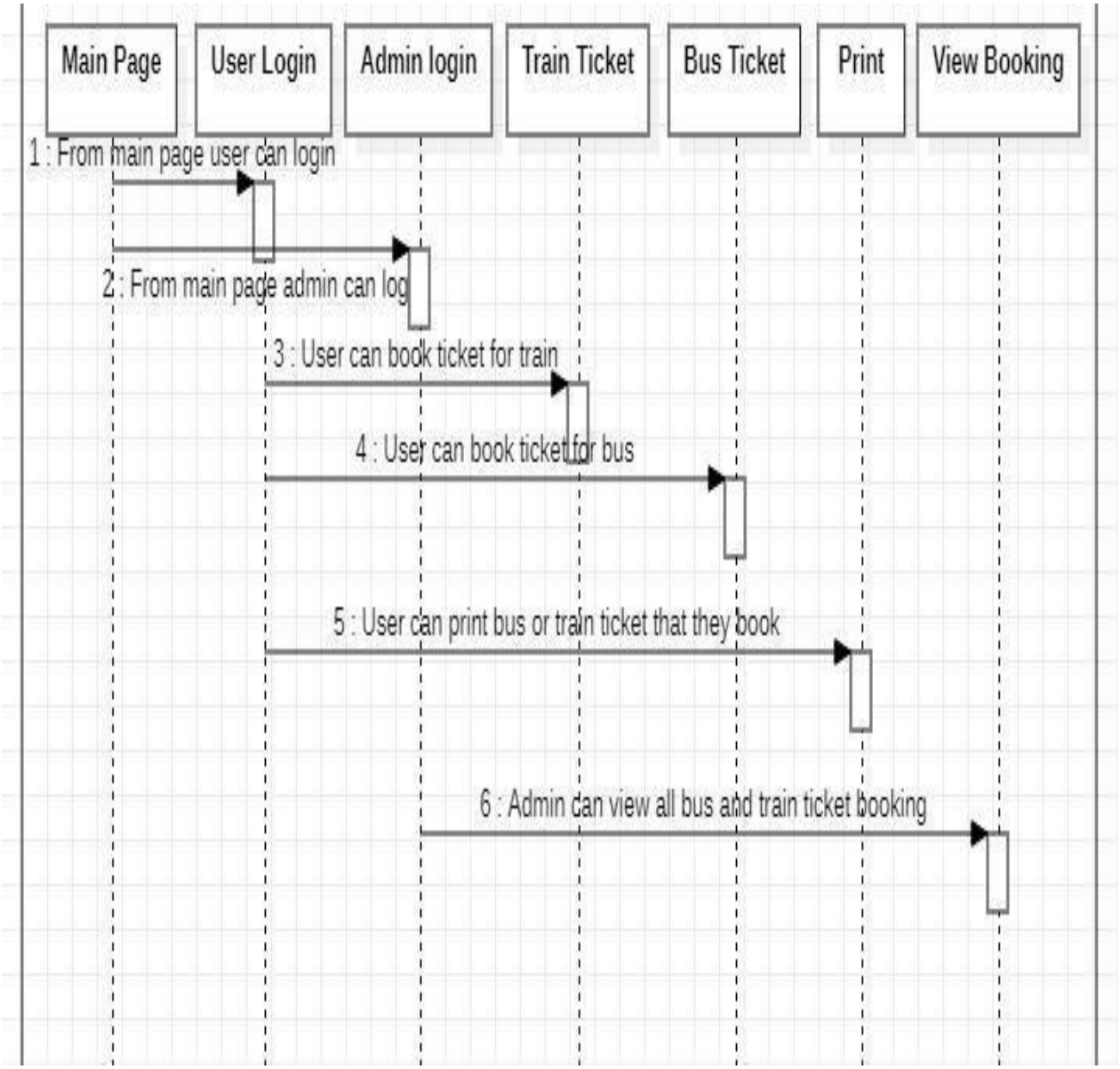

Fig 6: Sequence diagram.

7.3 DFD Diagram

A data flow diagram (DFD) is a graphical representation of the “flow" of data through an information system, modelling its process aspects. A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored. Top-level diagram is often called context diagram. It consist a single process bit, which plays vital role in studying the current system. The process in the context level diagram is exploded into other process at the first level DFD.

The development of DFD’S is done in several levels. Each process in lower levediagrams can be broken down into a more detailed DFD in the next level. The

7.3.1 DFD Level 0

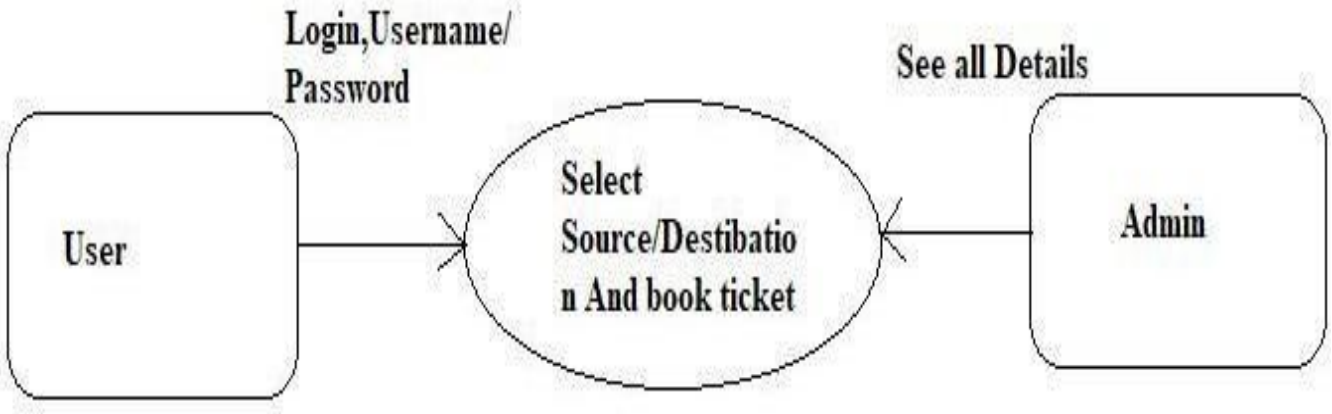

Fig 7 : DFD Level 0.

7.3.2 DFD Level 1

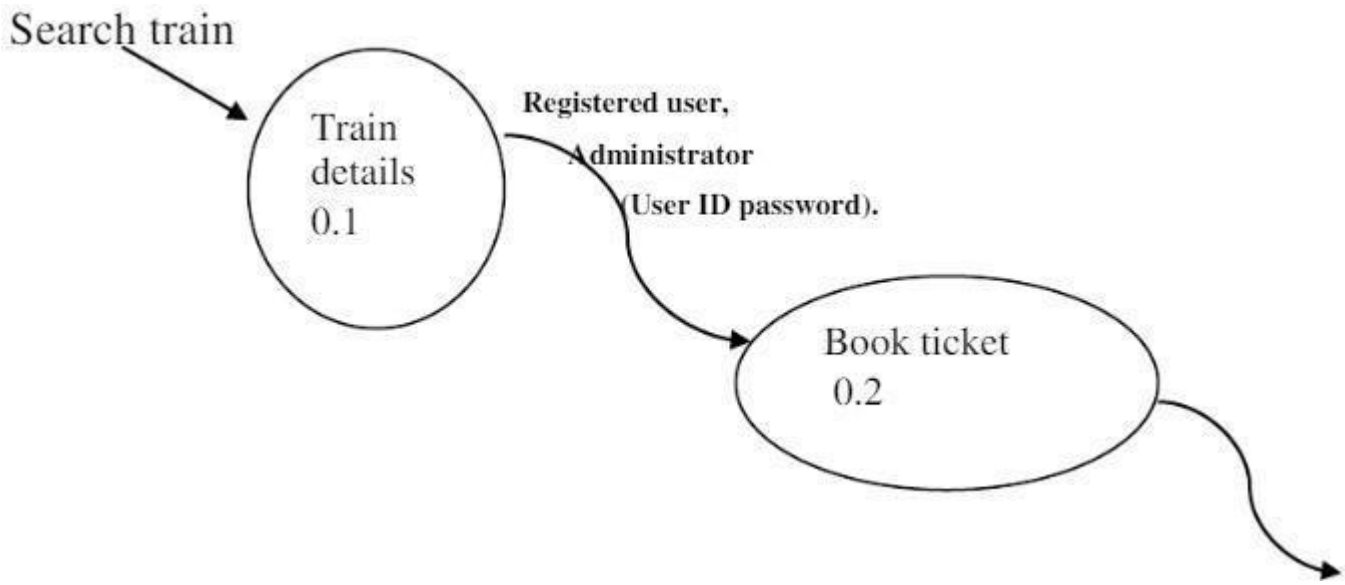

Fig 8 : DFD Level 1

7.3.3 DFD Level 2

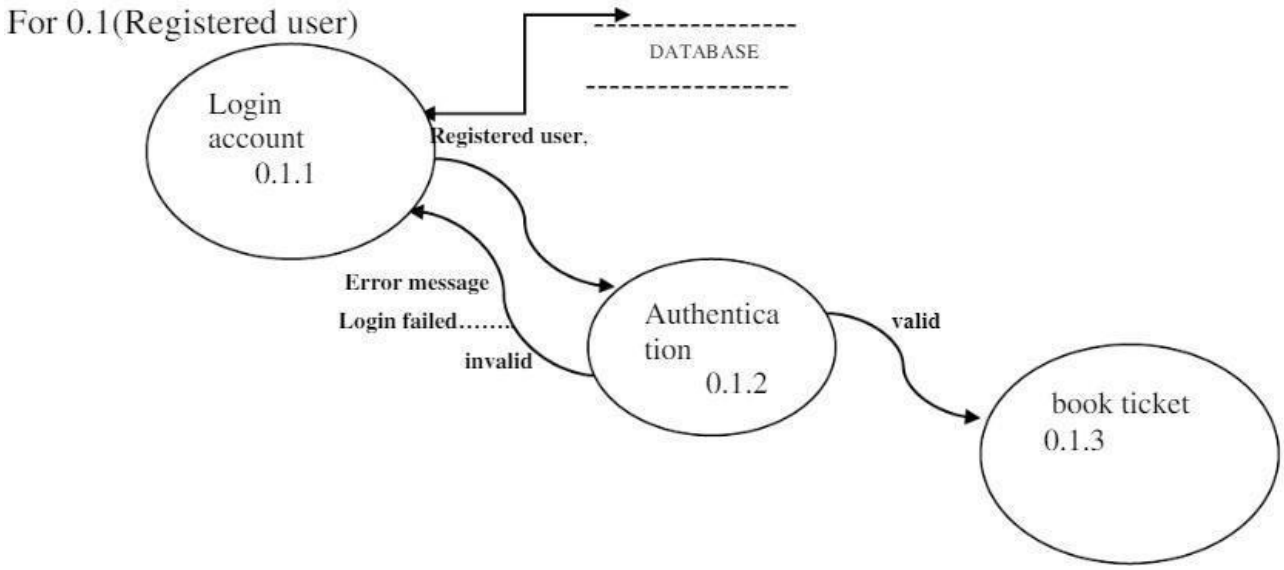

Fig 9: DFD Level 2.

Admin Part

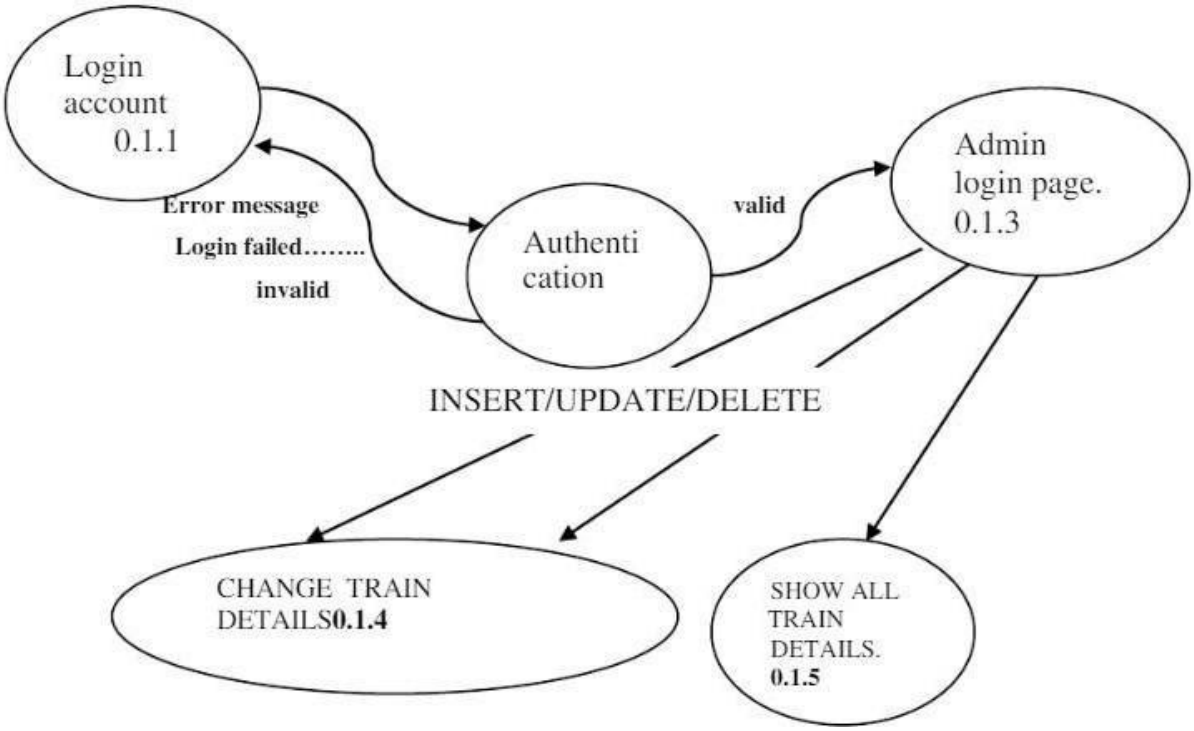

Fig 10: DFD Level 2 Admin Part

7.3.4 DFD Level 3

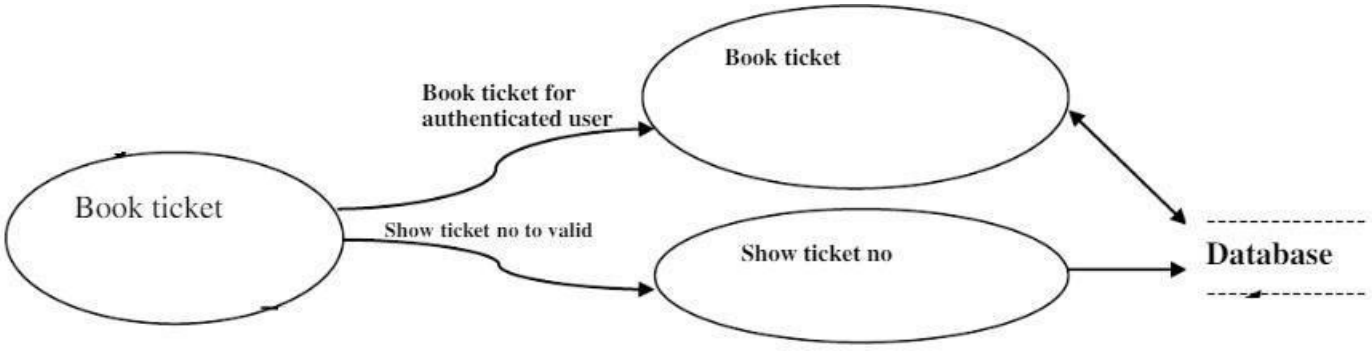

Fig 11 : DFD Level 3

7.4 Class Diagram

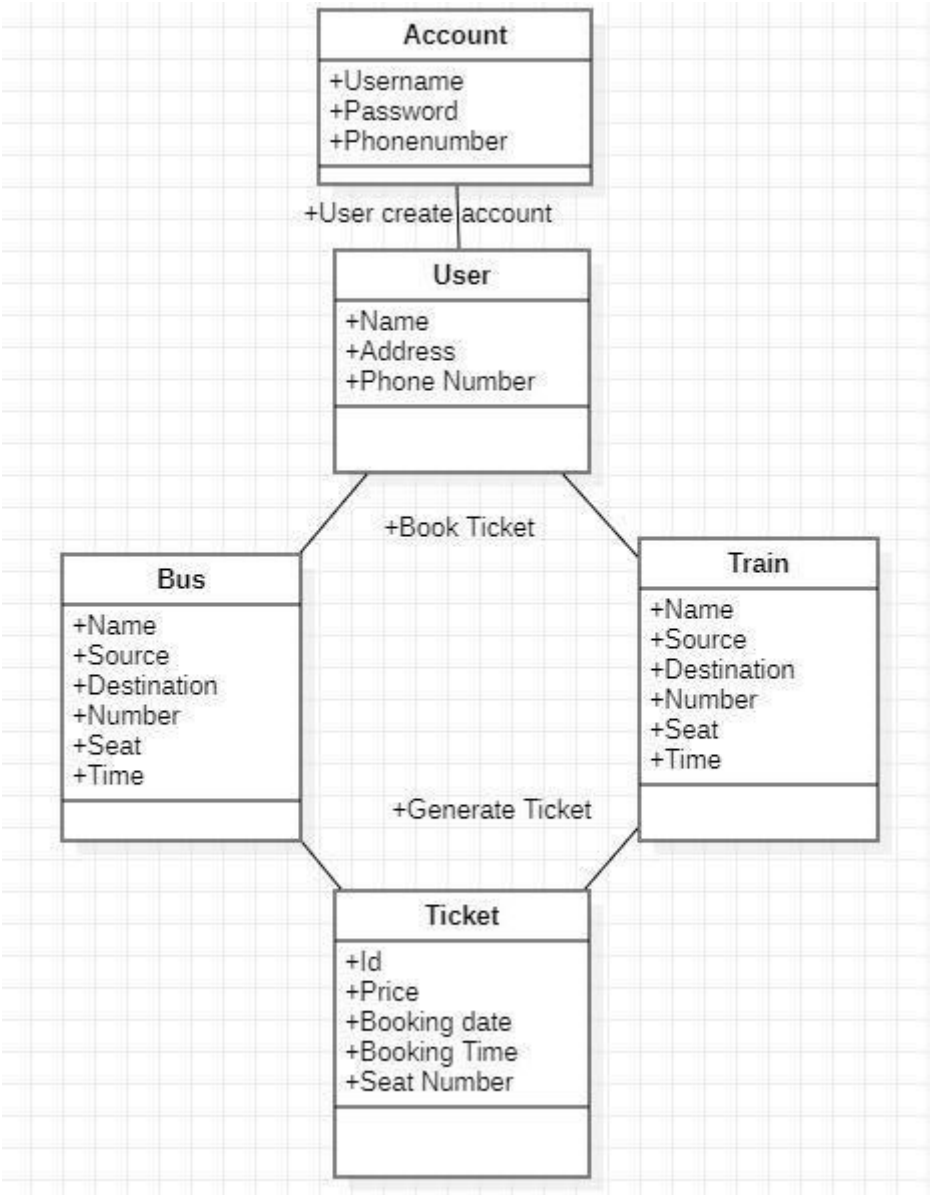

Fig 12: Class Diagram

Account: Represents a user's account information, including their username, password, email, and phone number.

User: Represents a user of the system, with their personal information such as name, address, payment information, and authentication status.

Bus and Train:
Represents a bus or train, with their unique ID, departure and arrival times, origin and destination locations, capacity, available seats, and price per seat.

Ticket:
Represents a ticket that a user has purchased for a specific bus or train, with a unique ID, type (bus or train), price, booking date and time, and cancellation status.

CHAPTER 8

SDLC

SDLC (Software development Life Cycle)

Every activity has a life cycle and software development process is not an exception for the same. Even if you are not aware of SDLC you still must be following it unknowingly. But if a software professional is aware about SDLC he can execute the project in a much controlled fashion. One of the big benefits of this awareness is that hot blooded developers will not start directly execution (coding) which can really lead to project running in an uncontrolled fashion. Second it helps customer and software professional to avoid Confusion by anticipating the problems and issues before hand. In short SDLC defines the various stages in a software life cycle. But before we try to understand what SDLC is all about. We need to get a broader view of the start and end of SDLC. Any project started if it does not have a start and end then it's already in trouble. It's like if you go out for a drive you should know where to start and where to end or else you are moving around endlessly. Below is the figure that shows typical flow in SDLC which has five main models.

- Waterfall - Big Bang and Phased model.
- Iterative - Spiral and Incremental model.

Iterative model

Iterative model was introduced because of problems faced in Waterfall model. The iterative waterfall model is used in the development of the system. The system is developed in increments, each increments adding some functional capability to the system until the full system is fully implemented. The advantage of this approach is that it will result in better testing, as testing of each increment is easier than testing the entire system in totality. Furthermore, this approach provided us with important feedback that was very useful in the implementation of the system.

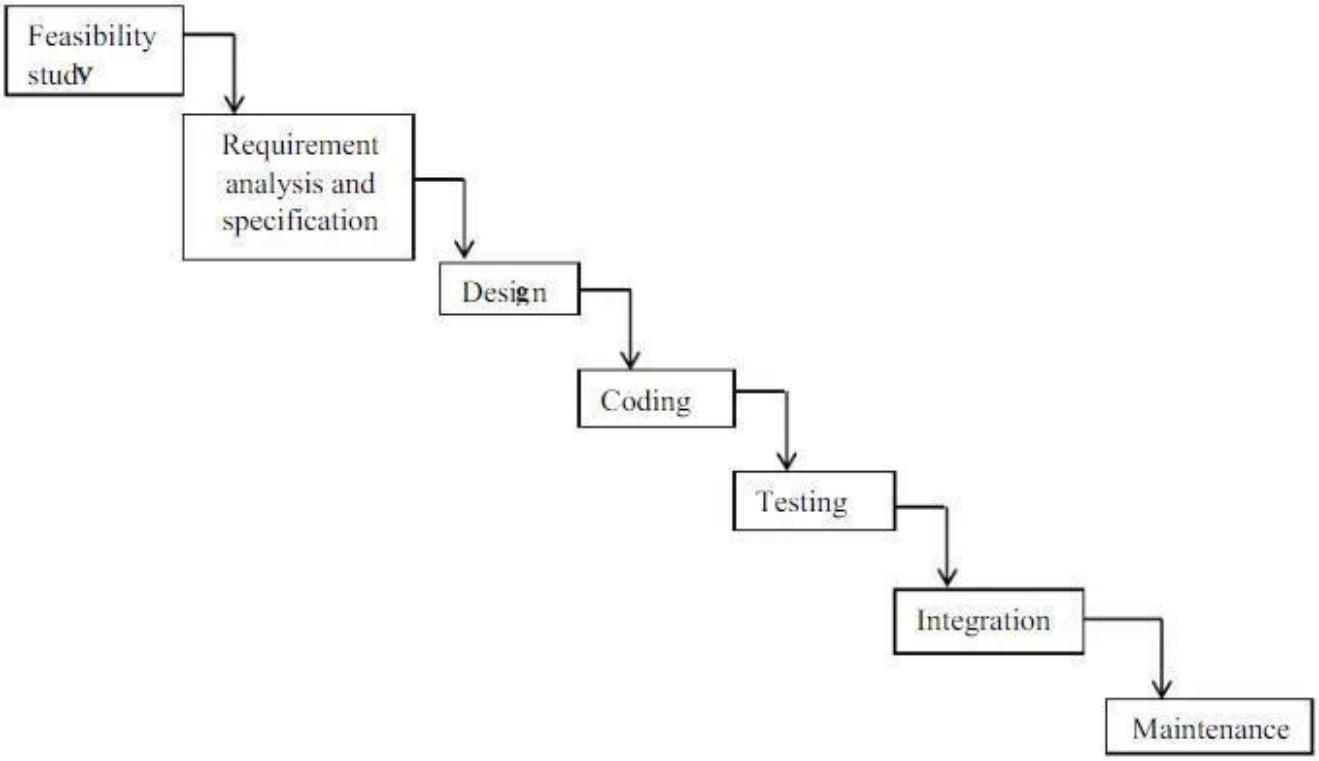

Fig 13: Iterative Model

CHAPTER 9

IMPLEMENTATION DETAILS

9.1 System Overview

M- Ticket system is a web based application. It has been developed using HTML, CSS, Bootstrap and PHP as the code end programming language. A MS SQL Server database consisting of multiple tables is used for data storage. This Website is an online travel booking website, which is capable of booking tour of national destination with easy steps at the cheapest rate . It allows the Administrator to perform all operations and view bookings. The general user is however given only restricted access. Travel masti helps in booking tour packages. The user can't book any tour until he is a registered user.

9.2 MySQL Server

MySQL server is basically a database server which is mostly used for storing user data into the required database in a specific table for easy access of these data in the future. The database server works when a local application invokes it. Before storing data into a database with the help of database server, PHP sends a SQL query to MySQL database server for establishing a connection to the server by using the loopback address, i.e., 127.0.0.1 along with the user name and password for getting authentication from the database server. Since connection is established locally with the database server by PHP, so there is no chance of getting access to database server for modifying database by the client. Also , when PHP request for information retrieval from the database server by sending SQL query then the database server sends back the result of query after executing it by the database server. Another method of accessing database server is only possible by locally, i.e., only administrator of that particular computer can get all the access facilities of the database server as well as all the database which are not available to restricted users. PHP can update information in the database server if it has the administrator username and password to access the specific database, otherwise connection will be rejected by MySQL server and the database cannot be updated. Since before the dawn of the computer age , people have been using databases. Before computers, a database may have

been a Rolodex containing phone numbers of the important people you knew, or it was a filing cabinet that contained all the personnel records for the company. Today, databases are computer-based and are found virtually everywhere. From desktop databases of your record collection to Web-enabled databases that run large corporations.

Features of MySQL:

- MySQL is a Relational Database Management System or RDBMS which means that it stores and presents data in tabular form, organized in rows and columns.
- MySQL is more secure as it consists of a solid data security layer to protect sensitive data from intruders and passwords in MySQL are encrypted.
- MySQL is available for free to download and use from the official site of MySQL.
- MySQL is compatible with most of the operating systems, including Windows, Linux, NetWare, Novell, Solaris and other variations of UNIX.
- MySQL provides the facility to run the clients and the server on the same computer or on different computers, via internet or local network.
- MySQL has a unique storage engine architecture which makes it faster, cheaper and more reliable.
- MySQL gives developers higher productivity by using views, Triggers and Stored procedures
- MySQL is simple and easy to use. You can build and interact with MySQL with only the basic knowledge of MySQL and a few simple SQL statements.
- MySQL has a client-server architecture. There can be any number of clients or application programs which communicate with the database server (MySQL) to query data, save changes, etc.
- MySQL is scalable and capable of handling more than 50 million rows. This is enough to handle almost any amount of data. Although the default file size limit is 4GB but it can be increased to 8TB.
- MySQL allows transactions to be rolled back.
- MySQL is very flexible as it supports a large number of embedded applications.

Disadvantages of MySQL:

- MySQL is not very efficient in handling very large databases.

- MySQL doesn't have as good a developing and debugging tool as compared to paid databases.
- MySQL versions less than 5.0 do not support COMMIT, stored procedure and ROLE.
- MySQL is prone to data corruption as it inefficient in handling transactions.
- MySQL does not support SQL check constraints.
-

9.2 EVOLUTION OF PHP

PHP is a recursive acronym for "PHP: Hypertext Pre-processor". PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the UNIX side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C-Like.

9.2.1 Characteristics of PHP

Five important characteristics make PHP's practical nature possible −

- Simplicity
- Efficiency
- Security
- Flexibility
- Familiarity

9.2.1 Disadvantages of PHP:

- PHP is not secure as it is open source.
- Not good to create desktop applications.
- Not suitable for large Web Applications- PHP code is hard to maintain since it is not very modular.
- Modification Problem – PHP does not allow the change in the core behaviour of the web applications.

9.3 HTML

9.4

HTML stands for Hyper Text Mark-up Language. HTML is the standard mark-up language for creating Web pages .HTML describes the structure of a Web page .HTML consists of a series of elements. HTML elements tell the browser how to display the content. HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc. HTML **elements** are the building blocks of HTML pages. HTML elements are represented by **<> tags.** The data that describes the page also termed as metadata is inside the head section while the body section includes all the tags that are necessary to represent the visible content of the web page HTML is a platform-independent language so that can be made in use in any platform like Windows, Linux, Macintosh, etc. There are various HTML versions. The newest version is HTML 5. It's more advanced features like Geo-location, native audio, and video support, Canvas, web socket, etc. Usually, HTML is a simple language to find out and use. A programmer can create an HTML file employing a simple text editor and execute it employing a browser.

Advantages:

- HTML helps to build structure of a website and is a widely used Mark-up language.
- It is easy to learn.
- Every browser supports HTML Language.
- HTML is light weighted and fast to load.
- Storage of big files are allowed because of the application cache feature.
- Do not get to purchase any extra software because it's by default in every window.

- Loose syntax (although, being too flexible won't suit standards).
- HTML is simple to edit as being a plain text.
- It integrates easily with other languages such as JavaScript, CSS etc.
- HTML is that it is easy to code even for novice programmers.
- HTML also allows the utilization of templates, which makes designing a webpage easy.
- It is fast to download as the text is compressible.
- Very useful for beginners in the web designing field.
- HTML can be supported to each and every browser, if not supported to all the browsers.
- HTML is built on almost every website, if not all websites.
- HTML is increasingly used for data storage as like XML syntax.
- HTML has many tag and attributes which can short your line of code.

Disadvantages:

- It cannot produce dynamic output alone, since it's a static language.
- Making the structure of HTML documents becomes tough to understand.
- Errors can be costly.
- It is the time consuming as the time it consume to maintain on the color scheme of a page and to make lists, tables and forms.
- We need to write a lot of code for just creating a simple webpage.
- We have to check up the deprecated tags and confirm not to use them to appear because another language that works with HTML has replaced the first work of the tag, and hence the opposite language needs to be understood and learned.
- Security features offered by HTML are limited.
- If we need to write down long code for creating a webpage then it produces some complexity.
- HTML can create only static and plain pages so if we'd like dynamic pages then HTML isn't useful.
- Editing of web page need to be done separately, they are not centralized.

9.5 CSS

Cascading Style Sheets, or CSS, for short, is a language for style sheets that is used to describe how a document is presented in a mark-up language like HTML. The appearance of a webpage's elements, such as their design, colours, and fonts, can be managed using CSS. It makes it simpler to maintain and update a website's design over time and enables developers to quickly and easily create websites that are consistent and well-designed. Therefore it is quite a popular tool used in the creation of websites. A website that uses CSS has a significant and unmistakable advantage over one that doesn't. You may have come across a website that partially loads, has a white background, and the majority of its text is blue and black. This indicates that the CSS component of the website either didn't load properly or doesn't exist at all. With CSS, you can stylize everything in a separate file, where you can also create the design and then add the CSS files on top of the HTML mark-up. The actual HTML mark-up is much cleaner and simpler to maintain as a result. In other words, CSS features eliminate the need to repeatedly describe the appearance of individual elements. This shortens the code, saves time, and reduces the likelihood of errors.

Advantages:

1. Optimized design:

Programmers can create responsive designs using CSS that adapt to different screen sizes and devices. With CSS, your website will be optimized without additional effort or applications. This is quite important for the overall user experience.

2. Greater flexibility:

CSS allows developers to change a website's design without altering the underlying HTML because it separates a website's content from its design. This makes updating and maintaining a website easier over time.

3. Uniformity and consistency:

CSS gives website designers the ability to define styles that are applied consistently across all website pages. This ensures that the websites aesthetic is unified and consistent, which can improve user experience. It also allows for time efficiency since one does not need to change each page individually.

4. Increased interactivity and dynamic effects:

CSS gives web designers the ability to enhance websites' interactivity and dynamic effects by including animations, transitions, and other moving elements. The visual appeal and user experience of a website can both be enhanced with the simple use of CSS.

5. Better performance:

CSS is a straightforward, powerful language that can significantly improve the performance of a website or web application. CSS allows web designers to create websites with less code, which speeds up page load times and enhances the functionality of the website as a whole.

Disadvantages

While using CSS for web development has many benefits, there are also some potential drawbacks to take into account, such as:

1. Not beginner friendly:

Because CSS has so many unique properties and values that must be correctly understood and applied, it can be difficult to learn and master. This may make it difficult for beginners, and it might require a lot of time and effort.

2. Dependency on external style sheets:

CSS is typically stored in external style sheets, which are accessed via links from a website's HTML. This means that if the style sheet is not loaded correctly or if the link to the style sheet is broken, the website may not display properly. This could be a problem if the style sheet takes a long time to load or your internet connection is slow.

3. Compatibility issues with browsers:

Because various browsers interpret and render CSS differently, there might be inconsistencies and compatibility issues. Developers may need to spend more time and effort testing and debugging their CSS code in order to ensure that it runs correctly across different browsers.

9.6 Bootstrap

Bootstrap is the world's most popular front-end web development framework. Based on HTML5, CSS, and JavaScript, Bootstrap makes it possible for developers to quickly launch a fully-featured, mobile-responsive site. Bootstrap is used for millions of sites across the world today, thanks in part to its free, open-source model. In programming, a "bootstrap" to something that launches another system, usually an operating system. In the real world, a "bootstrap" is the little piece at the back of a boot that lets you pull it on. Throughout software development, it refers to a smaller system that boots up a much larger system. Thus, Bootstrap means that it's a framework that can be used to launch a website quickly. With Bootstrap, you don't need to do any of the foundational programs that you would normally have to do. Instead, you can just focus on what's important — customizing it to your project.

Why Would You Use Bootstrap?

Many developers feel as though they are reinventing the wheel when they need to construct the most basic elements of a website. Bootstrap gives you everything you need to design a clean, effective site out of the box. In fact, you don't need to write a single line of code if you don't want to — you can just fill in the content.

Through Bootstrap, developers can:

- Launch sites much faster.
- Improve the consistency of their work.
- Directly control many elements of their sites.
- At the same time, developers do have an upfront investment of time. They need to learn the Bootstrap framework and system first if they want to do any serious customization. It can take months to really understand the intricacies of the Bootstrap framework, as it is an extensive compilation of files.

9.7 Database Tables

The following tables were created for the application:

Table name	Description
Login Data Of User	Store Login details of user
Login Data Of Admin	Store Login details of Admin
View All Booking of Bus	Show all booking related to bus
View All Booking of Train	Show all booking related to Train

CHAPTER 10

HARDWARE AND SOFTWARE REQUIREMEN

10.1 Hardware Requirement:

- Processor - Intel Core I3 2nd Generation
- Speed - 2.3 GHz
- RAM - 4 GB RAM

10.2 Software Requirement:

- Operating System - Windows 7 and Windows 10 Or Linux
- Technology - Web Based Application
- IDE - Dream View
- Front-End – Html, CSS
- Database - My SQL, PHP

CHAPTER 11

APPLICATION FLOW

11.1 Application Module:

- Main Page
- Admin Login
- Admin Dashboard
- User Login
- User Dashboard

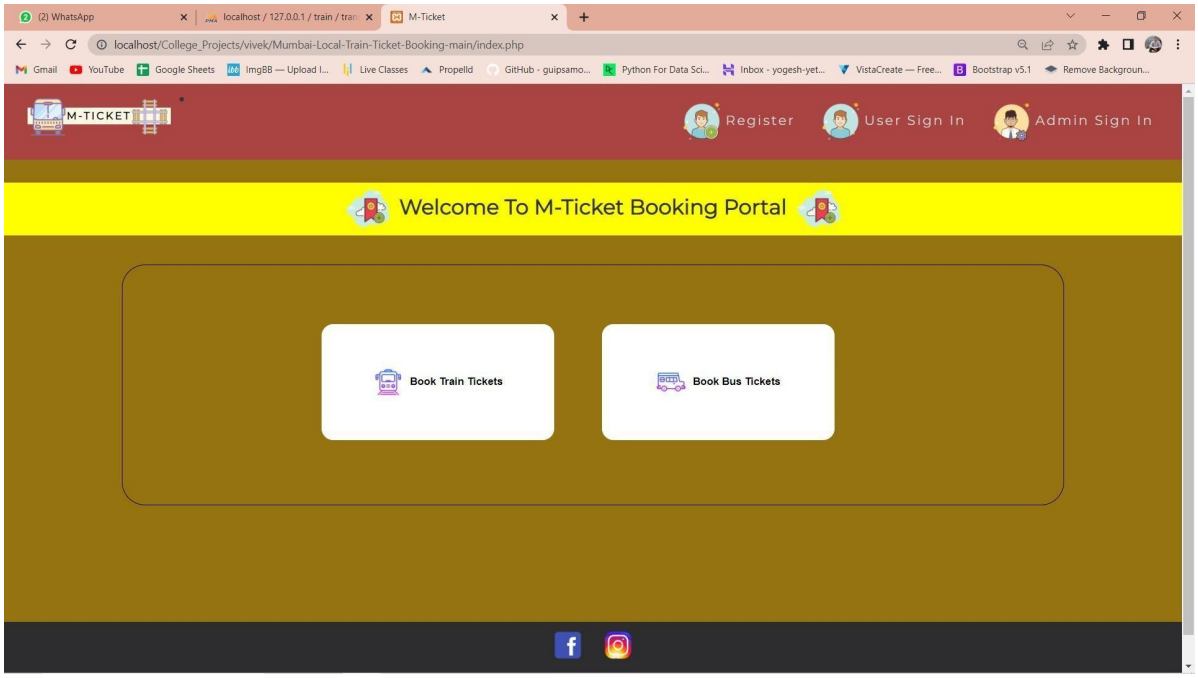

Fig 14: Main Page

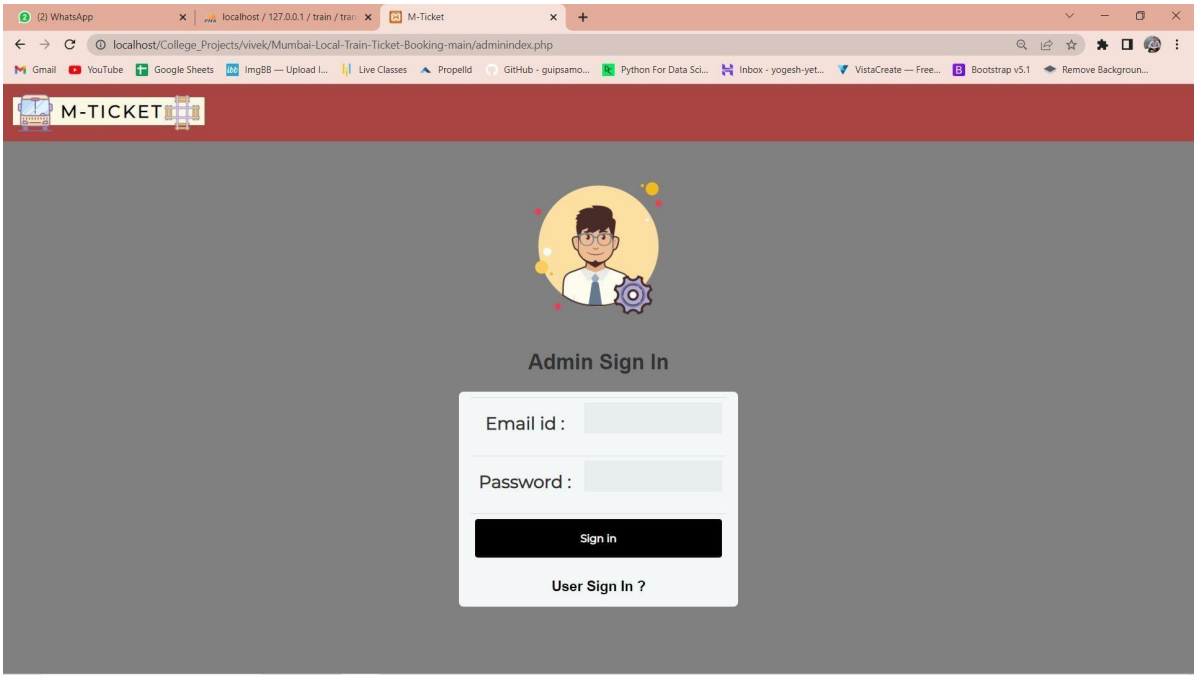

Fig 17: Admin Login Page

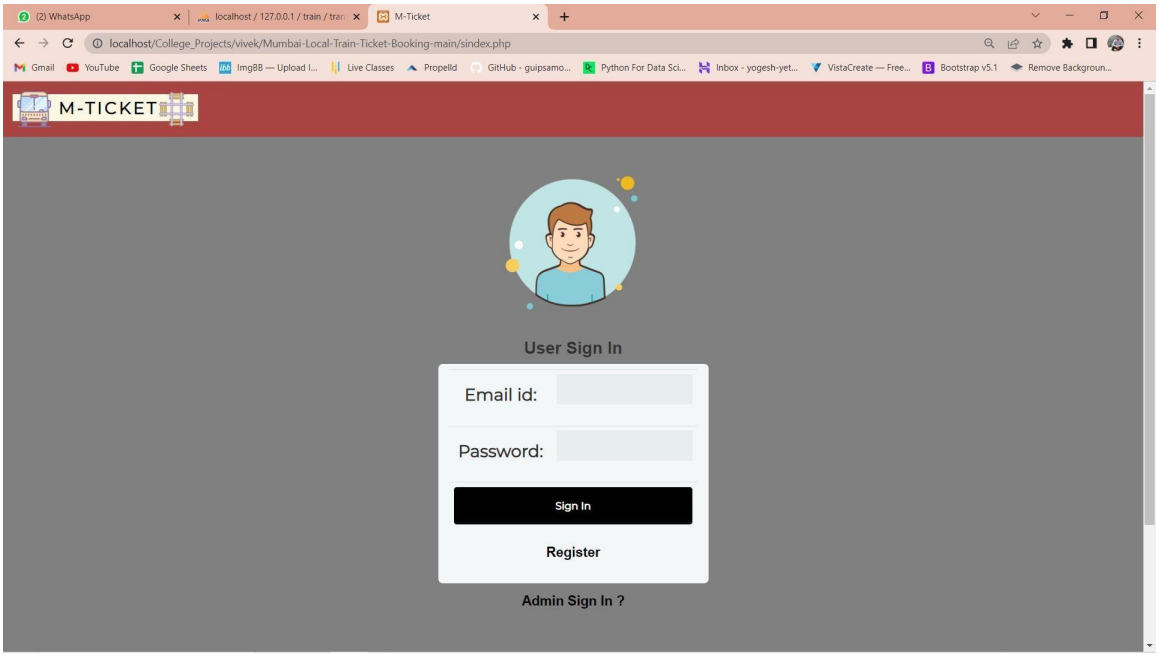

Fig 15: User Sign In

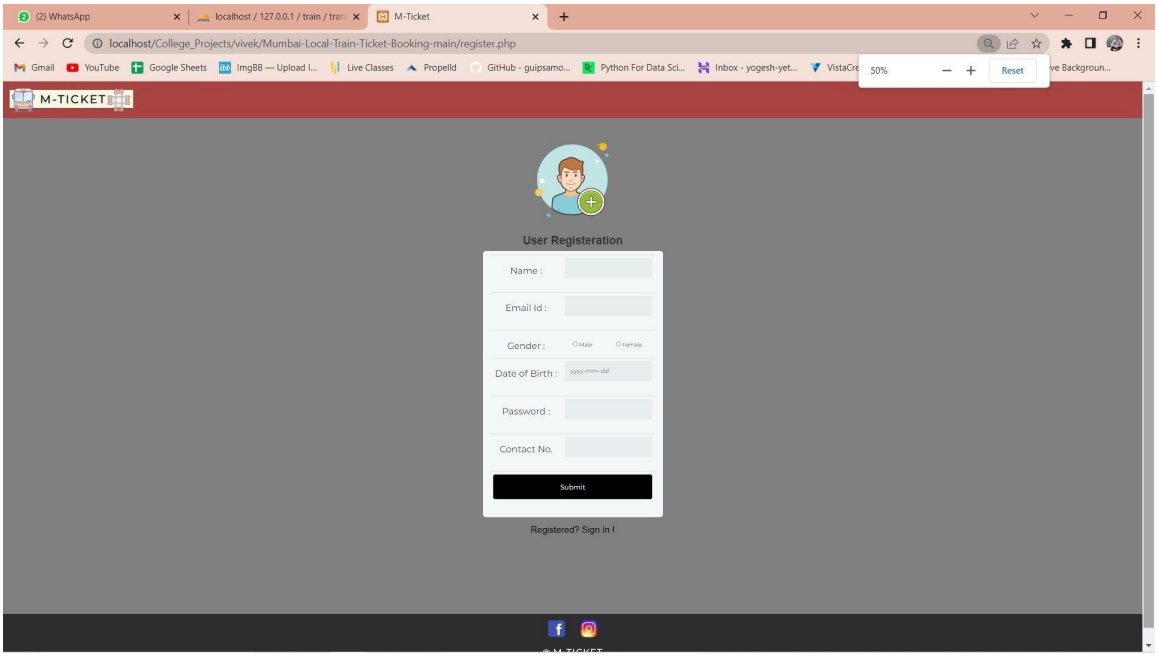

Fig 16:User Registration

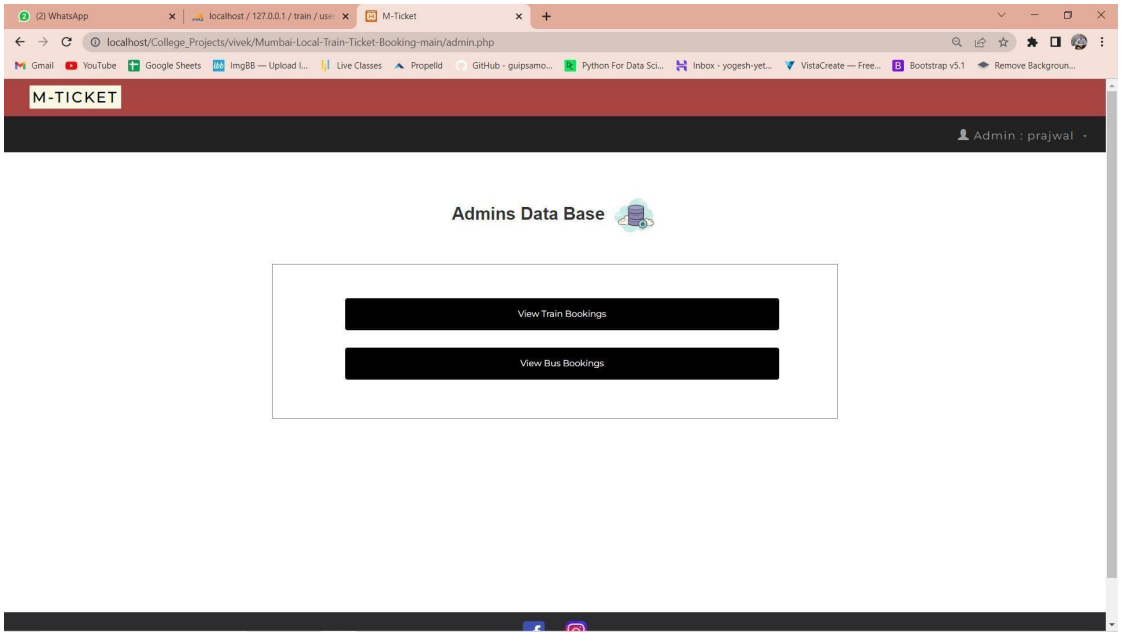

Fig 17: Admin Dashboard

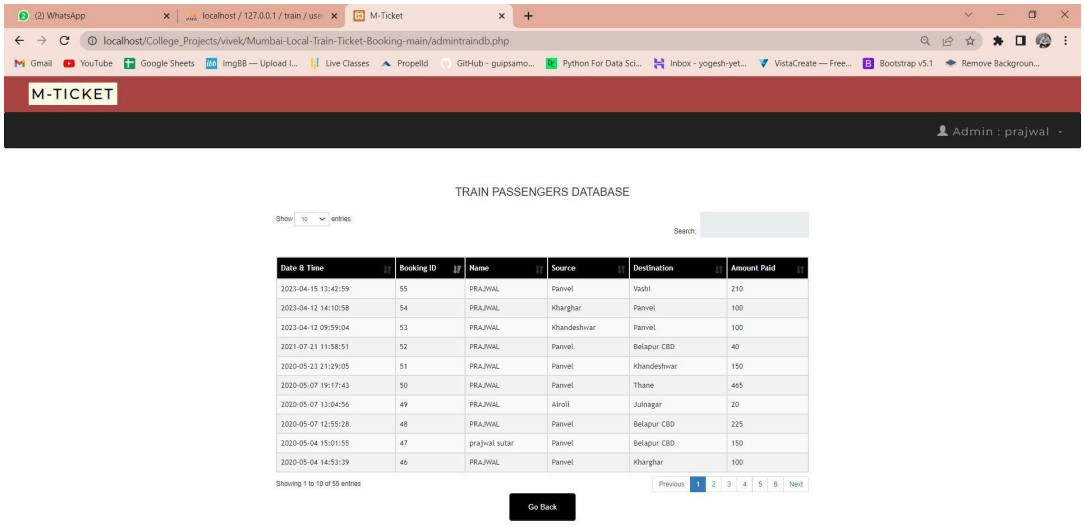

Fig 18: Train Bookings

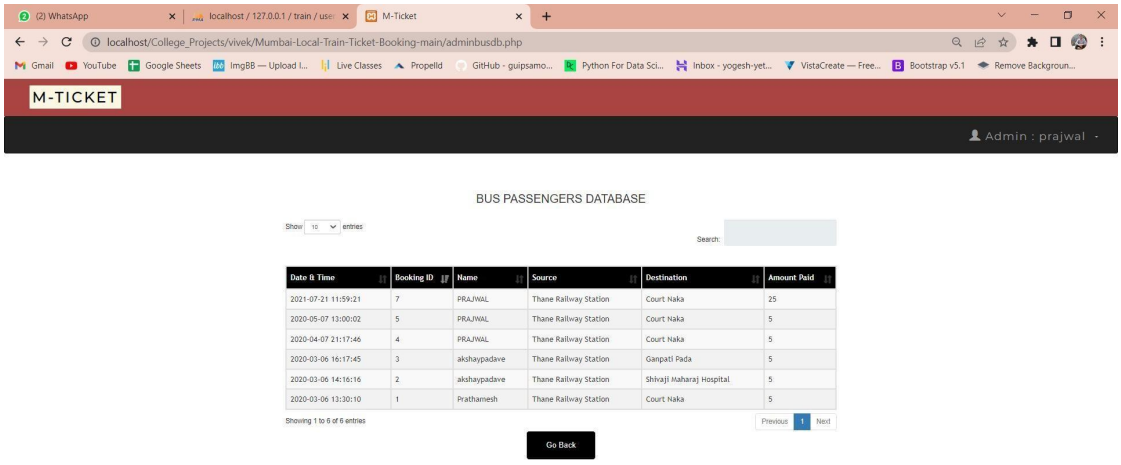

Fig 19: Bus Bookings

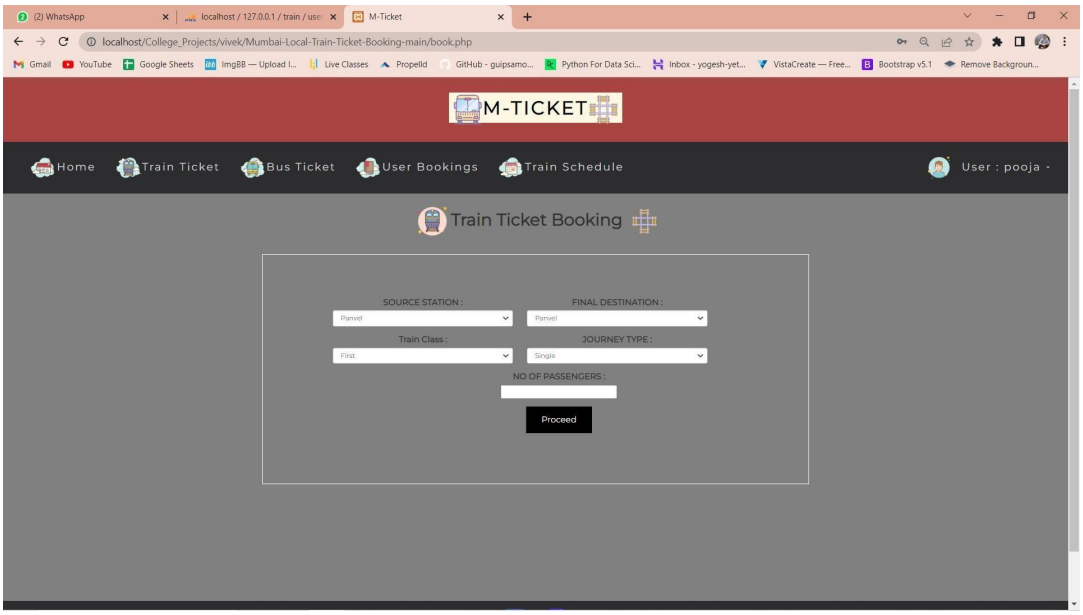

Fig 20: Train booking form

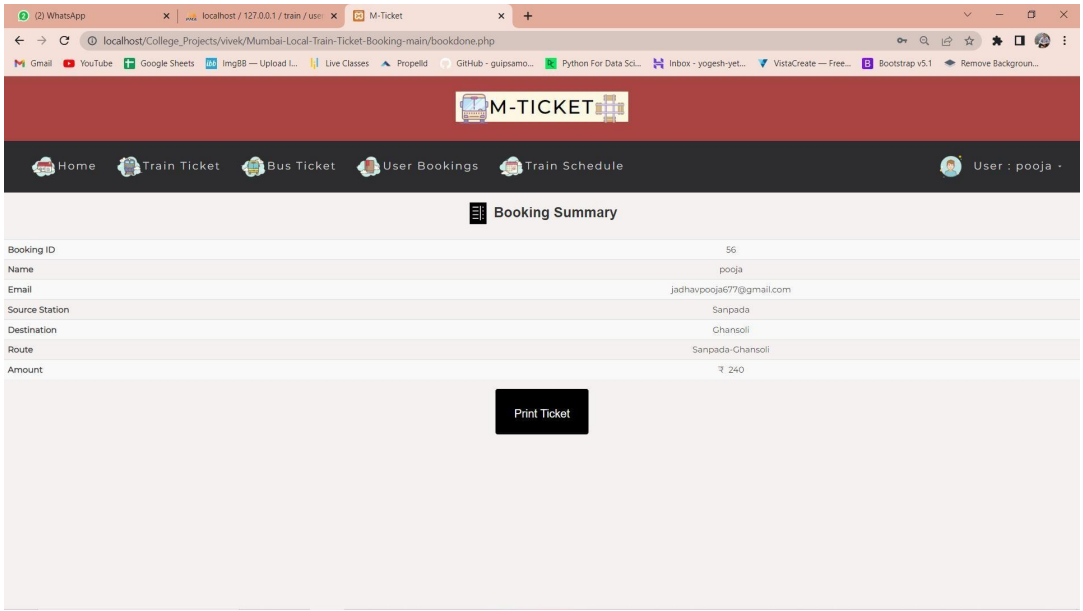

Fig 21: Booking Details

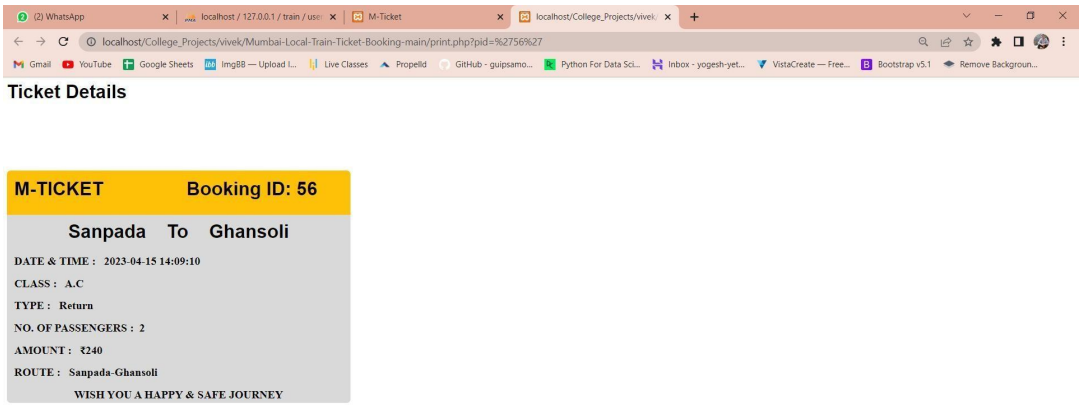

Fig 22: Print Ticket

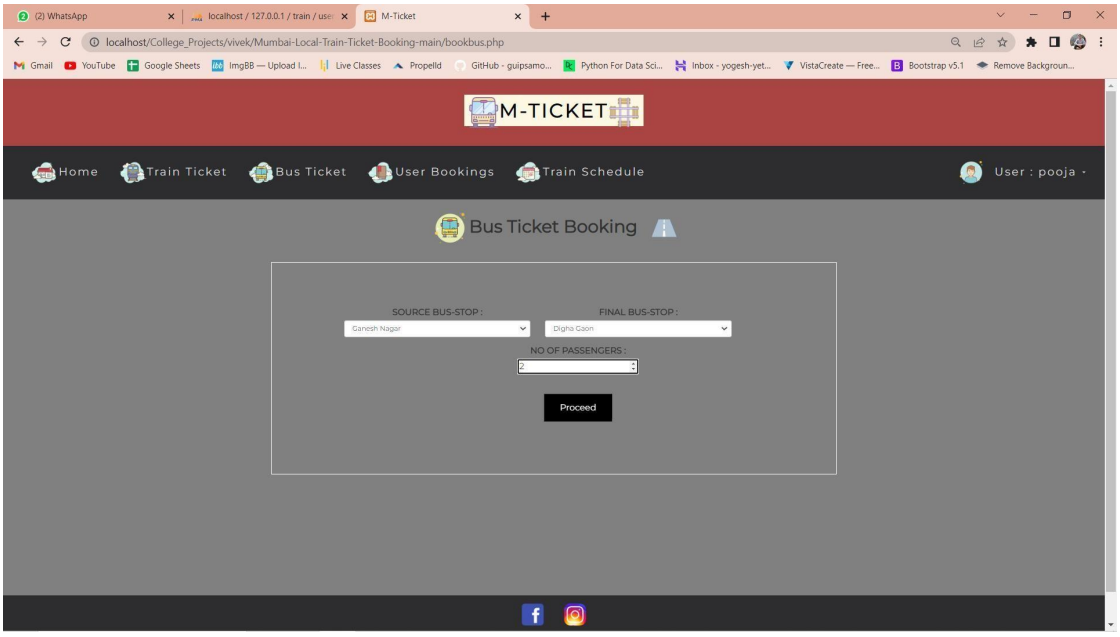

Fig 23: Bus Booking Form

CHAPTER 12

FUTURE SCOPE

Future Scope

- The GPS of the smart phone will be used to identify the locations.
- The GPS will play the role of the checker, where the user buys the ticket, the source geo points, destination geo-points, ticket type, expiry time & date are stored in the database.
- We can visualize that M-Ticket system will have an application portfolio with a mix of cloud-based services delivered across a combination of private, hybrid, and public cloud-based infrastructure deployment models.
- Thus, using cloud computing technology in train and bus system is the most efficient, cost-saving, time-saving and sterilisable technique for waiting ticket holders.

CHAPTER 13

CONCLUSION

Conclusion

- So thus we have developed “M-Ticket Booking System” which is a game-changer in the ticket booking industry, providing users with a seamless and convenient way to book tickets.
- The use of cloud technology ensures that the app is scalable, secure, and accessible from anywhere, making it an ideal choice for anyone looking to book tickets.

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RESEARCH PAPER

M- TICKET BOOKING SYSTEM

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Abstract:
This systemithasafacilityabout the analysisandpredictionof train and bus. Passengers can easily see book there ticket as per there convenience. GUI of system is easy to understand by passengers. At one time passenger can book ticket for 5 people. The M-Ticket Book System for Trains and Bus is an automated system designed to simplify and streamline the ticket booking process for train and bus travelers. This system is intended to provide an efficient and convenient solution to booking train tickets. The system includes a user-friendly interface for passengers to book tickets and a backend database for managing and storing passenger information and booking details. This paper presents the development of an M Ticket booking system for bus and train transportation. The proposed system aims to provide a convenient and user-friendly experience for customers to book and purchase their tickets using their mobile phones.

***Keywords*: M Ticket booking system, Bus, Train, Client-server model, Real-time updates, Secure online payments, Instant confirmation, Scalability, User evaluation.**

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INTRODUCTION

The Cloud-Based M-Ticket Booking System, which provides a convenient way for users to book tickets for the train and bus. This system is designed to be user-friendly, that allows users to search for train and bus any by location, date. It also enables users to view the availability of tickets, select their seats, and pay for their tickets. The system also provides users with real-time updates on the status of their bookings and sends them notifications about any changes or updates to their tickets. This helps to reduce the possibility of double bookings or any confusion regarding the event to improve their bookings and sends them notifications about any changes or updates to their tickets. This helps to reduce the possibility of double bookings or any confusion regarding the event. The m-ticket booking system is cloud-based system that enables users to book train and bus tickets through their mobile devices. The system is designed to offer convenience and flexibility to travelers by allowing them to book tickets anytime and anywhere. The cloud-based nature of the system means that it is accessible from anywhere with an internet connection. This makes it possible for users to book without the need to visit a physical booking office or stand in long queues. The m-ticket booking system is designed to be user-friendly and easy to use. It offers a variety of features that make the ticket booking process simple and straightforward. Overall, the m-ticket booking system offers a convenient and efficient way for travelers to book train and bus tickets on the go. With its cloud-based architecture, it provides a reliable and accessible solution for those who need to book tickets

quickly and easily.

LITURATURE SURVEY

Author: Nwakanma Ifeanyi Cosmas, Etus C, Ajere I.U. &AgomuoUchechukwu GodswillFindings: - Online Bus Ticket Reservation System is a Web based application that works within a centralized network. This project presents a review on the software program "Online Bus Ticket Reservation System" as should be used in a bus transportation system, a facility which is used to reserve seats, cancellation of reservation

and different types of route enquiries used on securing quick reservations. OBTRS is built for managing and computerizing the traditional database, ticket booking and tracking bus and travel made. It maintains all customer details, bus details, reservation details. In order to achieve the design, Imo Transport Company (ITC) was chosen as a case study because of its strategic importance to Imo State. Structured Systems Analysis and Design Methodology (SSADM) was adopted. In addition, PHP Hypertext Preprocessor (PHP) language was used for the front- end of the software while the back end was designed using MySQL. The software achieved is capable of improving the customer hand and relationship management in ITC operations. It is recommended that despite the present functionality of the designed software, an additional functionality such as the use of E-mail to send tickets and notifications to the customer and an online payment using credit cards/debit cards should be implemented into the system. Furthermore, other operations carried by ITC such as the courier services should also be integrated in order to enhance the system.

Author: K.Laxmi Sai Prasanna, K.Shivani , N.Vaishnavi , Ms.P R Anisha , Dr.B V Ramana Murthy &Mr.C Kishor Kumar Reddy Findings: Travelers are a large growing business across all countries. Bus reservation system deals with the maintenance of records of details of each bus. We observed the working of the bus reservation system and after going through it, we got to know that there are many operations, which they have to do manually. It takes a lot of time and causing many errors while data entry. Due to this, sometimes a lot of problems occur and they were facing many problems with the costumers. To solve the above problem, and further maintaining records of passenger details, seat number etc., by this software we can book tickets very easily and we can know easily that how many seats are still available..

Author: Paresh Satoskar, Mayuresh Prabhu, Karan Rajput, Neha Jadhav Findings: - Whole world is facing COVID-19 pandemic problem. The virus is primarily spread among people during close contact, most often through small droplets produced by coughing, sneezing and talking. The World Health Organization advised to wash hands, wear masks, maintain social distance, and disinfect personal belongings for preventing spread of corona virus. Motive to work on this prototype is that to maintain social distancing while travelling in state transport bus system. Because of the pandemic situation, bus transport system allowed only limited number of persons to maintain social distancing. This system does the reservation by following the social distance norm. The unit of reservation system is kept on state transport bus station. Here the passenger can purchase ticket using NFC Card. The passenger swipes the NFC Card and then selects the destination. The seat number will be allocated keeping in mind social distancing norms.

Author: Sourodeep Chatterjee,Soham Das, Divisha; Bhaskar Goswami; Pallab Nag; Chittaranjan PradhanFindings: This paper includes facilities for the Indian Railway Reservation System, such as dynamic seat allocation and real time charting. Real Time Charting provides additional benefits to both the passenger and the TTE. Using the proposed system, TTE can allocate seat dynamically if the seat is vacant while in transit and at the same time a passenger can also book a ticket until and unless the train has left the boarding station. The entire transaction will be stored in the central system which regulates and automates the proposed model. It also provides seat booking layout so that passengers can book seat of their choice on the relative place in the coach. The entire process is network efficient, thus our proposed system has bare minimum requirement for internet connectivity.

AIM & OBJECTIVES

1. The primary objective of this system is to provide a hassle-free and efficient method for booking train tickets for passengers. Additionally, this system aims to:

- Reduce the time and effort required for booking train tickets.
- Automate the ticket booking process to improve efficiency.
- Ensure accuracy in ticket booking details.
- Provide a secure system for storing passenger data and ticket booking information.

MOTIVATION

A ticket booking system makes it easy for passengers to book their tickets from anywhere and at any time, without having to visit a ticket counter physically. With a ticket booking system, the process of booking tickets becomes faster and more efficient, reducing waiting times and queues at ticket counters. A ticket booking system can help increase revenue for transportation companies by making it easier for passengers to book tickets, which can lead to more bookings and increased profitability. Offering a convenient and efficient ticket booking system can help retain customers and improve customer satisfaction, leading to increased loyalty and repeat business. A ticket booking system for buses and trains can be highly motivated due to the convenience, efficiency, revenue potential, customer retention, and data analysis benefits it can offer.

SYSTEM ARCHITECTURE

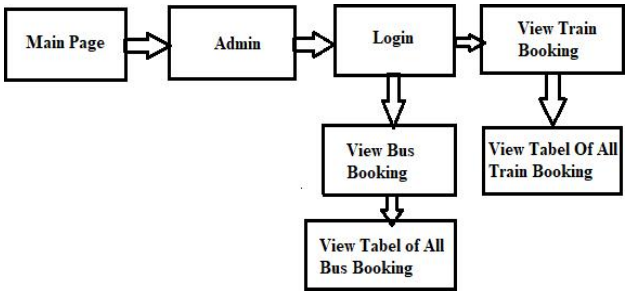


Fig -1: System Architecture Diagram (Admin Module)

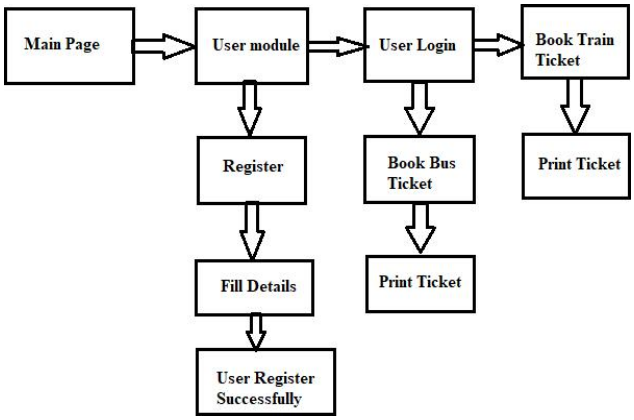
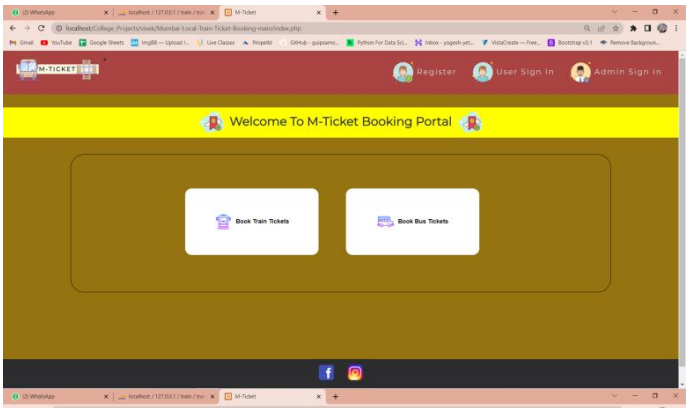


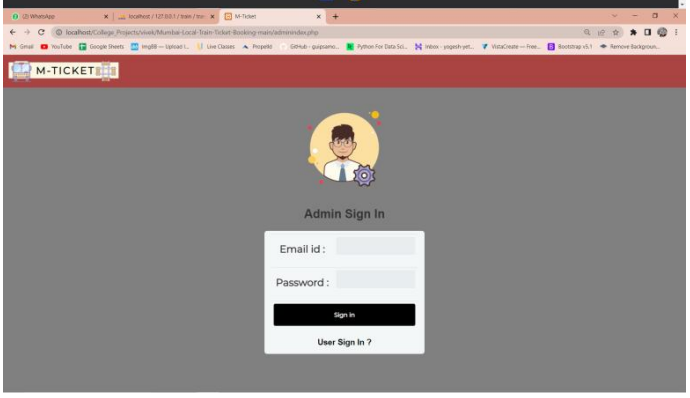
Fig -2: System Architecture Diagram (User Module)

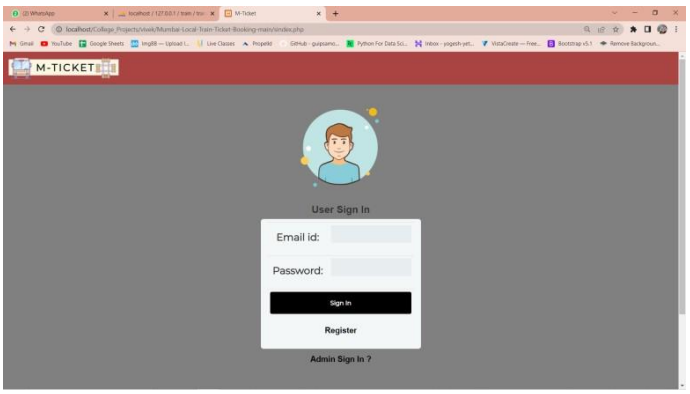
APPLICATION:

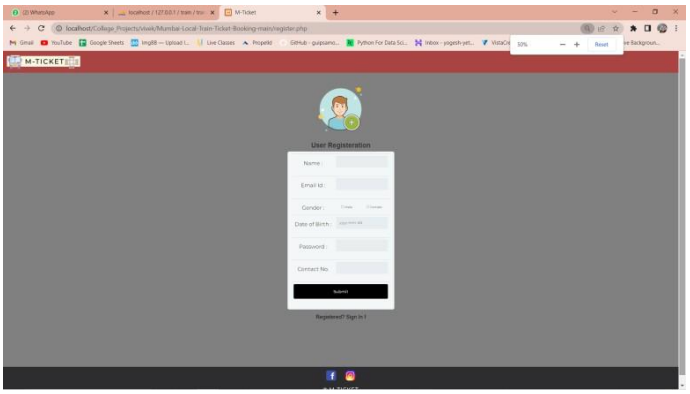
- Main Page
- Admin Login
- Admin Dashboard
- User Login
- User Dashboard

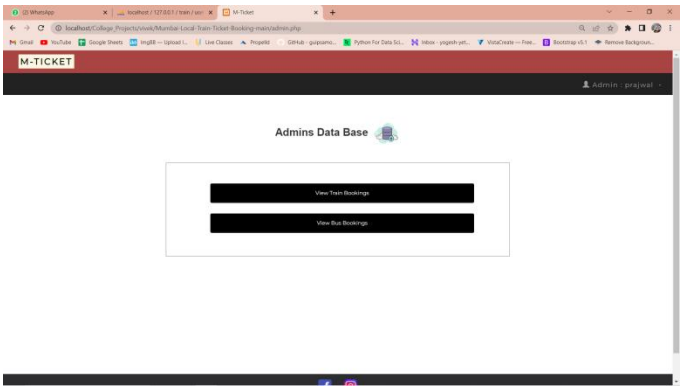
RESULT

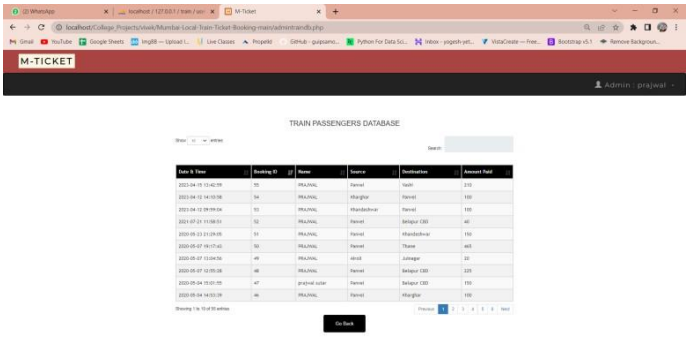

M-TICKET
Register
User Sign In
Admin Sign In
Welcome To M-Ticket Booking Portal
Book Train Tickets
Book Bus Tickets

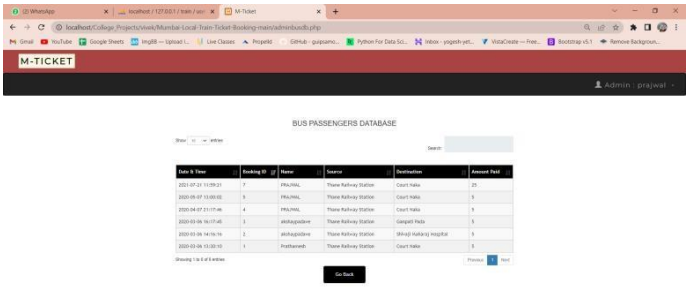

M-TICKET
Admin Sign In
Email id :
Password :
Sign in
User Sign In ?

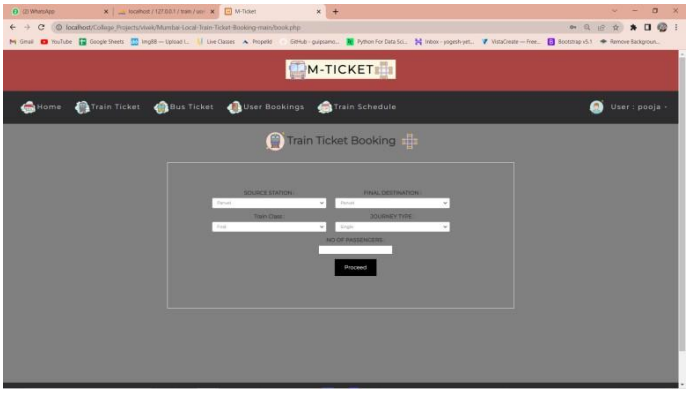

M-TICKET
User Sign In
Email id:
Password:
Sign in
Register
Admin Sign In ?

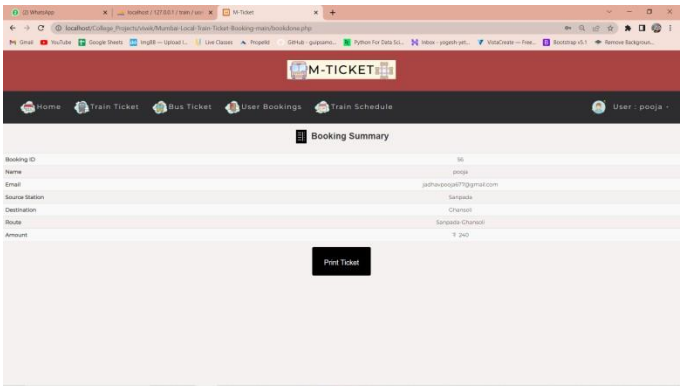

M-TICKET
User Registeration

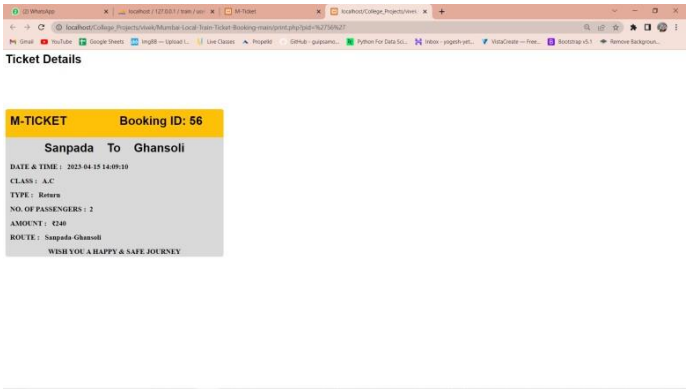

M-TICKET
Admin : prajwal
Admins Data Base
View Train Bookings
View Bus Bookings

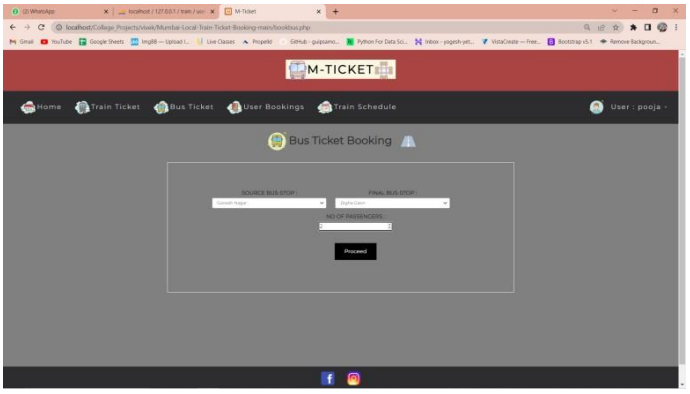

M-TICKET
Admin : prajwal
TRAIN PASSENGERS DATABASE
Go Back


M-TICKET
Admin : prajwal
BUS PASSENGERS DATABASE
Go Back

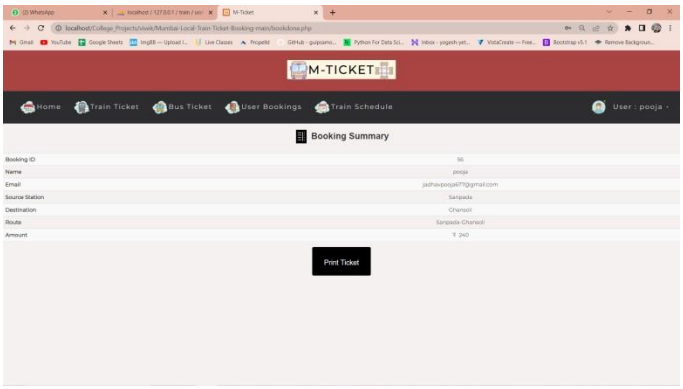

M-TICKET
Home
Train Ticket
Bus Ticket
User Bookings
Train Schedule
User : pooja
Train Ticket Booking
Proceed

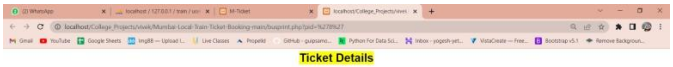

M-TICKET
Home
Train Ticket
Bus Ticket
User Bookings
Train Schedule
User : pooja
Booking Summary
Print Ticket


Ticket Details
M-TICKET
Booking ID: 56
Sanpada To Ghansoli
DATE & TIME : 2023-04-15 14:09:10
CLASS : A.C
TYPE : Return
NO. OF PASSENGERS : 2
AMOUNT : ₹240
ROUTE : Sanpada-Ghansoli
WISH YOU A HAPPY & SAFE JOURNEY


M-TICKET
Home
Train Ticket
Bus Ticket
User Bookings
Train Schedule
User : pooja
Bus Ticket Booking
Proceed


M-TICKET
Home
Train Ticket
Bus Ticket
User Bookings
Train Schedule
User : pooja
Total fare of bus number 502 from Ganesh Nagar to Digha Gaon is : ₹ 10
Checkout
Go back





Ticket Details

CONCLUSION

So thus we have developed "M-Ticket Booking System" which is a game-changer in the ticket booking industry, providing users with a seamless and convenient way to book tickets. The use of cloud technology ensures that the app is scalable, secure, and accessible from anywhere, making it an ideal choice for anyone looking to book tickets.A ticket booking system makes it easy for passengers to book their tickets from anywhere and at any time, without having to visit a ticket counter physically.

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Co-Author(s): Prajwal Choudhari, Abhishek Kolte, Nikshay Jain

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