

WEB BASED ADVANCED METRO RESERVATION SYSTEM

**Dissertation submitted to
Srinivasan College of Arts and Science**

*Affiliated to the Bharathidasan University,
in partial fulfillment of the requirements for the
award of the degree of*

MASTER OF COMPUTER APPLICATIONS

Submitted by

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APRIL - 2023

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DECLARATION

I am **CHANDRU. S** would like to declare that the project report entitled “**WEB BASE ADVANCED METRO RESERVATION SYSTEM**” submitted to Bharathidasan University in partial fulfillment of the requirement of the award of the degree “**MASTER OF COMPUTER APPLICATIONS**”. It’s an original work carried out by me under the guidance of **Prof.M.RAJAKUMAR,MCA.,M.Phil.,M.TECH.,(Ph.D.)** and all respected guides, faculty members and other sources have been properly acknowledged and the report contains no plagiarism. To the best of my knowledge and belief the matter embodied in this project is a genuine work done by me and it has been neither submitted for assessment to the Bharathidasan University nor to any other University for the fulfillment of the requirement of the course of study.

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CERTIFICATE

This is to certify that the project work titled **“WEB BASED ADVANCED METRO RESERVATION SYSTEM”** submitted to Bharathidasan University in partial fulfillment of the requirements for the award of the degree of **“MASTER OF COMPUTER APPLICATIONS”** of Bharathidasan University and the original work done by **CHANDRU. S** under my guidance and that this project work has not formed the basis for the award of any Degree / Diploma / Fellowship or similar title to any candidate of any University.

SIGNATURE OF THE GUIDE

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INTERNAL EXAMINER

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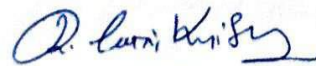
March 26, 2023

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. S. CHANDRU (Reg. No: 21280425), who is doing his final year MCA from SRINIVASAN COLLEGE OF ARTS & SCIENCE - PERAMBALUR, has successfully completed his project in our concern under the title of "WEB BASE ADVANCED METRO RESERVATION SYSTEM" in our concern during the period from **January 2023 to March 2023**, his Performance was good.



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ABSTRACT

As technology develops, new tools and software are created to make man's task easier. It takes a lot of time to wait in line for metro train tickets. In my metro ticket booking system automation would be helpful for the government to implement proper and better rates for tickets and also for the people as they wouldn't need to wait in long lines. It would also be beneficial for the government to diagnose record of real-time data of each who are all using metro tickets. By using this technique, travelers can purchase their tickets without having to wait in lengthy lines. In this project the admin can login the system using his/her user name and password. After the login process the admin can add and update the train details. The system allows the railway passengers to search for trains that are available between the two travel cities, namely the departure place and arrival place for a particular departure and arrival dates. The system display list of available trains and allows customer to choose and book a particular train. In this project we can view the passenger address to verify if any issue happened to the particular passenger. Also it has a specific ticket booking method which has bending and approved method of ticket booking which helps to control the passenger limits on the train. More over the passenger can apply their personalized travel and trip cards to travel on the metro train. Also the passenger can apply for the travel insurance.

CHAPTER-1

CHAPTER 1

INTRODUCTION

In this Metro Reservation System Project in PHP focuses mainly on managing online metro train tickets. To be more precise, the system helps to keep track of all online ticket bookings and information. Also, the system displays all the available passengers and routes. In addition, the system allows adding up train, and ticket details too. Evidently, this project contains an admin panel with an employee and passenger panel. In an overview of this web application, passengers can simply register themselves and log into the system in order to book online tickets. He/she can view a list of available trains with their routes, fares, and others respectively. With it, passengers can book trains by selecting any. For this, the passenger has to check out the online train reservation by providing a payment code. At last, the passengers can view their tickets from the ticket section. Before anything, this whole online ticket reservation process from a passenger's account is not considered to be finalized by the system. Meaning, the tickets are set to pending status by default, which requires approval from the system administrator. From the ticket section, passenger can also print their tickets. Besides, the passengers can cancel their tickets anytime. Also, the users can view, and update their profiles.

1.1. OVERVIEW OF THE PROJECT

The main objective of the Project on Web Base Advanced Metro Reservation System is to manage the details of Train, Ticket, Booking, Customer, Payment. It manages all the information about Train, Seat, Payment, Train. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Train, Ticket, Seat, Booking. It tracks all the details about the Booking, Customer, Payment. Also the project has three types of modules. The first portion is admin module which has full control of the project. In this module the admin can manage train details, employee details, passenger details etc. Also it has accounting section which clearly clarify about the ticket booking summary whether its in a pending stage or the approved stage. The second module is about employee who has the full control like admin module but some of the features can be different from that. The last one is passenger or the user login module. Here it has login page for the existing user and the registration page for the new user. User can view the available trains and the route, ticket fare, etc. After the user booked he train the user can cancel the ticket by their wish and also they can print their tickets with the qr code.

1.2. PROBLEM DESCRIPTION

As technology develops, new tools and software are created to make man's task easier. It takes a lot of time to wait in line for train tickets. By using this technique, travelers can purchase their tickets without having to wait in lengthy lines. In this project the admin can login the system using his/her username and password. After the login process the admin can add and update the train details. In this project the admin can login the system using his/her user name and password. After the login process the admin can add and update the train details. This system provides a facility for ticket checker to check daily passenger's ticket by just scanning the QR-code. The outcome of this project to perform maintaining all the records about the user who is booked the ticket and which is used for further investigations. In this ticket booking system it has every single details about the passenger to enquiry at any time easily. Also there is no facility to get the metro travel card through online apply. If the passenger want travel or the trip card they must be go to the ticket counter by themselves. More over in metro there is no travel insurance policy available to the passenger in chennai.

CHAPTER-2

CHAPTER 2

SYSTEM ANALYSIS

2.1. EXISTING SYSTEM

Lack of security of data which stored the low level of data about the passenger. A number of passengers arrived at same time and booked the tickets which is going to be make a harmful incident. We did not have a proper detail about the passenger who booked the train for the emergency enquiry. By giving a few details and some payment, a traveler can easily booked their tickets. According to the proposed system the existed system have more man power.

2.1.1. DISADVANTAGES OF EXISTING SYSTEM

In the existing system it has low amount of details about the passenger. They didn't need to input their address etc. More over in the metro reservation system they didn't control the number of passengers arrived at the same time to the travel. Just image the metro train has maximum 300 passengers capacity to travel. What can they do if 500 passengers booked to travel in the train. In indian railways they have alternative method to control this type of incident.. But in metro system they didn't have any method to control this thing. Lack of features. Also doesn't have an insurance for the travel purpose.

2.2. PROPOSED SYSTEM

The aim of the proposed system is to develop a system over come all the limitations of the existing systems. The system provides proper security and reduces the manual work. Ensure data accuracy's. Proper control of information about the passengers. The proposed system has bending and approved stages of ticket booking method. which is very helpful to control the number of passengers getting in to the train to avoid the rush. Also it has online method of travel and trip card applying facility. More over it has travel insurance policy to the passengers. We can also track the train by using this system.

2.2.1. ADVANTAGES OF PROPOSED SYSTEM

In the proposed system that person has to fill the various forms & number of copies of the forms can be easily generated at a time. In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time. To assist the staff in capturing the effort spent on their respective working areas. It satisfy the user requirement. Be easy to understand by the user and operator. Be easy to operate. Have a good user interface. It has tracking button which can be used to track the metro train live location. More over it has travel insurance which helps to the passenger if they meet any accident while travelling on the metro train. Also the passenger can apply travel and trip card through online by using this system. The card also be a personalized format which can be helped to the user to identify their card in a collection of cards. Passenger can recharge their metro card by using this system.

CHAPTER-3

CHAPTER 3

SYSTEM SPECIFICATION

3.1. HARDWARE REQUIREMENTS

The hardware requirements may serve as the basics for a contract for the implementation of the system and should therefore be a complete and consistent specification of the whole system. They are used by software engineers as the starting point for the system design.

Processor	:	Intel i3 (R) Pentium Quad core.
Speed	:	3 GHz and Above
Hard Disk	:	Minimum 64 GB
Memory (RAM)	:	Minimum 4 GB
Monitor	:	15 LED SVGA

3.2. SOFTWARE REQUIREMENTS

The software requirements document is the specification of the system. It should include both a definition and a specification of requirements. It is a set of what the system should do rather than how it should do it. The software requirements provide a basic for creating the software requirements specification.

Operating system	:	Windows 7 / 8 / 8.1 / 10
Front end	:	HTML , CSS , JavaScript
Back end	:	PHP
Database	:	MySQL
Framework	:	Bootstrap
Application Server	:	WampServer

CHAPTER-4

CHAPTER 4

SOFTWARE DESCRIPTION

4.1. FRONT-END

- **HTML**

INTRODUCTION TO HTML:

HTML is an acronym which stands for Hyper Text Markup Language which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page. Text: Hyper Text simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. Hyper Text is a way to link two or more web pages with each other. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.



Figure 4.1: HTML Logo

KEYPOINTS OF HTML:

- HTML stands for Hyper Text Markup Language.
- HTML is the standard markup 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.

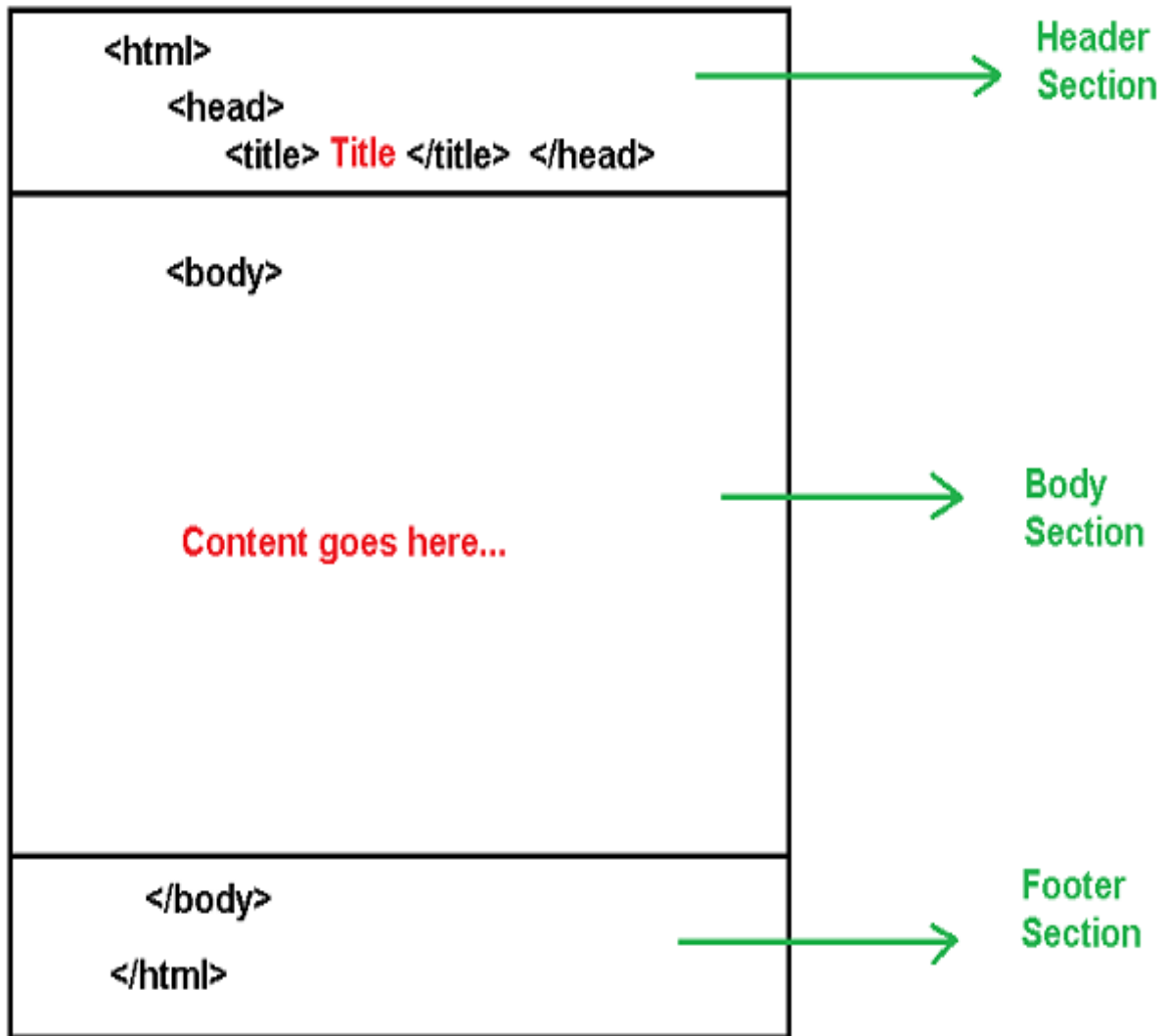


Figure 4.2 html structure

HTML STRUCTURE DESCRIPTION:

The above figure represents the html language basic structure. The first section of the html is header section. In the header section it contains title of the web application and so far some of the design and framework links. There after the second section of the html is body tag. In the body tag it contains all the content of the web application like the list, paragraph, table, design, etc. Last part of the html section is footer area. In this area it contains the basic address of the particular company websites.

- **CSS**

INTRODUCTION TO CSS:

Cascading Style Sheets is a stylesheet language used to describe the presentation of a document written in HTML or XML . It is used to style and layout web pages for example, to alter the font, color, size, and spacing of your content, split it into multiple columns, or add animations and other decorative features. This module provides a gentle beginning to your path towards CSS mastery with the basics of how it works. CSS describes how elements should be rendered on screen, on paper, in speech, or on other media. CSS is among the core languages of the open web and is standardized across web browsers according to W3C. Previously, the development of various parts of CSS specification was done synchronously, which allowed the versioning of the latest recommendations.



Figure 4.3: CSS Logo

KEYPOINTS OF CSS:

- The syntax and forms of the language.
- Specificity, inheritance, and the Cascade.
- CSS units and values and functional notations.
- Box model and margin collapse.
- The containing block.
- Stacking and block-formatting contexts.
- Initial, computed, used, and actual values.
- CSS shorthand properties.

- **JAVASCRIPT**

INTRODUCTION TO JAVASCRIPT:

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities. JavaScript was first known as Live Script, but Netscape changed its name to JavaScript, possibly because of the excitement being generated by Java. JavaScript made its first appearance in Netscape 2.0 in 1995 with the name Live Script. The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other web browsers. Less server interaction helps validate user input before sending the page off to the server. This saves server traffic, which means less load on your server.



Figure 4.4: JavaScript Logo

KEYPOINTS OF JAVASCRIPT:

- New Array Functions.
- Simple client-side calculations.
- Platform Independent.
- Template Literal.
- Recognizing the User's Browser and OS.
- Let/Const.
- Default Parameters.
- Greater Control.

- **BOOTSTRAP FRAMEWORK**

INTRODUCTION TO BOOTSTRAP:

Bootstrap is a free, open source front-end development framework for the creation of websites and web apps. Designed to enable responsive development of mobile first websites, Bootstrap provides a collection of syntax for template designs. As a framework, Bootstrap includes the basics for responsive web development, so developers only need to insert the code into a pre-defined grid system. The bootstrap framework is built on hypertext markup language, cascading style sheets and JavaScript. Web developers using bootstrap can build websites much faster without spending time worrying about basic commands and function. Bootstrap makes responsive web design a reality. It makes it possible for a web page or app to detect the visitor's screen size and orientation and automatically adapt the displaying accordingly. The mobile first approach assumes smartphones, tablets and task specific mobile apps are employees primary tools for getting work done.



Figure 4.5: Bootstrap Logo

KEYPOINTS OF BOOTSTRAP:

- Easy to Use.
- Mobile-Friendly.
- Customizable Bootstrap.
- Simple Integration.
- Pre-styled Components.
- Responsive Features.
- Browser Compatibility.
- Great Grid System.

4.2. BACK-END:

- **PHP**

INTRODUCTION TO PHP:

The term PHP is an acronym for PHP: Hypertext Preprocessor. PHP is a server-side scripting language designed specifically for web development. It is open-source which means it is free to download and use. It is very simple to learn and use. The files have the extension “.php”. Rasmus Lerdorf inspired the first version of PHP and participated in the later versions. It is an interpreted language and it does not require a compiler. PHP code is executed in the server. It can be integrated with many databases such as Oracle, Microsoft SQL Server, MySQL, PostgreSQL, Sybase, and Informix. It is powerful to hold a content management system like WordPress and can be used to control user access. It supports main protocols like HTTP Basic, HTTP Digest, IMAP, FTP, and others. Websites like www.facebook.com and www.yahoo.com are also built on PHP.



Figure 4.6: PHP Logo

KEYPOINTS OF PHP:

- PHP can generate dynamic page content.
- PHP can create, open, read, write, delete, and close files on the server.
- PHP can collect form data.
- PHP can send and receive cookies.
- PHP can add, delete, modify data in your database.
- PHP can be used to control user-access.

- **MYSQL**

INTRODUCTION TO MYSQL:

MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing. MySQL is an important component of an open source enterprise stack called LAMP. LAMP is a web development platform that uses Linux as the operating system, Apache as the web server, MySQL as the relational database management system and PHP as the object-oriented scripting language.



Figure 4.7: MySQL Logo

KEYPOINTS OF MYSQL:

- Relational Database Management System (RDBMS).
- Easy to use.
- It is secure.
- Client/ Server Architecture. MySQL follows the working of a client/server architecture.
- Free to download.
- It is scalable.
- Speed.
- High Flexibility.

- **WAMPSEVER:**

INTRODUCTION TO WAMPSEVER:

WAMP is an acronym that stands for Windows, Apache, MySQL, and PHP. It's a software stack which means installing WAMP installs Apache, MySQL, and PHP on your operating system (Windows in the case of WAMP). Even though you can install them separately, they are usually bundled up, and for a good reason too. What's good to know is that WAMP derives from LAMP (the L stands for Linux). The only difference between these two is that WAMP is used for Windows, while LAMP – for Linux based operating systems.



Figure 4.8: WampServer Logo

KEYPOINTS OF WAMPSEVER:

- It is supported by Windows.
- It includes Apache, MySQL, and PHP.
- Its straightforward interface makes it effortless to use.
- It is not an open source platform.
- The installation and configuration process is relatively effortless.
- It comprises modules supported on Windows.

CHAPTER-5

CHAPTER 5

SYSTEM DESIGN

5.1. DATAFLOW DIAGRAM

A data flow diagram is a to-dimensional diagram that explains how data is processed and transferred in a system. Individuals seeking to draft a data flow diagram must identify external inputs and outputs, determine how the inputs and output relate to each other.



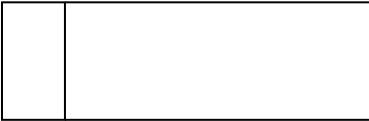

Symbol	Description
	An entity. A source of data or a destination for data.
	A process or task that is performed by the system.
	A data store, a plate where data is held between processes.
	A data flow.

Table 5.1: Data Flow Diagram symbols with description

- **Level 0 DFD:**

Level 0 data flow diagram represents the main concept of this system. the main concept of this system is online method of metro ticket booking system. Passengers are the customers who performed the activity in here the system is the provider who provide all the details about the train details, train time, train fare to the passengers throw out the help of the admin panel. An admin can manage the train details and update the new train routes also can manage the employees, passenger details. Each and every booking history will be maintained throw out admin and the employee panels.

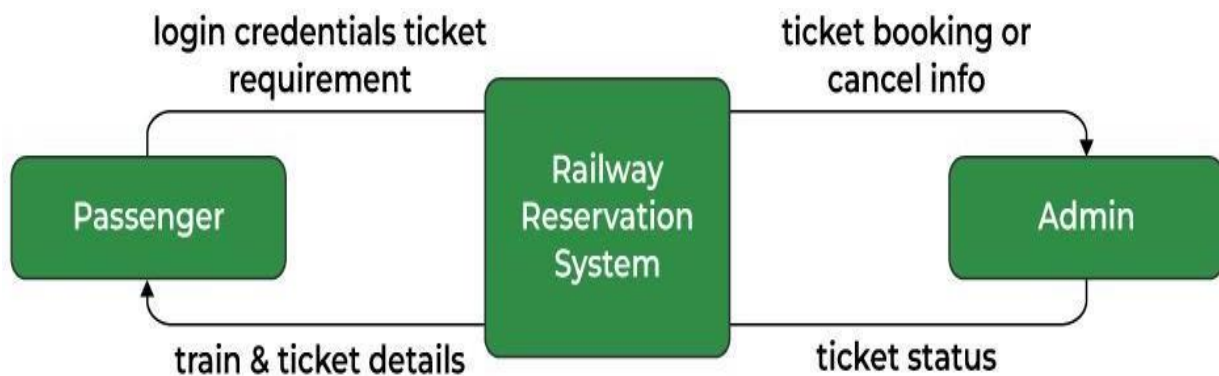


Figure 5.1: Level 0 Data Flow Diagram for overall system process

- **Level 1 DFD:**

First Level DFD (1st Level) of Metro Reservation System shows how the system is divided into sub-systems (processes), each of which deals with one or more of the data flows to or from an external agent, and which together provide all of the functionality of the Railway Reservation System as a whole. It also identifies internal data stores of Payment, Customer, Train Route, Train schedule, Ticket that must be present in order for the Metro Reservation system to do its job, and shows the flow of data between the various parts of Trains, Ticket, Customer, Payment, Train Route of the system. DFD Level 1 provides a more detailed breakout of pieces of the 1st level DFD.

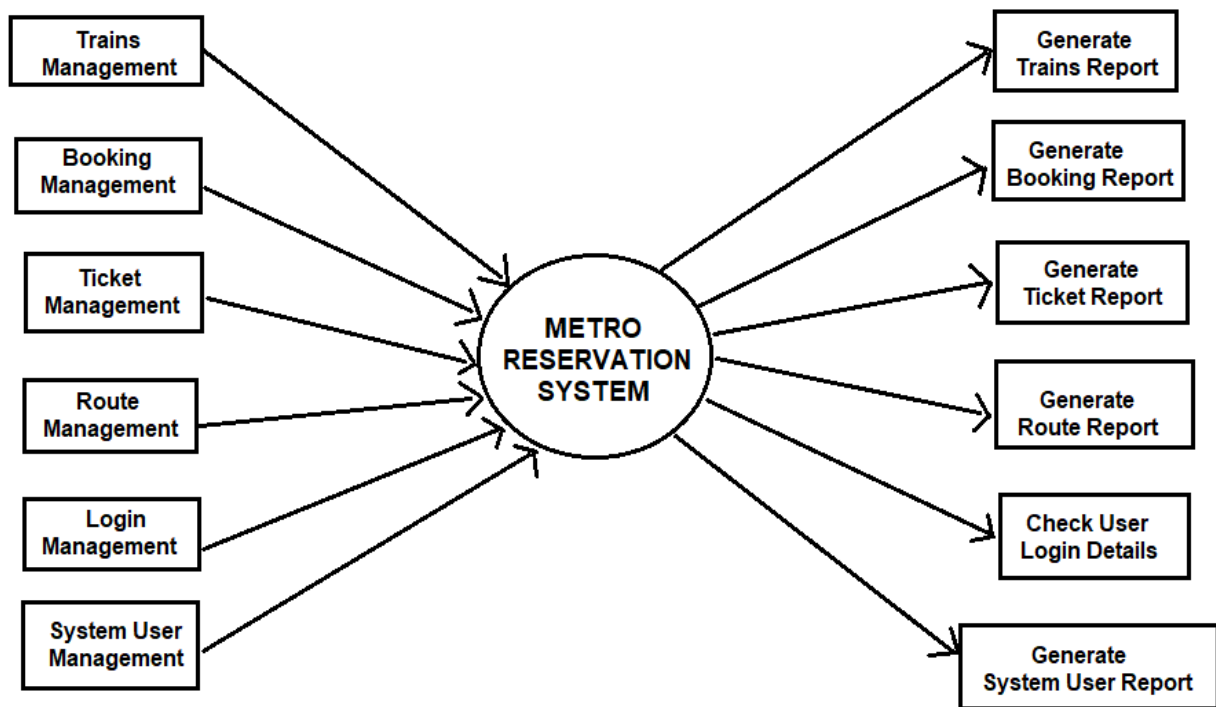


Figure 5.2: Level 1 Data Flow Diagram for Sub-System Process

- **Level 2 DFD:**

DFD Level 2 then goes one step deeper into parts of Level 1 of Railway Reservation. It may require more functionalities of Railway Reservation to reach the necessary level of detail about the Metro Reservation functioning. First Level DFD (1st Level) of Metro Reservation System shows how the system is divided into sub-systems (processes). The 2nd Level DFD contains more details of Payment, Customer, Train Route, Train Schedule, Ticket, Booking, Trains.

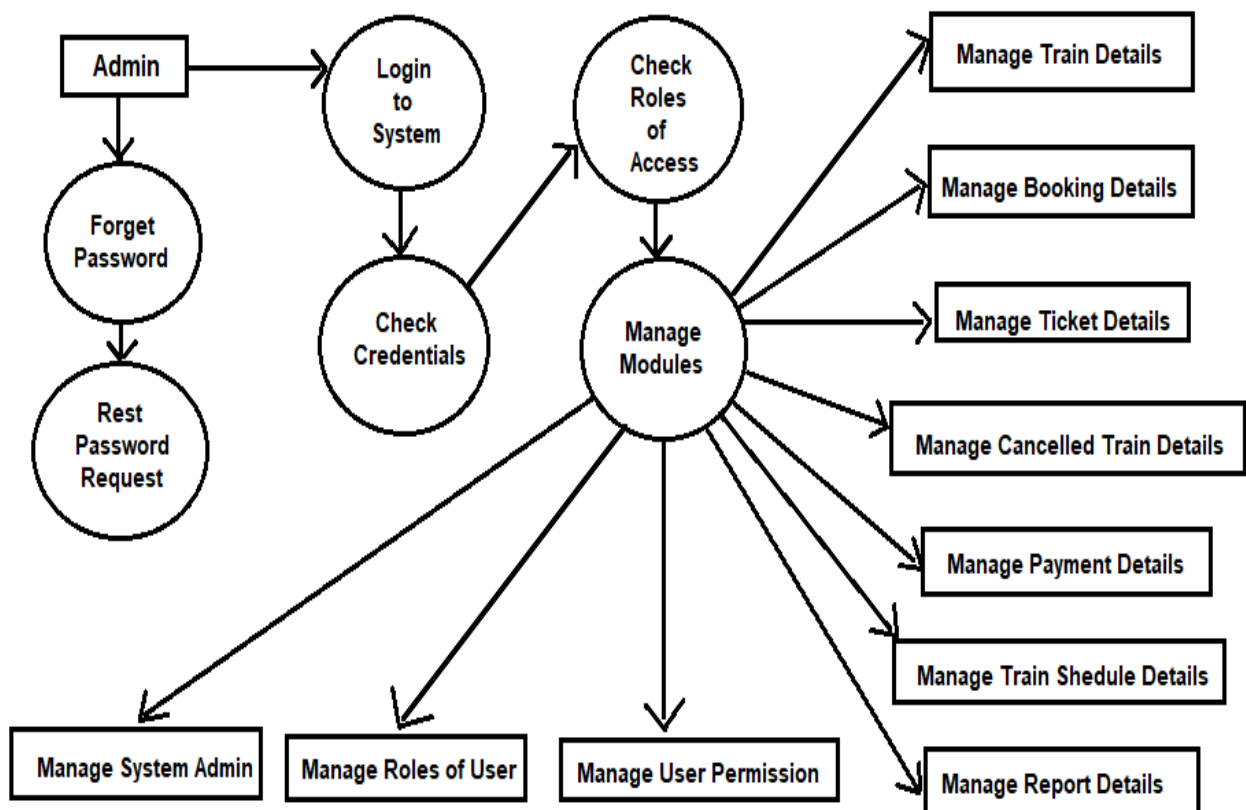


Figure 5.3: Level 2 Data Flow Diagram for Admin Process

5.2. SYSTEM ARCHITECTURE

System Architecture Diagram represents the process about the overall system functions. The main part of the system processed by the admin. An admin can manage all over the sub-system of this project. Admin can manage train details, passenger details, employee details as well as accounting section too. Under the admin control the employee also can manage the train details and the passenger details as well as accounting section. The main part of this project is satisfy the passenger needs. Passenger can book their Metro Tickets by using this project throw out online method.

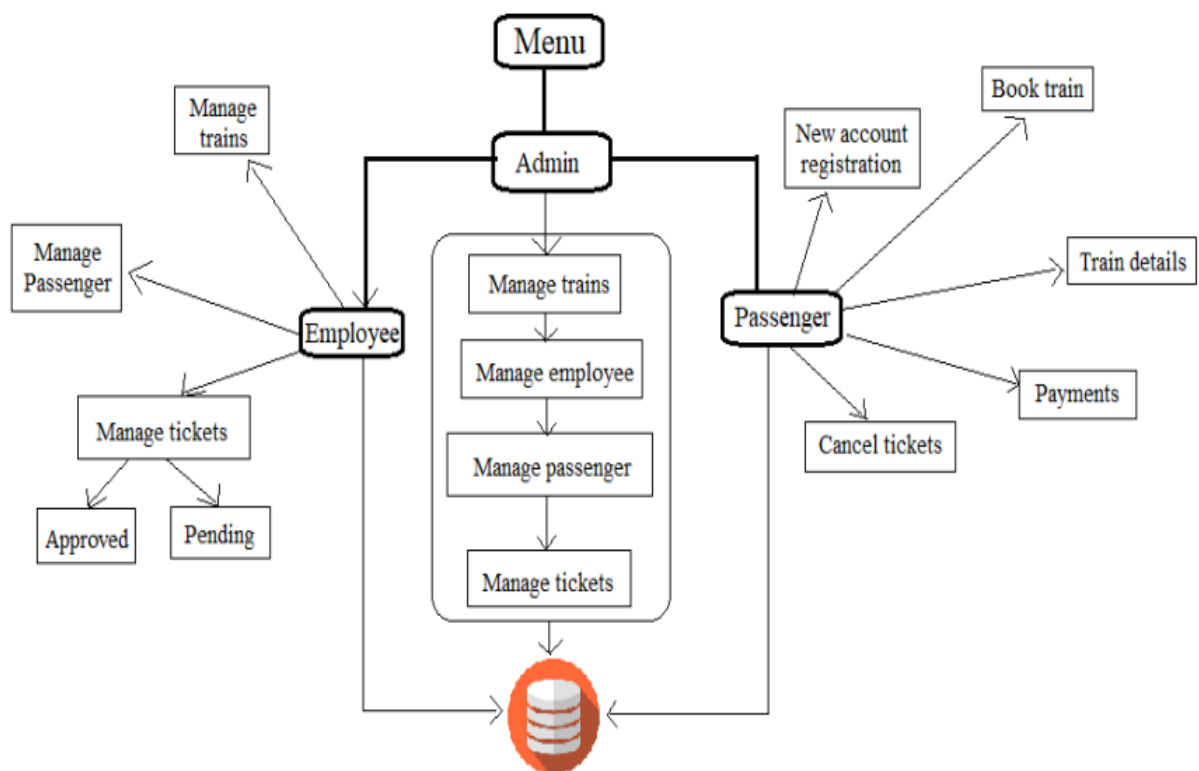


Figure 5.4: System Architecture Diagram

5.3. DATABASE DESIGN

- **Admin Database:**

Field	Type	Null	Default	Key
Id	Int(10)	No	None	Primary
Fname	Varchar(20)	No	None	
Lname	Varchar(20)	No	None	
Email	Varchar(20)	No	None	
Uname	Varchar(20)	No	None	
Password	Varchar(20)	No	None	

Table 5.2: Admin Database

- **Password Reset Database:**

Field	Type	Null	Default	Key
Id	Int(10)	No	None	Primary
Email	Varchar(20)	No	None	
Status	Varchar(20)	No	None	

Table 5.3: Password Reset Database

- **Employee Database:**

Field	Type	Null	Default	Key
Id	Int(12)	No	None	Primary
Fname	Varchar(20)	No	None	
Lname	Varchar(20)	No	None	
Nat_idno	Varchar(20)	No	None	
Phone	Varchar(20)	No	None	
Address	Varchar(20)	No	None	
Username	Varchar(20)	No	None	
Email	Varchar(20)	No	None	
Password	Varchar(20)	No	None	

Table 5.4: Employee Database

- **Train Database:**

Field	Type	Null	Default	Key
Id	Int(10)	No	None	Primary
Name	Varchar(20)	No	None	
Route	Varchar(20)	No	None	
Current	Varchar(20)	No	None	
Destination	Varchar(20)	No	None	
Time	Varchar(20)	No	None	
Passengers	Varchar(20)	No	None	
Fare	Int(5)	No	None	

Table 5.5: Train Database

- **Passenger Database:**

Field	Type	Null	Default	Key
Id	Int(10)	No	None	Primary
Fname	Varchar(20)	No	None	
Lname	Varchar(20)	No	None	
Phone	Varchar(20)	No	None	
Address	Varchar(20)	No	None	
Email	Varchar(20)	No	None	
Password	Varchar(20)	No	None	
Uname	Varchar(20)	No	None	
Birthday	Varchar(20)	No	None	
Bio	longtext	No	None	

Table 5.6: Passenger Database

5.4. UML DIAGRAMS

- **CLASS DIAGRAM:**

A class diagram in UML diagrams can be represents about the sub-systems of this project. It has a collection of classes by separate format. Each and every class have its own attributes with the primary key. In this project the classes are separated by based on the access level. For example the users can only book the train and print their tickets. So that the user or the passenger can be access the ticket class and the train class. More over the employee can access passengers class too and the admin can manage and access the whole classes in this project.

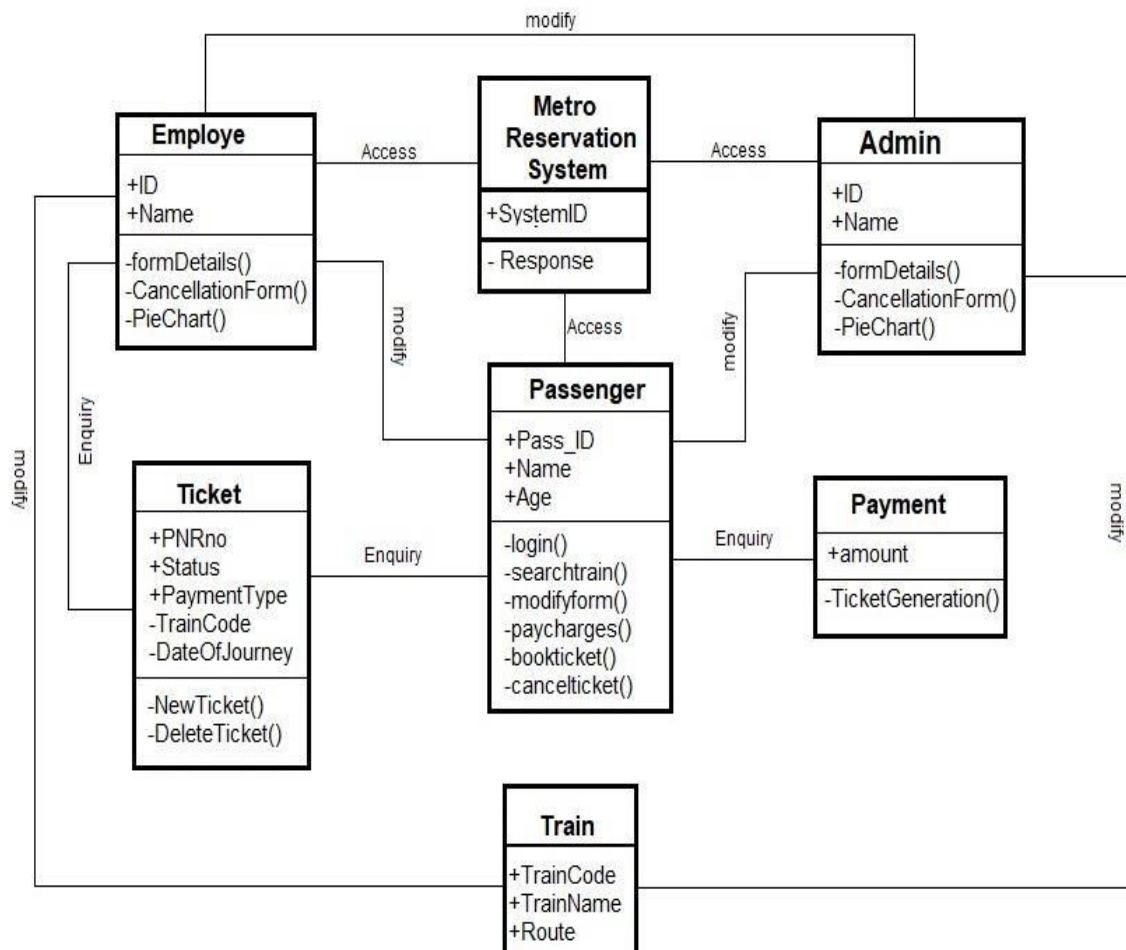


Figure 5.5: UML Class Diagram

- **USE CASE DIAGRAM:**

The use case diagram in the UML diagram that represent the activity between the actors. In this project there are 3 actors are here. An admin, employee and passengers. For example the passenger can booked their ticket and the request is goes to the admin and also the employees. They can manage that request and process their ticket there after they provide the booked ticket to the passenger. Like this the passenger can print their booked tickets.

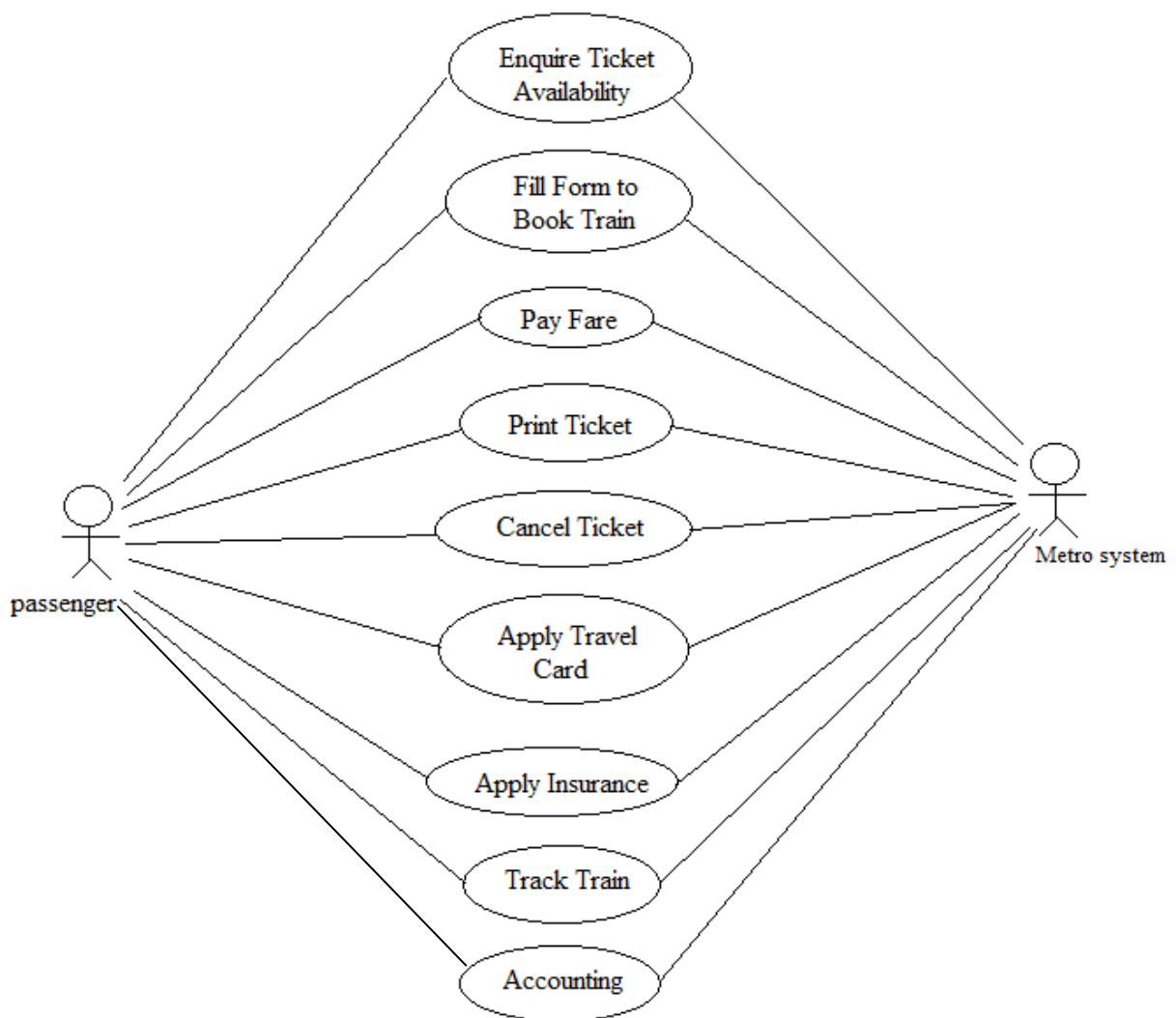


Figure 5.6: UML Use Case Diagram

- **ACTIVITY DIAGRAM:**

The activity diagram in the UML diagrams it represents the permission of activities in this system. In this project there is a separated activities that managing the ticket, managing the booking list, managing the passengers, managing the employee and also managing the payments. Each and every activity have access control. So they can only manage the activity based on their access level.

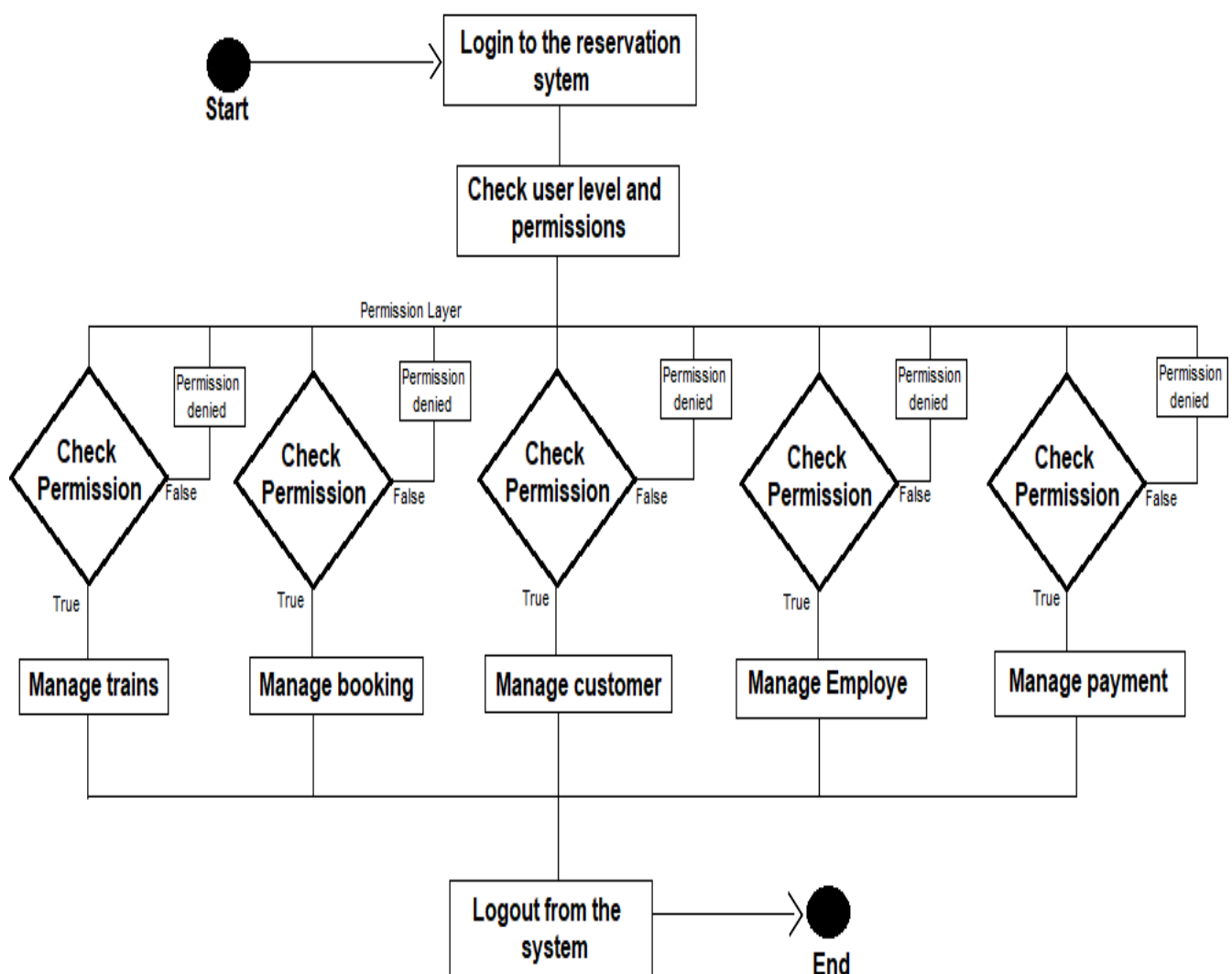


Figure 5.7: UML Activity Diagram

- **SEQUENCE DIAGRAM:**

The sequence diagram in the UML diagrams represents the input and output of activities. Here the above sequence diagram i have prepared the main concept of this project. The passenger can login to the system and the system will be check that the user provide the valid login status or not. If it is valid the system allow the passenger to get into their dashboard. After getting into the system the passenger can checkout the train details and booked their train and it will be redirect to the system then the system will be provide the booked ticket to the passenger. There after they can print their ticket by themself.

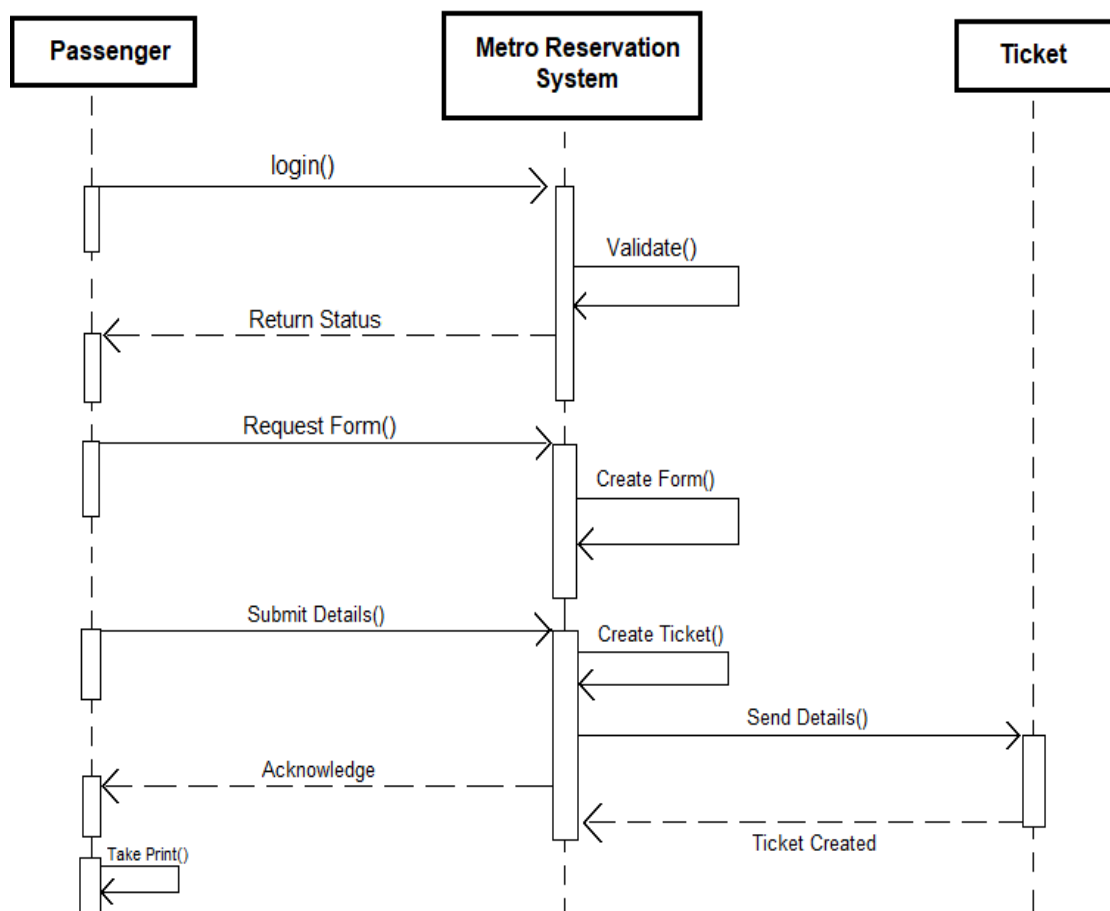


Figure 5.8: UML Sequence Diagram For Passenger Ticket Booking

- **COMPONENT DIAGRAM:**

The component diagram represents the packages of this system. In this system it has class package, controller class package and the data access package. Each and every package have some type of process into it. The class package can be hold the classes and the controller class can be controlled it and the data access package can be define the access level of the packages.

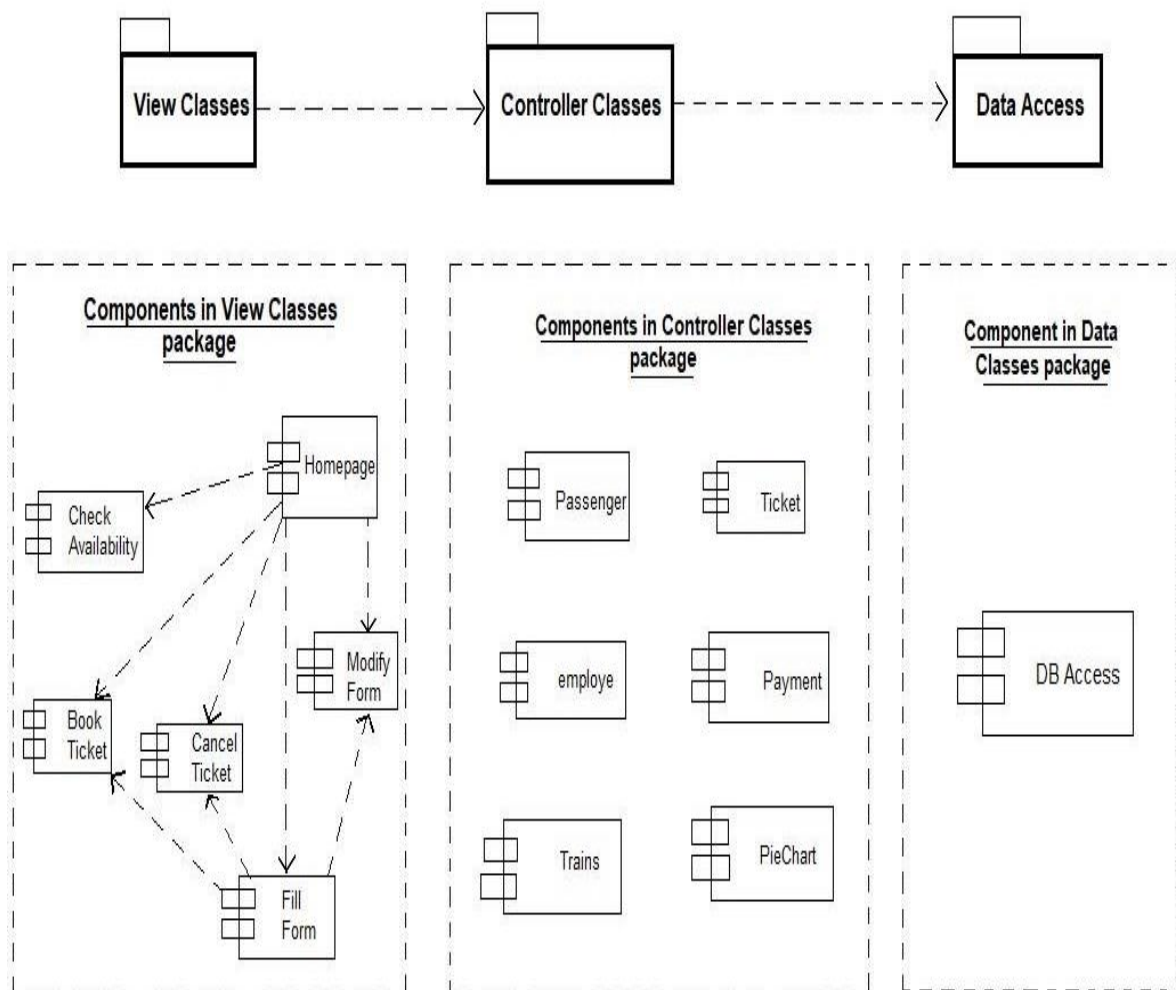


Figure 5.9: UML Component diagram

CHAPTER-6

CHAPTER 6

SYSTEM TESTING

6.1. TYPES OF TESTING

Test case formats may vary from one organization to another. However, using a standard test case format for writing test cases is one step closer to setting up a testing process for your project. It also minimizes Ad-hoc testing that is done without proper test case documentation. But even if you use standard templates, you need to set up test cases writing, review & approve, test execution and most importantly test report preparation process, etc. by using manual methods. Also, if you have a process to review the test cases by the business team, then you must format these test cases in a template that is agreed by both the parties.

- Test plan.
- Responsive test.
- Unit test.
- Integration test.
- System test.
- Acceptance test.
- Performance test.
- Usability test.

- **TEST PLAN:**

Before testing begins, a test plan is created. A typical test plan documents input values for the test, procedures used to perform the testing and the expected output values or results. Test plans range from very simple to very complex, usually in relation to the complexity of software processes which are to be test. For instance, testing whether a new user prompt is added to a screen maynot require a test plan at all, while testing a complicated process may require documenting many varied input scenarios and the corresponding expected resultsand outputs for each case.

- **RESPONSIVE TEST:**

Before creating any kind of software application it mustsatisfy the users whom used the application in different types of platform like computer or android smartphones. The screen size is different in these two devices. The responsive test is used to display the application contents perfectly.

- **UNIT TEST:**

A unit test typically focuses on a minimal component, module or narrow activity. The unit test validates that the specific module functions correctly. In relation to new or modified code, the unit test is often performed bythe developer.

- **INTEGRATION TEST:**

Integration testing follows a business process through a series of components, modules and activities to ensure that a function performed by the system works as designed from end to end.

- **SYSTEM TEST:**

System testing takes, as its input, all of the "integrated" components that have successfully passed integration testing. System testing is a more limited type of testing, it seeks to detect defects both within the "inter-assemblages" and also within the system as a whole.

- **ACCEPTANCE TEST:**

Acceptance testing usually occurs in cases which require a 'sign-off' in order for the coding or functionality to be considered complete. If the acceptance testing proves successful, the code or functionality is considered ready for production, and no further changes are required or allowed.

- **PERFORMANCE TEST:**

Performance testing attempts to put a system under a heavy load (such as a large number of concurrent users or complex batch processing). The performance test shows whether measures such as system response time are acceptable.

- **USABILITY TEST:**

Usability testing seeks to discover whether the user interface is intuitive or at least easy to use. Usability testing is often administered in a controlled environment in which sample end users are monitored and asked for feedback on their experience.

6.2. TEST RESULTS

- **LOGIN TEST:**

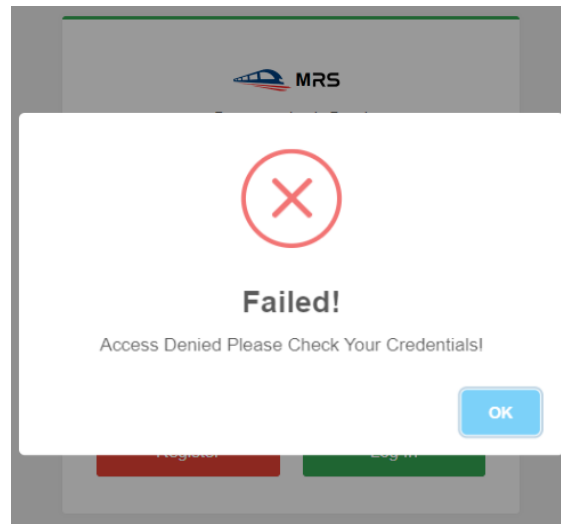


Figure 6.1: Login Credentials Test Diagram

The above figure 6.1 represents the login activity test. The user must fill the input box with the valid email id and the password. If they input any wrong email or the password they got the above access denied message box.

- **INPUT FEILD REQUIRED TEST:**

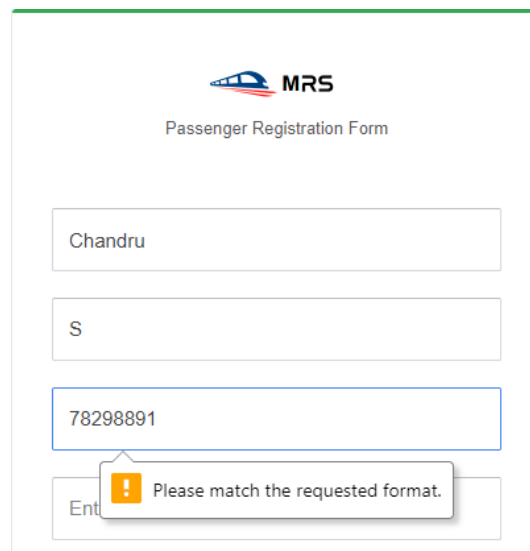
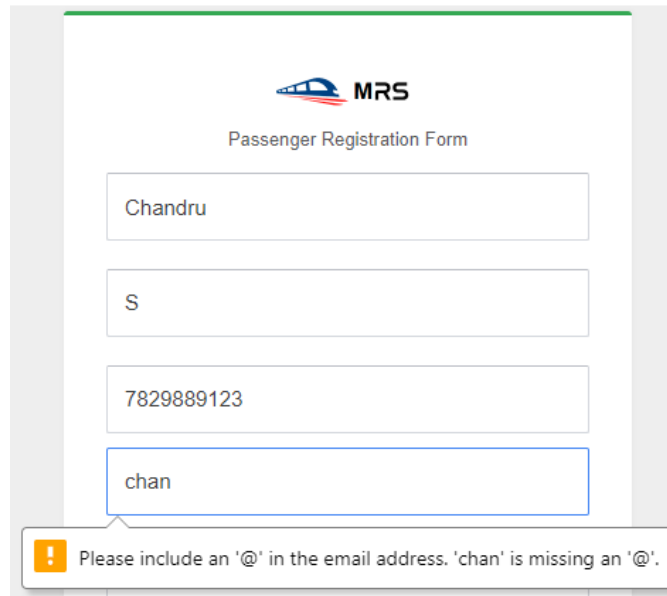


Figure 6.2: Mobile Number Input Field Required Test

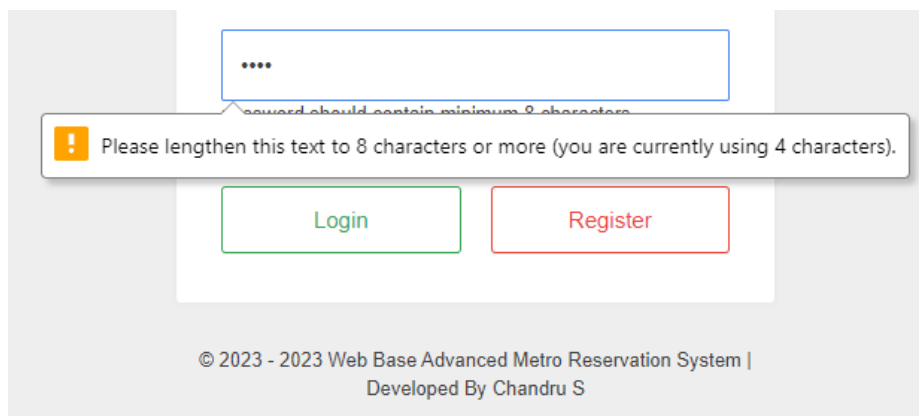
The above figure 6.2 represents the mobile number input box. In this input box the user must fill the 10 digits of their mobile number. If they missed to fill 10 digits of their mobile number they got the alert message of “please match the requested format”.



The screenshot shows a web form titled "MRS Passenger Registration Form". It contains four input fields: a name field with "Chandru", a last name field with "S", a phone number field with "7829889123", and an email field with "chan". Below the email field, a red-bordered error message box displays the text: "Please include an '@' in the email address. 'chan' is missing an '@'."

Figure 6.3: Email Input Field Required Test

The above figure 6.3 represents the email box input field required test. The user must be input their email id with the @ symbol. If they missed that they got the alert message of “please include an @ in the email address”.



The screenshot shows a web form with a password input field containing four dots. Below the field, a red-bordered error message box displays the text: "Please lengthen this text to 8 characters or more (you are currently using 4 characters)." Below the error message are two buttons: "Login" (green border) and "Register" (red border). At the bottom of the page, the footer text reads: "© 2023 - 2023 Web Base Advanced Metro Reservation System | Developed By Chandru S".

Figure 6.4: Password Input Field Required Test

The above 6.4 represents password input field required test. The user must fill the password with minimum of 8 character. If they fill that box without the minimum requirements they got the above alert message.

- **RESPONSIVE TEST:**

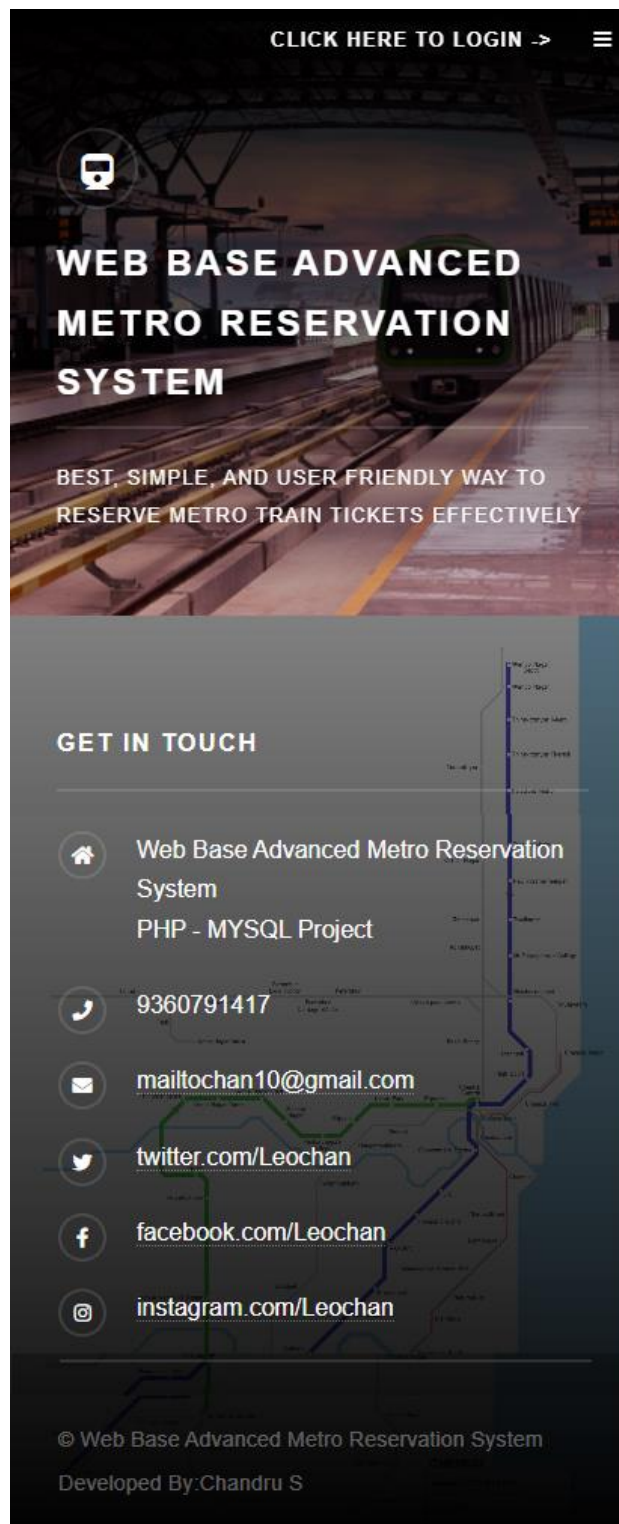


Figure 6.5: Responsive Test

The above figure 6.5 represents the responsive test for this web application project. Because this is an web base project so the user can access this application by using their mobile phones also. So that the application must be in responsive format on the mobile screen display size.

CHAPTER-7

CHAPTER 7

SYSTEM IMPLEMENTATION

7.1. NAME OF THE MODULES

1. ADMIN LOGIN

2. EMPLOYEE LOGIN

3. PASSENGER LOGIN

- PASSENGER LOGIN
- NEW PASSENGER REGISTRATION

7.2. MODULE DESCRIPTION

1. ADMIN LOGIN:

An admin has full control over the system. He/she can manage passengers, trains, accounting, and so on. Here, each and every section has its own respective details such as name, and other important details. Here, an admin can add passenger records directly by filling up the required forms. During the passenger registration, an admin has to provide details such as name, address, contact, and set up login details. The administrator can also manage employee members for the system. For adding an employee, the user has to provide names, and positions, and set up login credentials. Talking about the reservations, an administrator can view all the passenger's reservation lists from his/her dashboard. Which also highlights all the important details such as names, routes, times, fares, total passengers, and more.

KEY FEATURES OF ADMIN PANEL:

- Can be manage the train details.
- Can be manage the employee details.
- Can be manage the passenger details.
- Can be manage the ticket details.
- Can be manage the accounting sections.
- Can be manage the passenger password reset request.
- Can be manage the allover controls.

2. EMPLOYEE LOGIN:

Talking about the employee panel, there's a bit of a similar access level for the employees in this system. An employee can also manage train details, passengers, and tickets. Speaking of tickets, it has the same access as the administrator where the user can manage pending train tickets. The employees can also view a list of passenger reservations with detailed information. Moving toward the accounting section [Admin Panel], this section displays total sales generated only after the confirmation from the passenger's train ticket. In addition to it, the accounting section also highlights the overall reservation numbers. With it, the system also plots out total figures of paid and pending ticket reservations using a pie chart.

KEY FEATURES OF EMPLOYEE PANEL:

- Can be manage the train details.
- Can be manage the passenger details.
- Can be manage the ticket details.
- Can be manage the accounting sections.
- Can be manage the some of the controls.

3. PASSENGER LOGIN:

PASSENGER LOGIN: talking about the user login here the user already have an account to login their profile. In the user login they can view the available trains and the ticket fare of then trains. here, they can book the train and make payment. Also they can print their booked ticket and status of their ticket.

NEW PASSENGER REGISTRATION: talking about the new user registration here the user didn't have an existing account to login so they can create a new account to login their profile. Also here they can view the available trains and the ticket fare of then trains. here, they can book the train and make payment. Also they can print their booked ticket and status of their ticket.

KEY FEATURES OF USER PANEL:

- Can be manage their profiles.
- Can be view the available trains.
- Can be search the needed train.
- Can be track the train.
- Can be booked the train.
- Can be request to reset the password.
- Can be cancelled the booked train.
- Can be download the booked ticket as pdf format.
- Can be apply for travel and trip card.
- Can be apply travel insurance.

CHAPTER-8

CHAPTER 8

APPENDICES

8.1. SCREENSHOTS

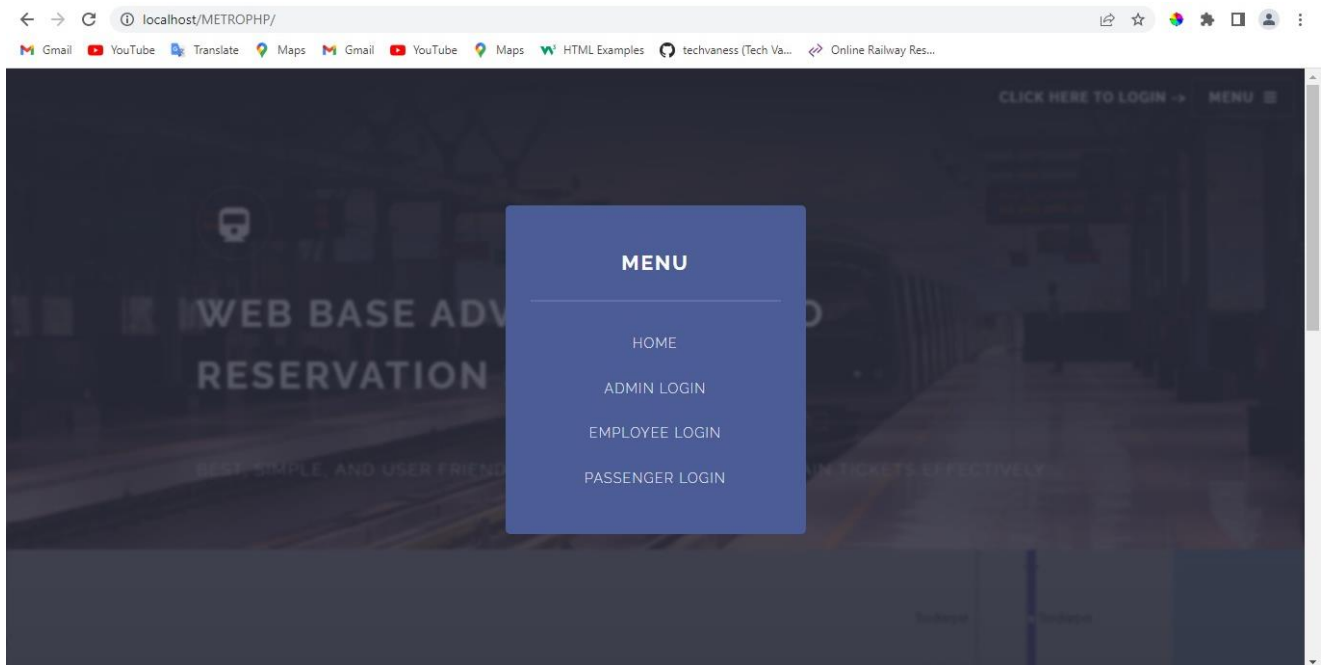


Figure 8.1: Home Page

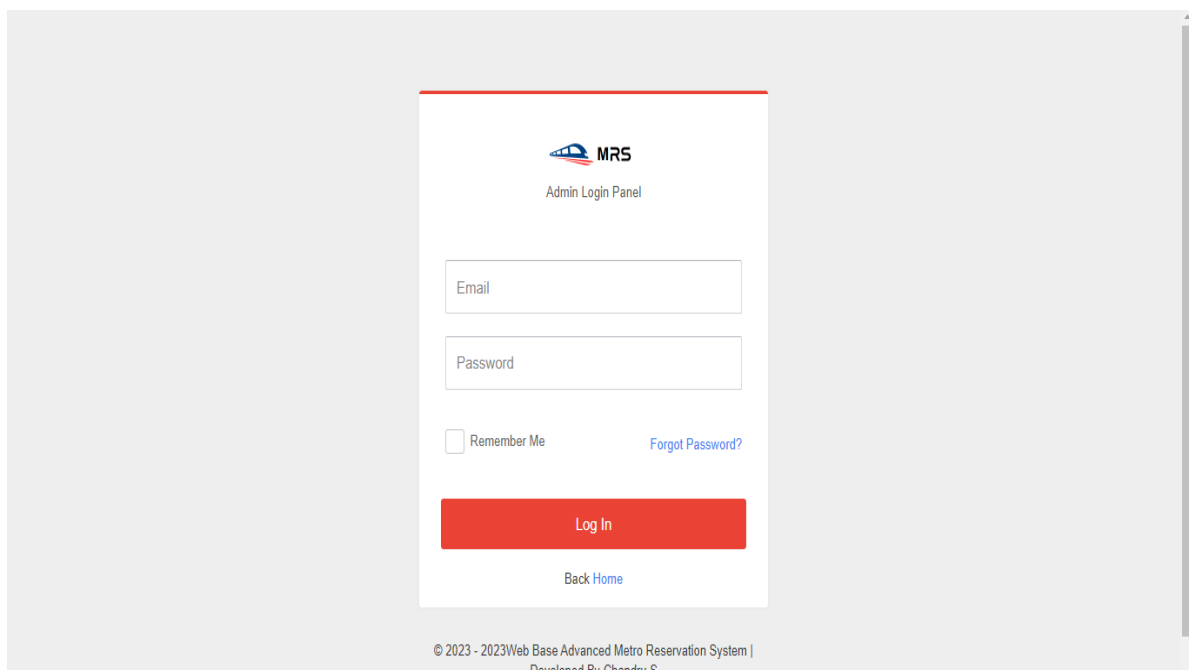


Figure 8.2: Admin Login Panel

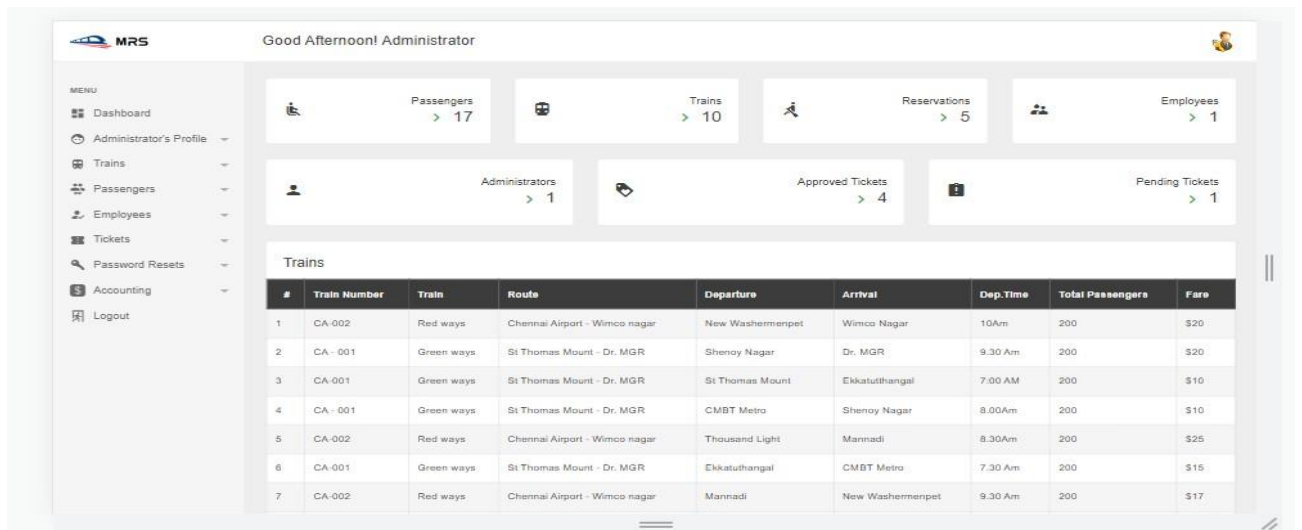


Figure 8.3: Admin Dashboard

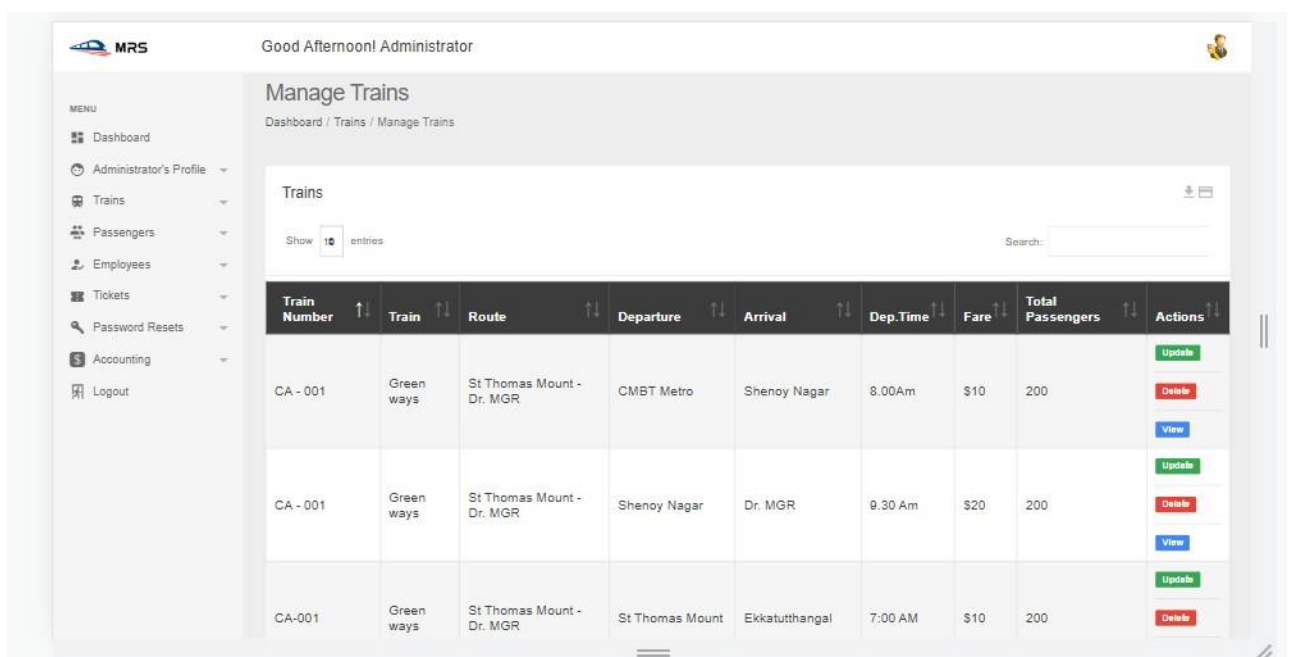


Figure 8.4: Admin Manage Trains

The screenshot displays the MRS Admin interface. At the top, the MRS logo is on the left, and the text "Good Afternoon! Administrator" is on the right. A sidebar menu on the left lists: Dashboard, Administrator's Profile, Trains, Passengers, Employees, Tickets, Password Resets, Accounting, and Logout. The main content area is titled "Add Passenger" with a breadcrumb "Dashboard / Passenger / Add". Below this is a form titled "Create Passenger Profile" with the instruction "Fill All Details". The form contains six input fields: First Name, Last Name, Contact Number, Address, Email, and Username.

MRS

Good Afternoon! Administrator

MENU

- Dashboard
- Administrator's Profile
- Trains
- Passengers
- Employees
- Tickets
- Password Resets
- Accounting
- Logout

Add Passenger

Dashboard / Passenger / Add

Create Passenger Profile

Fill All Details

First Name

Last Name

Contact Number

Address

Email

Username

Figure 8.5: Admin Add Passenger

The screenshot displays the MRS Admin interface. At the top, the MRS logo is on the left, and the text "Good Afternoon! Administrator" is on the right. A sidebar menu on the left lists: Dashboard, Administrator's Profile, Trains, Passengers, Employees, Tickets, Password Resets, Accounting, and Logout. The main content area is titled "Add Employee" with a breadcrumb "Dashboard / Employee / Add". Below this is a form titled "Create Employee Profile" with the instruction "Fill All Details". The form contains seven input fields: First Name, Last Name, National ID Number, Contact Number, Address, Department, and Email.

MRS

Good Afternoon! Administrator

MENU

- Dashboard
- Administrator's Profile
- Trains
- Passengers
- Employees
- Tickets
- Password Resets
- Accounting
- Logout

Add Employee

Dashboard / Employee / Add

Create Employee Profile

Fill All Details

First Name

Last Name

National ID Number

Contact Number

Address

Department

Email

Figure 8.6: Admin Add Employee

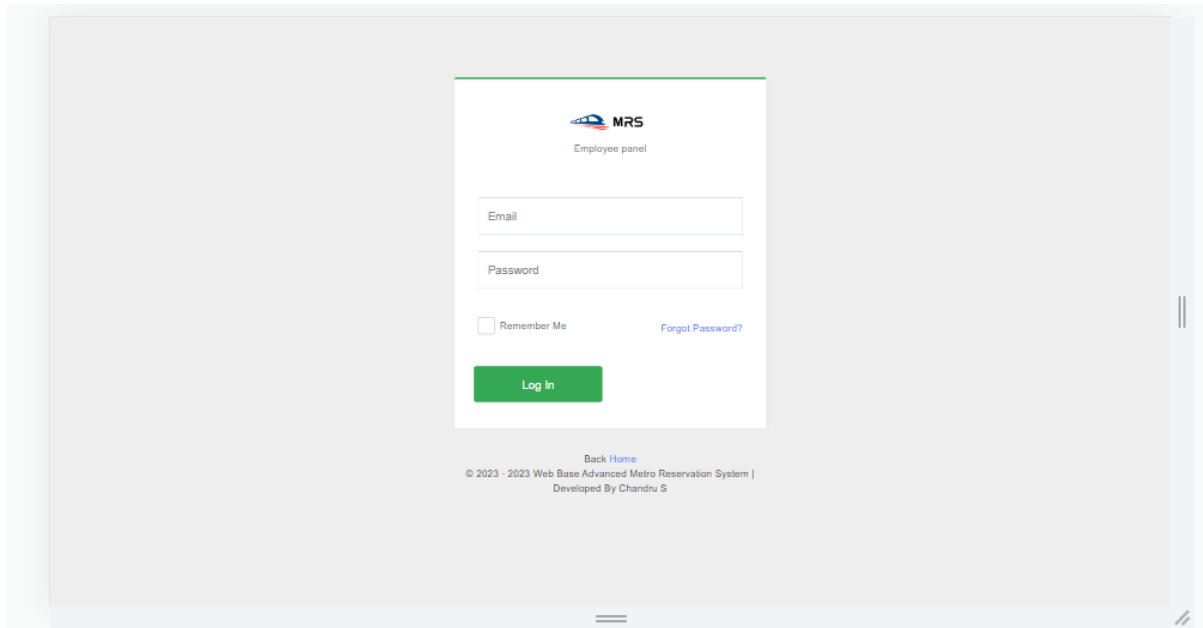


Figure 8.7: Employee Login Panel

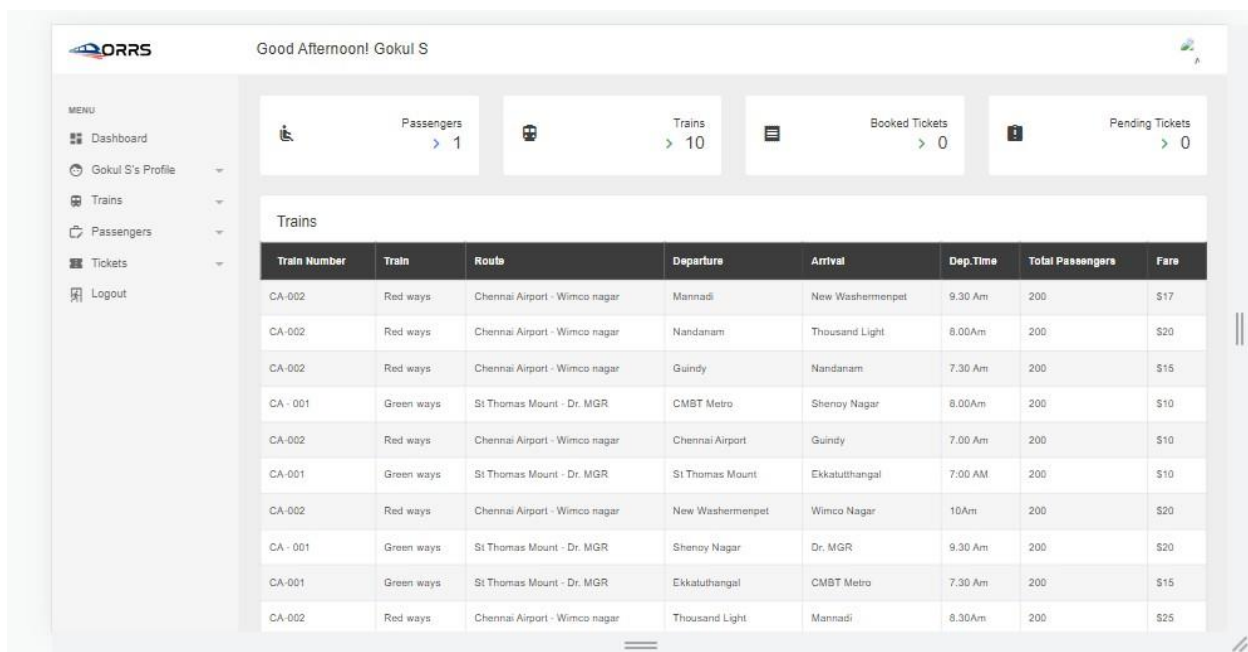


Figure 8.8: Employee Dashboard

The screenshot displays a web browser window with a light gray background. In the center is a white rectangular box titled "Passenger Login Panel" with the MRS logo above it. The form contains two input fields for "Email" and "Password". Below these is a checkbox for "Remember Me" and a blue link for "Forgot Password?". At the bottom of the form are two buttons: a red "Register" button and a green "Log In" button. Below the form, there is a small blue link for "Home" and a copyright notice: "© 2023 - 2023 Web Base Advanced Metro Reservation System | Developed By Chandru S".

Figure 8.9: Passenger Login Form

The screenshot displays a web browser window with a light gray background. In the center is a white rectangular box titled "Passenger Registration Form" with the MRS logo above it. The form contains seven input fields: "Enter Your First Name", "Enter Your Last Name", "Enter Your Phone Number", "Enter Your Address", "Enter Your Username", "Enter Your Email Address", and "Password". At the bottom of the form are two buttons: a green "Login" button and a red "Register" button.

Figure 8.10: New Passenger Registration Form

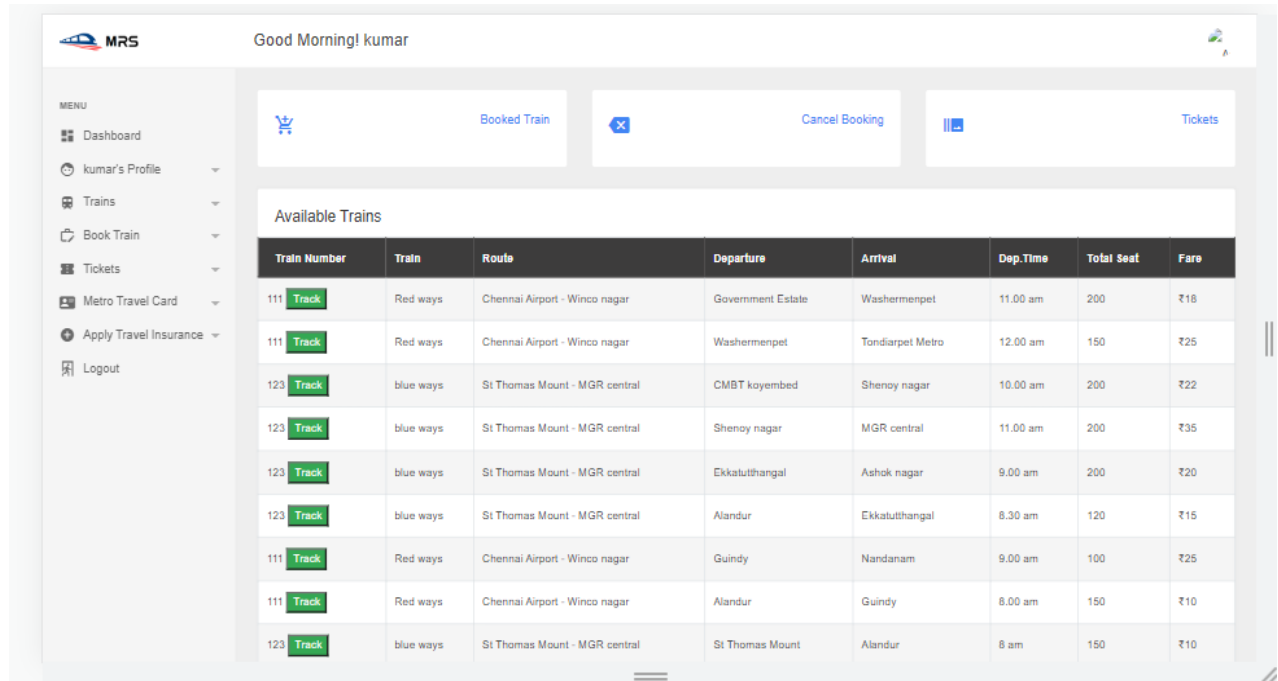


Figure 8.11: Passenger Dashboard

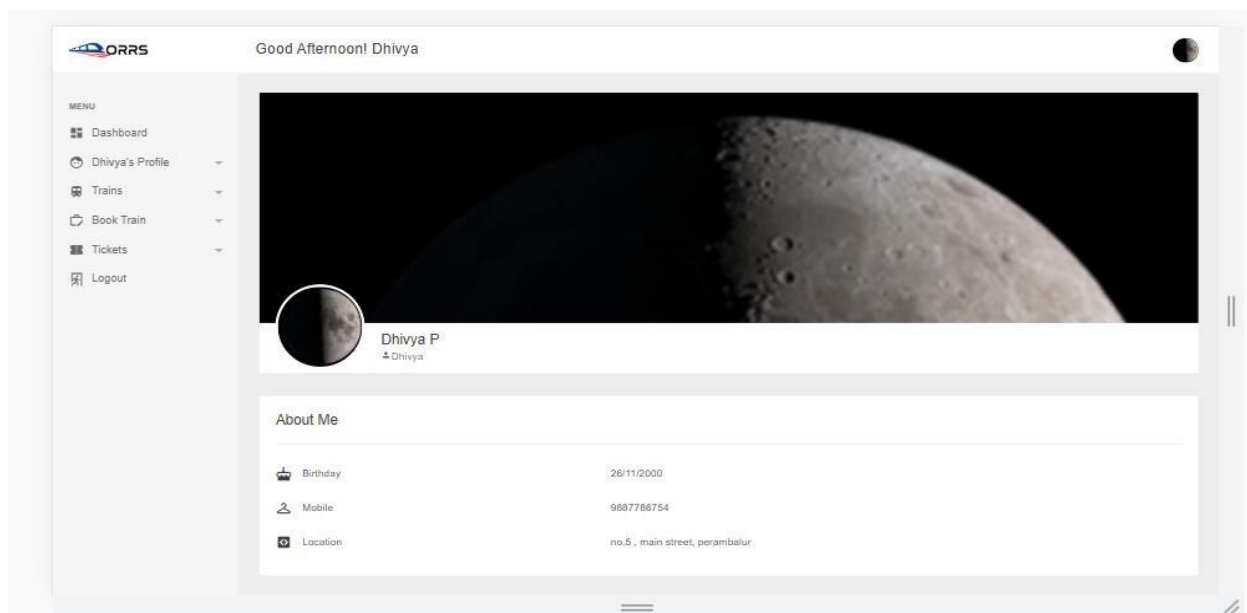


Figure 8.12: Passenger Profile

Good Afternoon! Dhivya

Book / Out / Up

Address: no.5 , main street, perambalur

Train Number: CA - 001

Train Name: Green ways

Departure: CMBT Metro

Arrival: Shenoy Nagar

Departure Time: 8.00Am

Train Fare: 10

[Book Train](#) [Cancel](#)

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Figure 8.13: Passenger Book Train

Good Afternoon! Dhivya

Cancel Train

Dashboard / Book Train / Cancel Train Booking

Cancel Your Train Booking

Show entries

Search:

Train Number	Train	Departure	Arrival	Dep.Time	Fare	Action
CA - 001	Green ways	CMBT Metro	Shenoy Nagar	8.00Am	\$10	Cancel

Showing 1 to 1 of 1 entries

Previous [1](#) Next

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Waiting for localhost...

Figure 8.14: Passenger Ticket Cancellation

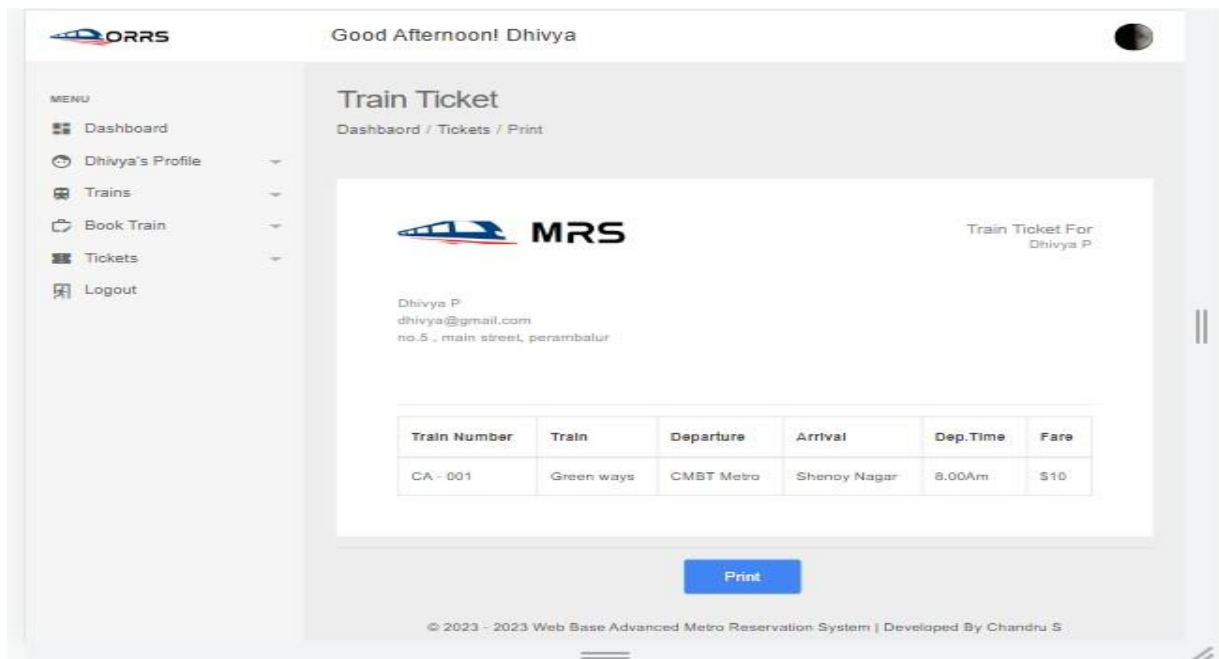


Figure 8.15: Passenger Booked Ticket Print

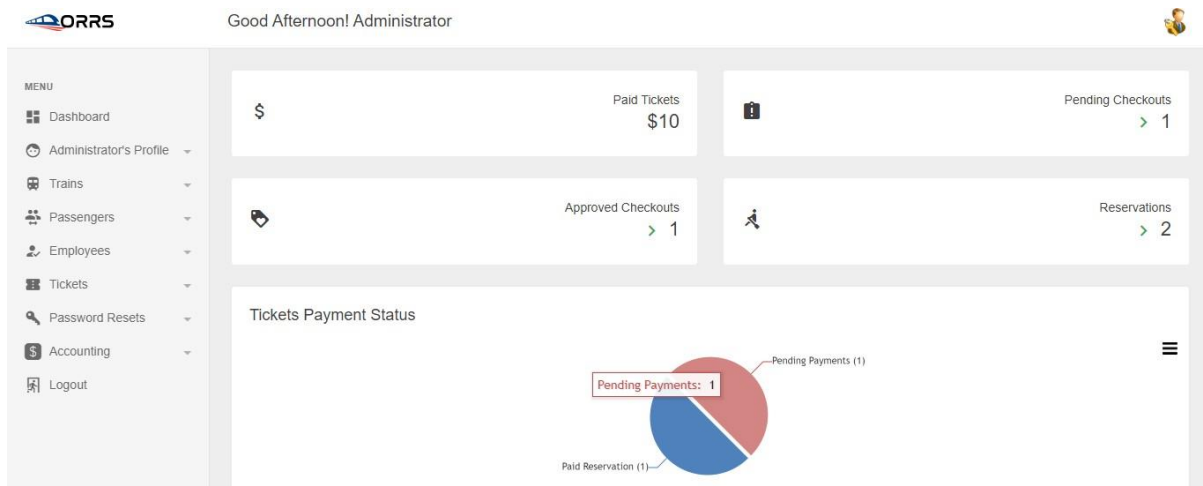


Figure 8.16: Admin Ticket Summary

The screenshot shows the 'Metro Apply Travel Card' page. On the left is a sidebar menu with options: Dashboard, kumar's Profile, Trains, Book Train, Tickets, Metro Travel Card, Apply Travel Insurance, and Logout. The main header says 'Good Morning! kumar'. The page title is 'Metro Apply Travel Card' with a breadcrumb 'Dashboard / Metro Travel Card / Apply Travel Card'. A promotional banner for the 'Metro Reservation System' offers a '20% Discount' on regular fares during the 'Festival Season!'. Below the banner is the 'Travel Card Form' with the instruction 'Kindly fill the form and submit to apply metro travel card'. The form fields are: First name (with placeholder 'Firstname'), Last name (with placeholder 'Lastname'), Email, and Phone number. A status bar at the bottom left says 'Waiting for localhost...'.

Figure 8.17: Passenger Apply Travel Card

The screenshot shows the 'Metro Apply Trip Card' page. The sidebar menu is identical to the previous figure. The main header says 'Good Morning! kumar'. The page title is 'Metro Apply Trip Card' with a breadcrumb 'Dashboard / Metro Travel Card / apply trip card'. The same promotional banner for the 'Metro Reservation System' is present. Below the banner is the 'Trip Card Form' with the instruction 'Kindly fill the form and submit to apply the metro trip card'. The form fields are: Full Name (with placeholder 'Full Name') and Phone Number.

Figure 8.18: Passenger Apply Trip Card

The screenshot shows the 'Metro Card Recharge' form within the MRS application. The user is logged in as 'kumar' and the page title is 'Good Morning! kumar'. The left sidebar menu includes: Dashboard, kumar's Profile, Trains, Book Train, Tickets, Metro Travel Card, Apply Travel Insurance, and Logout. The main form is divided into two columns: 'Billing Address' and 'Card Details'.

Billing Address:

- Full Name:** Enter Your Name
- Email:** Enter Your Email Address
- Address:** Enter Your Postal Address
- City:** Enter Your Living City
- State:** Enter Your State
- Pincode:** Enter Your Pincode

Card Details:

- Name on Card:** Enter Your Metro card name
- Metro card number:** Enter Your Metro Card Number
- Enter Amount:** Enter The Recharge Amount
- Pay Throw Upi:** Enter Your Upi Id

Figure 8.19: Passenger Card Recharge

The screenshot shows the 'Metro Travel Insurance Form'. The form is titled 'Metro Travel Insurance Form' and contains the following text:

By law I am required to offer you Metro travel insurance. For this reason I require that all of my clients complete, sign and submit this Travel Insurance Form indicating that you have been offered travel insurance, and should you chose not to purchase travel insurance you accept all responsibility.

Emergencies can happen when you least expect it. I highly recommend that you protect your vacation with a travel insurance policy. The cruise lines, airlines, hotels and tour operators all charge high penalties for cancellation, ranging from the full deposit to no refund at all. Another important fact to keep in mind is that that most health insurance policies will not cover you when you are out of the country. Your Travel Insurance will protect you in the following areas:

- Trip Cancellation
- Trip Delay
- Trip Interruption
- Missed Connection
- Baggage Loss, Theft or Damage

Figure 8.20: Passenger Apply Insurance

8.2. SOURCE CODE

//index.php:

```
<!DOCTYPE HTML>

<html>

<head>

<title>Web Base Advanced Metro Reservation System</title>

<meta charset="utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1, user-
scalable=no" />

<link rel="stylesheet" href="includes/css/main.css" />

<noscript><link rel="stylesheet" href="includes/css/noscript.css" /></noscript>

</head>

<body class="is-preload">

<!-- Page Wrapper -->

<div id="page-wrapper">

<!-- Header -->

<header id="header" class="alt">

<h1><a href="index.php">Web Base Advanced Metro Reservation System</a></h1>

<nav>

<a href="#menu">Menu</a>

</nav>

</header>

<!-- Menu -->
```



```

<nav id="menu">

<div class="inner">

<h2>Menu</h2>

<ul class="links">

<li><a href="index.php">Home</a></li>

<li><a href=" admin/emp -login.php"> Admin Login </a></li>

<li><a href="employee/emp-login.php">Employee Login</a></li>

<li><a href="pass-login.php">Passenger Login</a></li>

</ul>

<a href="#" class="close">Close</a>

</div>

</nav>

<section id="banner">

<div class="inner">

<div class="logo"><span class="icon solid fa-train"></span></div>

<h2>Web Base Advanced Metro Reservation System</h2>

<p>Best, Simple, and User Friendly Way To Reserve Metro Train Tickets Effectively</a></p>

</div>

</section>

<section id="footer">

<div class="inner">

<h2 class="major">Get in touch</h2>

```

<ul class="contact">

<li class="icon solid fa-home">

Web Base Metro Reservation System

PHP Project

<li class="icon solid fa-phone">9360791417

<li class="icon solid fa-envelope">maitochan10@gmail.com

<li class="icon brands fa-twitter">twitter.com/leochan

<li class="icon brands fa-facebook-f">facebook.com/leochan

<li class="icon brands fa-instagram">instagram.com/leochan

<ul class="copyright">

© Web Base Advanced Metro Reservation System.

Developed By: Chandru S

</div>

</section>

</div>

<!-- Scripts -->

<script src="includes/js/jquery.min.js"></script>

<script src="includes/js/jquery.scrollex.min.js"></script>

<script src="includes/js/browser.min.js"></script>

<script src="includes/js/breakpoints.min.js"></script>

```
<script src="includes/js/util.js"></script>
```

```
<script src="includes/js/main.js"></script>
```

```
</body>
```

```
</html>
```

```
//main.css:
```

```
@import url(fontawesome-all.min.css);
```

```
@import url("https://fonts.googleapis.com/css?family=Raleway:200,700|Source+Sans+Pro:300,600,300italic,600italic");
```

```
html, body, div, span, applet, object, iframe, h1, h2, h3, h4, h5, h6, p, blockquote,pre, a, abbr,
acronym, address, big, cite, code, del, dfn, em, img, ins, kbd, q, s, samp,small,strike, strong,
sub, sup, tt, var, b, u, i, center, dl, dt, dd, ol, ul, li, fieldset, form, label, legend, table, caption,
tbody,tfoot, thead, tr, th, td, article, aside,canvas, details, embed, figure, figcaption,footer,
header, hgroup, menu, nav, output, ruby,section, summary, time, mark, audio, video
```

```
{
```

```
    margin: 0;
```

```
    padding: 0;
```

```
    border: 0;
```

```
    font-size: 100%;
```

```
    font: inherit;
```

```
    vertical-align: baseline;}
```

```
article, aside, details, figcaption, figure, footer,
```

```
header, hgroup, menu, nav, section {
```

```
    display: block;}
```

```

body {
line-height: 1;

} ol, ul {

    list-style: none;

} blockquote, q {

    quotes: none;

} blockquote:before, blockquote:after, q:before, q:after {

    content: "";

    content: none;

} table {

    border-collapse: collapse;

    border-spacing: 0;

} body {

    -webkit-text-size-adjust: none;

} mark {

    background-color: transparent;color:

    inherit;

}

input::-moz-focus-inner {

    border: 0;

    padding: 0;

}

```

```

input, select, textarea {

    -moz-appearance: none;

    -webkit-appearance: none;

    -ms-appearance: none;

    appearance: none;

}

@-ms-viewport {

    width: device-width;

} body {

    -ms-overflow-style: scrollbar;

}

@media screen and (max-width: 480px) {

html, body {

    min-width: 320px;

    }}

html {

    box-sizing: border-box;

}

*, *:before, *:after {

    box-sizing: inherit;

}

```

```

body {

    background-color: #2e3141;

    background-image: linear-gradient(to top, rgba(46, 49, 65, 0.8), rgba(46,
49, 65, 0.8)), url("../images/bg.jpg");

    background-size: auto, cover;

    background-attachment: fixed, fixed;

    background-position: center, center;

}

body.is-preload *, body.is-preload *:before, body.is-preload *:after {

    -moz-animation: none !important;

    -webkit-animation: none !important;

    -ms-animation: none !important;

    animation: none !important;

    -moz-transition: none !important;

    -webkit-transition: none !important;

    -ms-transition: none !important;

    transition: none !important;

}

body, input, select, textarea {

    color: #ffffff;

    font-family: "Source Sans Pro", Helvetica, sans-serif;

    font-size: 16.5pt;

    font-weight: 300;

    line-height: 1.65; }

```

```

@media screen and (max-width: 1680px) {

body, input, select, textarea {

font-size: 13pt;

}}

@media screen and (max-width: 1280px) {

body, input, select, textarea {

font-size: 12pt;

}}

@media screen and (max-width: 980px) {

body, input, select, textarea {

                                font-size: 12pt;

                                }}

@media screen and (max-width: 736px)

{body, input, select, textarea {

                                font-size: 12pt;

                                }}

@media screen and (max-width: 480px) {

body, input, select, textarea {

                                font-size: 12pt;

                                }}

```

```

        vertical-align: middle;

        width: 2em;

    }

    a.special:not(.button):hover:before {

        background-color: rgba(255, 255, 255, 0.025);

    }

    a.special:not(.button):active:before {

        background-color: rgba(255, 255, 255, 0.075);

    }

strong, b {

    color: #ffffff; font-
    weight: 600;

}

em, i {

    font-style: italic;

}

p {

    margin: 0 0 2em 0;

}

h1, h2, h3, h4, h5, h6 {

    color: #ffffff;

    font-family: Raleway, Helvetica, sans-serif;

    font-weight: 700;

    letter-spacing: 0.1em;

```



```

margin: 0 0 1em 0;

text-transform: uppercase;

}

h1 a, h2 a, h3 a, h4 a, h5 a, h6 a {

    color: inherit;

    text-decoration: none;

    border-bottom: 0;

}

h1 span, h2 span, h3 span, h4 span, h5 span, h6 span {

    font-weight: 200;

}

h1.major, h2.major, h3.major, h4.major, h5.major, h6.major {

    padding-bottom: 1em;

    border-bottom: solid 2px rgba(255, 255, 255, 0.125);

}

h2 {font-size: 1.2em;}

h3 {font-size: 0.9em;}

h4 {font-size: 0.7em;}

h5 {font-size: 0.7em;}

h6 {font-size: 0.7em;}

```

//Admin Dashboard.php:

```
<?php
    session_start();
    include('assets/inc/config.php');
    include('assets/inc/checklogin.php');
    check_login();
    $aid=$_SESSION['admin_id'];
?>
<!DOCTYPE html>
<html lang="en">
    <!--Head-->
    <?php include("assets/inc/head.php");?>
    <!--End Head-->
    <body>

        <div class="be-wrapper be-fixed-sidebar">

            <!--Navbar-->
            <?php include("assets/inc/navbar.php");?>
            <!--End Nav Bar-->

            <!--Sidebar-->
            <?php include('assets/inc/sidebar.php');?>
            <!--End Sidebar-->

            <div class="be-content">
                <div class="main-content container-fluid">
                    <div class="row">
                        <div class="col-12 col-lg-6 col-xl-3">
                            <div class="widget widget-tile">

                                <div class="data-info">
                                    <?php
                                        //code for summing up number of passengers
```

```

$result = "SELECT count(*) FROM orrs_passenger";
$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($pass);
$stmt->fetch();
$stmt->close();
?>

<div class="desc">Passengers</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-right"></span><span class="number" data-toggle="counter" data-end="<?php echo $pass;?>">0</span>
</div>
</div>
</div>
</div>
</div>

<div class="col-12 col-lg-6 col-xl-3">
<div class="widget widget-tile">
<div class="chart sparkline"><i class="material-icons">directions_subway</i></div>
<div class="data-info">
<?php
//code for summing up number of trains
$result = "SELECT count(*) FROM orrs_train";
$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($train);
$stmt->fetch();
$stmt->close();
?>

<div class="desc">Trains</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-right"></span><span class="number" data-toggle="counter" data-end="<?php echo $train;?>">0</span>

```

```

</div>
</div>
</div>
</div>

```

```

<div class="col-12 col-lg-6 col-xl-3">
  <div class="widget widget-tile">
    <div class="chart sparkline"><i class="material-icons">rowing</i></div>
    <div class="data-info">
      <?php
        //code for summing up number of trains tickets
        $result ="SELECT count(*) FROM `orrs_train_tickets` ";
        $stmt = $mysqli->prepare($result);
        $stmt->execute();
        $stmt->bind_result($resevations);
        $stmt->fetch();
        $stmt->close();
      ?>
      <div class="desc">Reservations</div>
      <div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$resevations;?>">0</span>
    </div>
  </div>
</div>
</div>
</div>

```

```

<div class="col-12 col-lg-6 col-xl-3">
  <div class="widget widget-tile">
    <div class="chart sparkline"><i class="material-icons">supervisor_account</i></div>
    <div class="data-info">
      <?php
        //code for summing up number of passengers
        $result ="SELECT count(*) FROM orrs_employee";

```

```

$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($pass);
$stmt->fetch();
$stmt->close();
?>
<div class="desc">Employees</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>
</div>
</div>
</div>
</div>
</div>

<div class="col-12 col-lg-6 col-xl-4">
<div class="widget widget-tile">
<div class="chart sparkline"><i class="material-icons">person</i></div>
<div class="data-info">
<?php
//code for summing up number of passengers
$result = "SELECT count(*) FROM orrs_admin ";
$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($pass);
$stmt->fetch();
$stmt->close();
?>
<div class="desc">Admin</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>
</div>

```

```

        </div>
    </div>
</div>

<!-- <div class="col-12 col-lg-6 col-xl-3">
    <div class="widget widget-tile">
        <div class="chart sparkline"><i class="material-icons">local_activity</i></div>
        <div class="data-info">
            <?php
                //code for summing up number of passengers
                $result ="SELECT count(*) FROM orrs_passwordresets where status = 'Pending' ";
                $stmt = $mysqli->prepare($result);
                $stmt->execute();
                $stmt->bind_result($pass);
                $stmt->fetch();
                $stmt->close();
            ?>
            <div class="desc">Passwd Resets</div>
            <div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>
            </div>
        </div>
    </div>
</div>
</div> -->

<div class="col-12 col-lg-6 col-xl-4">
    <div class="widget widget-tile">
        <div class="chart sparkline"><i class="material-icons">loyalty</i></div>
        <div class="data-info">
            <?php
                //code for summing up number of trains tickets
                $result ="SELECT count(*) FROM orrs_train_tickets where confirmation = 'Approved'";
                $stmt = $mysqli->prepare($result);

```

```

$stmt->execute();
$stmt->bind_result($ticket);
$stmt->fetch();
$stmt->close();
?>

<div class="desc">Approved Tickets</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$ticket;?>">0</span>
</div>
</div>
</div>
</div>

<div class="col-12 col-lg-6 col-xl-4">
<div class="widget widget-tile">
<div class="chart sparkline"><i class="material-icons">assignment_late</i></div>
<div class="data-info">
<?php
//code for summing up number of passengers
$result = "SELECT count(*) FROM orrs_train_tickets where confirmation != 'Approved' ";
$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($pass);
$stmt->fetch();
$stmt->close();
?>
<div class="desc">Pending Tickets</div>
<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>
</div>
</div>
</div>

```

```

</div>

</div>
<div class="row">
  <div class="col-sm-12">
    <div class="card card-table">
      <div class="card-header">Trains

        <div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

      </div>
    </div>
    <div class="card-body">
      <!--Start Table-->
      <table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
        <thead class="thead-dark">
          <tr>
            <th>#</th>
            <th>Train Number</th>
            <th>Train</th>
            <th>Route</th>
            <th>Departure</th>
            <th>Arrival</th>
            <th>Dep.Time</th>
            <th>Total Passengers</th>
            <th>Fare</th>
          </tr>
        </thead>
        <tbody>
          <?php

            $ret="SELECT * FROM orrs_train ORDER BY RAND() LIMIT 10 "; //sql code to get
to ten trains randomly

```



```

$stmt= $mysqli->prepare($ret) ;
$stmt->execute() ;//ok
$res=$stmt->get_result();
$cnt=1;
while($row=$res->fetch_object())
{
?>
<tr class="odd gradeX even gradeC odd gradeA ">
  <td><?php echo $cnt;?>
  <td><?php echo $row->number;?></td>
  <td><?php echo $row->name;?></td>
  <td><?php echo $row->route;?></td>
  <td><?php echo $row->current;?></td>
  <td><?php echo $row->destination;?></td>
  <td><?php echo $row->time;?></td>
  <td><?php echo $row->passengers;?></td>
  <td>$<?php echo $row->fare;?></td>
</tr>

<?php $cnt=$cnt+1; }?>
</tbody>
</table>
<!--eND Table-->
</div>
</div>
</div>
</div>
<div class="row">
  <div class="col-sm-12">
    <div class="card card-table">
      <div class="card-header">Passenger Reservations

      <div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

```

```

</div>
</div>
<div class="card-body">
<!--Start Table-->
<table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
  <thead class="thead-dark">
    <tr>
      <th>#</th>
      <th>Passenger</th>
      <th>Address</th>
      <th>Train Number</th>
      <th>Train</th>
      <th>Departure</th>
      <th>Arrival</th>
      <th>Fare</th>
    </tr>
  </thead>
  <tbody>
    <?php
      $ret="SELECT * FROM orrs_train_tickets WHERE confirmation ='Approved' LIMIT
10";

      $stmt= $mysqli->prepare($ret) ;
      $stmt->execute() ;//ok
      $res=$stmt->get_result();
      $cnt=1;
      while($row=$res->fetch_object())
      {
        ?>
        <tr class="odd gradeX even gradeC odd gradeA ">
          <td><?php echo $cnt;?>
          <td><?php echo $row->pass_name;?></td>
          <td><?php echo $row->pass_addr;?></td>
          <td><?php echo $row->train_no;?></td>

```

```

        <td><?php echo $row->train_name;?></td>
        <td><?php echo $row->train_dep_stat ;?></td>
        <td><?php echo $row->train_arr_stat;?></td>
        <td>$<?php echo $row->train_fare;?></td>
    </tr>

```

```

        <?php $cnt=$cnt+1; }?>
    </tbody>
</table>
<!--END Table-->
</div>
</div>
</div>
</div>
<div class="row">
    <div class="col-sm-12">
        <div class="card card-table">
            <div class="card-header">Employees List

```

```

                <div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

```

```

            </div>
        </div>
        <div class="card-body">
            <!--Start Table-->
            <table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
                <thead class="thead-dark">
                    <tr>
                        <th>#</th>
                        <th>Employee</th>
                        <th>Address</th>
                        <th>Contact</th>
                        <th>National ID</th>

```

```

        <th>Email</th>

    </tr>
</thead>
<tbody>
    <?php
        $ret="SELECT * FROM orrs_employee ORDER BY RAND() LIMIT 10 "; //sql code
to get all details of all employees
        $stmt= $mysqli->prepare($ret) ;
        $stmt->execute() ;//ok
        $res=$stmt->get_result();
        $cnt=1;
        while($row=$res->fetch_object())
        {
            ?>
            <tr class="odd gradeX even gradeC odd gradeA ">
                <td><?php echo $cnt;?>
                <td><?php echo $row->emp_fname;?> <?php echo $row->emp_lname;?></td>
                <td><?php echo $row->emp_addr;?></td>
                <td><?php echo $row->emp_phone;?></td>
                <td><?php echo $row->emp_nat_idno;?></td>
                <td><?php echo $row->emp_email ;?></td>
            </tr>

            <?php $cnt=$cnt+1; }?>
        </tbody>
    </table>
    <!--eND Table-->
</div>
</div>
</div>
</div>

```

//Employee Dashboard.php:

```
<?php
    session_start();
    include('assets/inc/config.php');
    include('assets/inc/checklogin.php');
    check_login();
    $aid=$_SESSION['emp_id'];
?>

<!DOCTYPE html>
<html lang="en">
    <!--Head-->
    <?php include("assets/inc/head.php");?>
    <!--End Head-->
    <body>

        <div class="be-wrapper be-fixed-sidebar">

            <!--Navbar-->
            <?php include("assets/inc/navbar.php");?>
            <!--End Nav Bar-->

            <!--Sidebar-->
            <?php include('assets/inc/sidebar.php');?>
            <!--End Sidebar-->

            <div class="be-content">
                <div class="main-content container-fluid">
                    <div class="row">
                        <div class="col-12 col-lg-6 col-xl-3">
                            <div class="widget widget-tile">
                                <div class="chart sparkline"><i class="material-
icons">airline_seat_recline_normal</i></div>
                                <div class="data-info">
```

```

<?php
    //code for summing up number of passengers
    $result = "SELECT count(*) FROM orrs_passenger";
    $stmt = $mysqli->prepare($result);
    $stmt->execute();
    $stmt->bind_result($pass);
    $stmt->fetch();
    $stmt->close();
?>

    <div class="desc">Passengers</div>
    <div class="value"><span class="indicator indicator-equal mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>
    </div>
</div>
</div>
</div>
<div class="col-12 col-lg-6 col-xl-3">
    <div class="widget widget-tile">
        <div class="chart sparkline"><i class="material-icons">directions_subway</i></div>
        <div class="data-info">
            <?php
                //code for summing up number of trains
                $result = "SELECT count(*) FROM orrs_train";
                $stmt = $mysqli->prepare($result);
                $stmt->execute();
                $stmt->bind_result($train);
                $stmt->fetch();
                $stmt->close();
            ?>

            <div class="desc">Trains</div>
            <div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$train;?>">0</span>

```

```

        </div>
    </div>
</div>
</div>

<div class="col-12 col-lg-6 col-xl-3">
    <div class="widget widget-tile">
        <div class="chart sparkline"><i class="material-icons">receipt</i></div>
        <div class="data-info">
            <?php
                //code for summing up number of trains tickets
                $result ="SELECT count(*) FROM orrs_train_tickets WHERE confirmation
='Approved'";
                $stmt = $mysqli->prepare($result);
                $stmt->execute();
                $stmt->bind_result($ticket);
                $stmt->fetch();
                $stmt->close();
            ?>
            <div class="desc">Booked Tickets</div>
            <div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$ticket;?>">0</span>
        </div>
    </div>
</div>
</div>

<div class="col-12 col-lg-6 col-xl-3">
    <div class="widget widget-tile">
        <div class="chart sparkline"><i class="material-icons">assignment_late</i></div>
        <div class="data-info">
            <?php

```

```

//code for summing up number of passengers
$result = "SELECT count(*) FROM orrs_train_tickets where confirmation != 'Approved' ";
$stmt = $mysqli->prepare($result);
$stmt->execute();
$stmt->bind_result($pass);
$stmt->fetch();
$stmt->close();
?>

<div class="desc">Pending Tickets</div>

<div class="value"><span class="indicator indicator-positive mdi mdi-chevron-
right"></span><span class="number" data-toggle="counter" data-end="<?php echo
$pass;?>">0</span>

</div>
</div>
</div>
</div>

</div>
<div class="row">
<div class="col-sm-12">
<div class="card card-table">
<div class="card-header">Trains

<div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

</div>
</div>
<div class="card-body">
<!--Start Table-->
<table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
<thead class="thead-dark">
<tr>

```



```

<th>Train Number</th>
<th>Train</th>
<th>Route</th>
<th>Departure</th>
<th>Arrival</th>
<th>Dep.Time</th>
<th>Total Passengers</th>
<th>₹Fare</th>
</tr>
</thead>
<tbody>
<?php

```

\$ret="SELECT * FROM orrs_train ORDER BY RAND() LIMIT 10 "; //sql code to get
to ten trains randomly

```

$stmt= $mysqli->prepare($ret) ;
$stmt->execute() ;//ok
$res=$stmt->get_result();
$cnt=1;
while($row=$res->fetch_object())
{
?>
<tr class="odd gradeX even gradeC odd gradeA ">
<td><?php echo $row->number;?></td>
<td><?php echo $row->name;?></td>
<td><?php echo $row->route;?></td>
<td><?php echo $row->current;?></td>
<td><?php echo $row->destination;?></td>
<td><?php echo $row->time;?></td>
<td><?php echo $row->passengers;?></td>
<td>₹<?php echo $row->fare;?></td>
</tr>

<?php $cnt=$cnt+1; }?>

```

```

        </tbody>
    </table>
    <!--eND Table-->
</div>
</div>
</div>
</div>
<div class="row">
    <div class="col-sm-12">
        <div class="card card-table">
            <div class="card-header">Passenger Reservations

                <div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

            </div>
        </div>
        <div class="card-body">
            <!--Start Table-->
            <table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
                <thead class="thead-dark">
                    <tr>
                        <th>#</th>
                        <th>Passenger</th>
                        <th>Address</th>
                        <th>Train Number</th>
                        <th>Train</th>
                        <th>Departure</th>
                        <th>Arrival</th>
                        <th>₹Fare</th>
                    </tr>
                </thead>
                <tbody>
                    <?php

```

\$ret="SELECT * FROM orrs_train_tickets WHERE confirmation ='Approved'"; //sql
code to get all details of booked trains.

```

$stmt= $mysqli->prepare($ret) ;
$stmt->execute() ;//ok
$res=$stmt->get_result();
$cnt=1;
while($row=$res->fetch_object())
{
?>
<tr class="odd gradeX even gradeC odd gradeA ">
<td><?php echo $cnt;?>
<td><?php echo $row->pass_name;?></td>
<td><?php echo $row->pass_addr;?></td>
<td><?php echo $row->train_no;?></td>
<td><?php echo $row->train_name;?></td>
<td><?php echo $row->train_dep_stat ;?></td>
<td><?php echo $row->train_arr_stat;?></td>
<td>₹<?php echo $row->train_fare;?></td>
</tr>
<?php $cnt=$cnt+1; }?>
</tbody>
</table>
<!--eND Table-->
</div>
</div>
</div>
</div>

</div>
<!--footer-->
<?php include('assets/inc/footer.php');?>
<!--EndFooter-->
</div>
</div>

```

```

<script type="text/javascript">
    $(document).ready(function(){
        //-initialize the javascript
        App.init();
        App.dashboard();
    });
</script>
</body>
</html>

```

//Passenger Dashboard.php:

```

<?php
    session_start();
    include('assets/inc/config.php');
    include('assets/inc/checklogin.php');
    check_login();
    $aid=$_SESSION['pass_id'];
?>
<!DOCTYPE html>
<html lang="en">
    <!--Head-->
    <?php include("assets/inc/head.php");?>
    <!--End Head-->

    <body>

        <div class="be-wrapper be-fixed-sidebar">

            <!--Navbar-->
            <?php include("assets/inc/navbar.php");?>
            <!--End Nav Bar-->

            <!--Sidebar-->
            <?php include('assets/inc/sidebar.php');?>

```

<!--End Sidebar-->

<div class="be-content">

<div class="main-content container-fluid">

<div class="row">

<div class="col-12 col-lg-6 col-xl-4">

<div class="widget widget-tile">

<div class="chart sparkline"><i class="material-icons">add_shopping_cart</i></div>

<div class="data-info">

<div class="desc">Booked Train</div>

</div>

</div>

</div>

<div class="col-12 col-lg-6 col-xl-4">

<div class="widget widget-tile">

<div class="chart sparkline"><i class="material-icons">backspace</i></div>

<div class="data-info">

<div class="desc">Cancel Booking</div>

</div>

</div>

</div>

<div class="col-12 col-lg-6 col-xl-4">

<div class="widget widget-tile">

<div class="chart sparkline"><i class="material-icons">burst_mode</i></div>

<div class="data-info">

<div class="desc">Tickets</div>

</div>

```

        </div>
    </a>
</div>

</div>
<div class="row">
    <div class="col-sm-12">
        <div class="card card-table">
            <div class="card-header">Available Trains

                <div class="tools dropdown"><span class=""></span><a class="dropdown-toggle"
href="#" role="button" data-toggle="dropdown"><span class=""></span></a>

            </div>
        </div>
    </div>
    <div class="card-body">
        <!--Start Table-->
        <table class="table table-striped table-bordered table-hover table-fw-widget" id="table1">
            <thead class="thead-dark">
                <tr>
                    <th>Train Number</th>
                    <th>Train</th>
                    <th>Route</th>
                    <th>Departure</th>
                    <th>Arrival</th>
                    <th>Dep.Time</th>
                    <th>Total Seat</th>
                    <th>Fare</th>
                </tr>
            </thead>
            <tbody>
                <?php

                $ret="SELECT * FROM orrs_train ORDER BY RAND() LIMIT 10 "; //sql code to get

```

to ten trains randomly

```
$stmt= $mysqli->prepare($ret) ;
$stmt->execute() ;//ok
$res=$stmt->get_result();
$cnt=1;
while($row=$res->fetch_object())
{
?>
<tr class="odd gradeX even gradeC odd gradeA ">
<td><?php echo $row->number;?></td>
<td><?php echo $row->name;?></td>
<td><?php echo $row->route;?></td>
<td><?php echo $row->current;?></td>
<td><?php echo $row->destination;?></td>
<td><?php echo $row->time;?></td>
<td><?php echo $row->passengers;?></td>
<td>₹<?php echo $row->fare;?></td>
</tr>

<?php $cnt=$cnt+1; }?>
</tbody>
</table>
<!--eND Table-->
</div>
</div>
</div>
</div>

</div>
<!--footer-->
<?php include('assets/inc/footer.php');?>
<!--EndFooter-->
</div>
```

```
</div>
```

```
<script type="text/javascript">  
  $(document).ready(function(){  
    //-initialize the javascript  
    App.init();  
    App.dashboard();  
  
  });
```

```
</script>
```

```
</body>
```

```
</html>
```


CHAPTER-9

CHAPTER 9

CONCLUSION

In this project is designed to help book the metro tickets easily and the extensive information is available at your fingertips through this system. Viewing metro train availability, train time, passenger details, employee details, payment controls and related issues are made simple and easy. There are custom search capabilities to aid in finding train information and working on the records. This can make the system easier to navigate and to use maximizing the effectiveness of time and other resources. It allows to keep all the personal data about a passenger in a form that can be easily accessed and analyzed in a consistent way.

FUTURE ENHANCEMENT

It is more efficient and convenient for the metro train ticket booking. It reduces the manpower needed to perform different tasks by reducing the paper work needs. If all the works are done by computer there will be no chance of errors depending on the system maintenance. More over storing and retrieving of the information is easy, so work can be done speedily and in time.

CHAPTER-10

CHAPTER 10

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