MINI-PROJECT REPORT

RAILWAY RESERVATION SYSTEM

Submitted by: Dalvin K Vinod LMC21MCA2015



DEPARTMENT OF COMPUTER APPLICATIONS (Affiliated to APJ Abdul Kalam Technological University, Kerala (KTU))

LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY KUTTICHAL, THIRUVANANTHAPURAM-695574 (MANAGED BY THE ARCHDIOCESE OF CHANGANASSERY)

RAILWAY RESERVATION SYSTEM

A Project Report

Submitted By:

Dalvin K Vinod - LMC21MCA2015

in partial fulfillment of the requirements for the award of the degree in

MASTER OF COMPUTER APPLICATIONS

at



DEPARTMENT OF COMPUTER APPLICATIONS LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY KUTTICHAL, THIRUVANANTHAPURAM-695574

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(Affiliated to APJ Abdul Kalam Technological University, Kerala)

DEPARTMENT OF COMPUTER APPLICATIONS



CERTIFICATE

This is to certify that the project work entitled "RAILWAY RESERVATION SYSTEM" is a Bona fide record of the work done by Mr. DALVIN K VINOD, Reg No LMC21MCA2015, student of Department of Computer Applications, Lourdes Matha College Of Science And Technology, Kuttichal, Thiruvananthapuram, affiliated to the APJ AbdulKalam Technological University, Kerala from August 2022 to November 2022 in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications from APJ Abdul Kalam Technological University, Kerala.

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(Internal Guide)	

Internal Examiner

Prof. Bismi K Charleys (Head of the Department)

DECLARATION

I undersigned here by declared that the project report "RAILWAY RESERVATION SYSTEM" submitted for partial fulfilment of the requirements for the award of degree of Master of Computer Applications of the APJ Abdul Kalam Technological University, Kerala. This submission represents my idea in my own words and, I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact of source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University.

Place: Trivandrum DALVIN K VINOD

Date: __/__/2022

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Abstract

The railway reservation system facilitates the passengers to enquiry about the trains available on the basis of source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc. The aim of case study is to design and develop a data base maintaining records of different trains, train status and passengers. This project contains introduction to the railways reservation system. It is the computerized system of reserving the seats of train seats in advance. It is mainly used for a long route. Online reservation has made the process for the reservation of seats very much easier than ever before.

In our country India, there are number of counters for the reservation of the seats and one can easily make reservations and get tickets. Railway reservation system, has described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization it better utilization of resources. Administrator of the project, with the help of a password, can enter new train record, display all train records, modify train records and delete train records. The record of train includes its number, name, source, destination, and days on which it is available, whereas record of train status includes dates for which tickets can be booked, total number of seats available, and number of seats already booked.



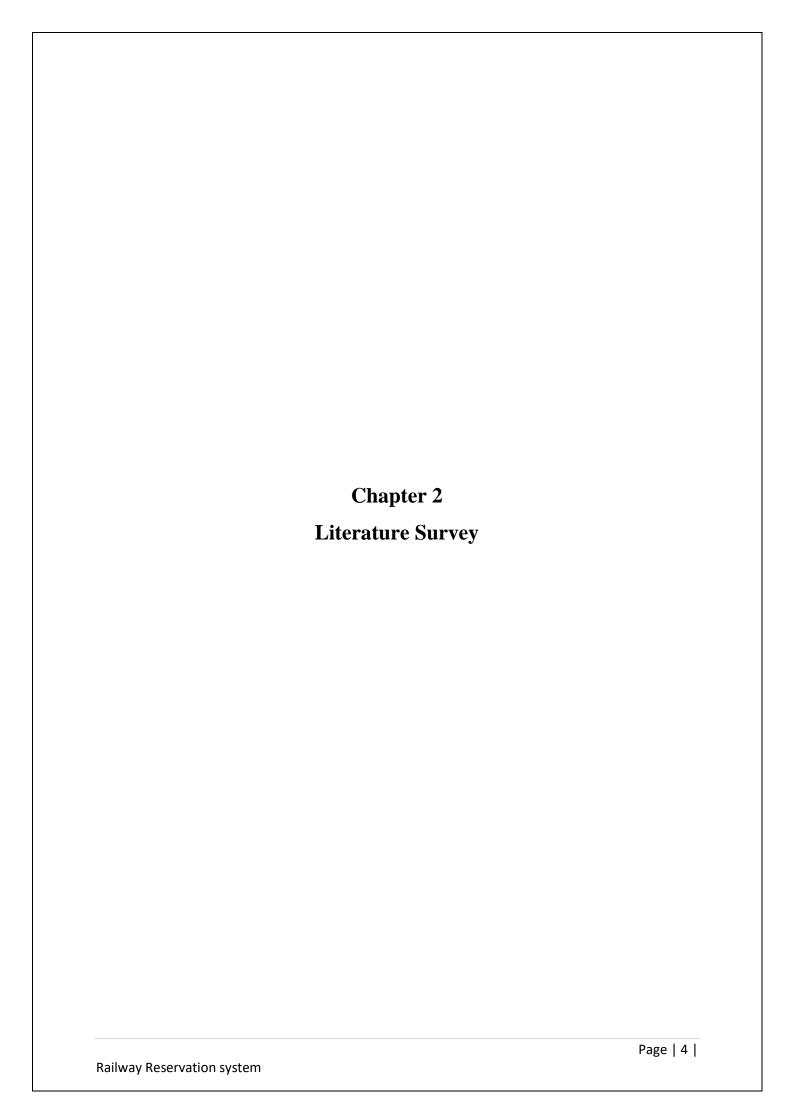
1.1 General Introduction

Database is an organized collection of data. The data is typically organized to model aspects of reality in a way that supports processes requiring information. A DBMS makes it possible for end users to create, read, update and delete data in a database. The DBMS essentially serves as an interface between the database and end users or application programs, ensuring that data is consistently organized and remains easily accessible. The DBMS manages three important things: the data, the database engine that allows data to be accessed, locked and modified and the database schema, which defines the database's logical structure. These three foundational elements help provide concurrency, security, data integrity and uniform administration procedures. The DBMS can offer both logical and physical data independence. That means it can protect users and applications from needing to know where data is stored or having to be concerned about changes to the physical structure of data.

The main purpose of maintaining database for Railway Reservation System is to reduce the manual errors involved in the booking and cancelling of tickets and make it convenient for the customers and providers to maintain the data about their customers and also about the seats available at them. Due to automation many loopholes that exist in the manual maintenance of the records can be removed. The speed of obtaining and processing the data will be fast. For future expansion the proposed system can be web enabled so that clients can make various enquiries about trains between stations. Due to this, sometimes a lot of problems occur and they are facing many disputes with customers. To solve the above problem, we design a data base which includes customer details, availability of seats in trains, no of trains and their details.

1.2 Goal of the Project

The goal of the project is to design and develop a Web page, maintaining records of different trains, train status, passengers and ticket booking. Using SQL, PHP, the web page is used to book tickets for traveling in a train



2.1 Study of similar work

There are many types of reservation systems that are available today on various platforms like desktops, smartphone, web applications etc. The main study is conducted on the original railway website

There are many types of advanced and modern transcription applications that are available today on various platforms like desktops, smartphones, etc., web applications, hardware devices, or even as an embedded future on various applications like voice assistant systems. The main leader in this field is Google Translate, which has lots of options and features like selecting translations according to the end user, predicting the language, and translating it through both voice and text transcript.

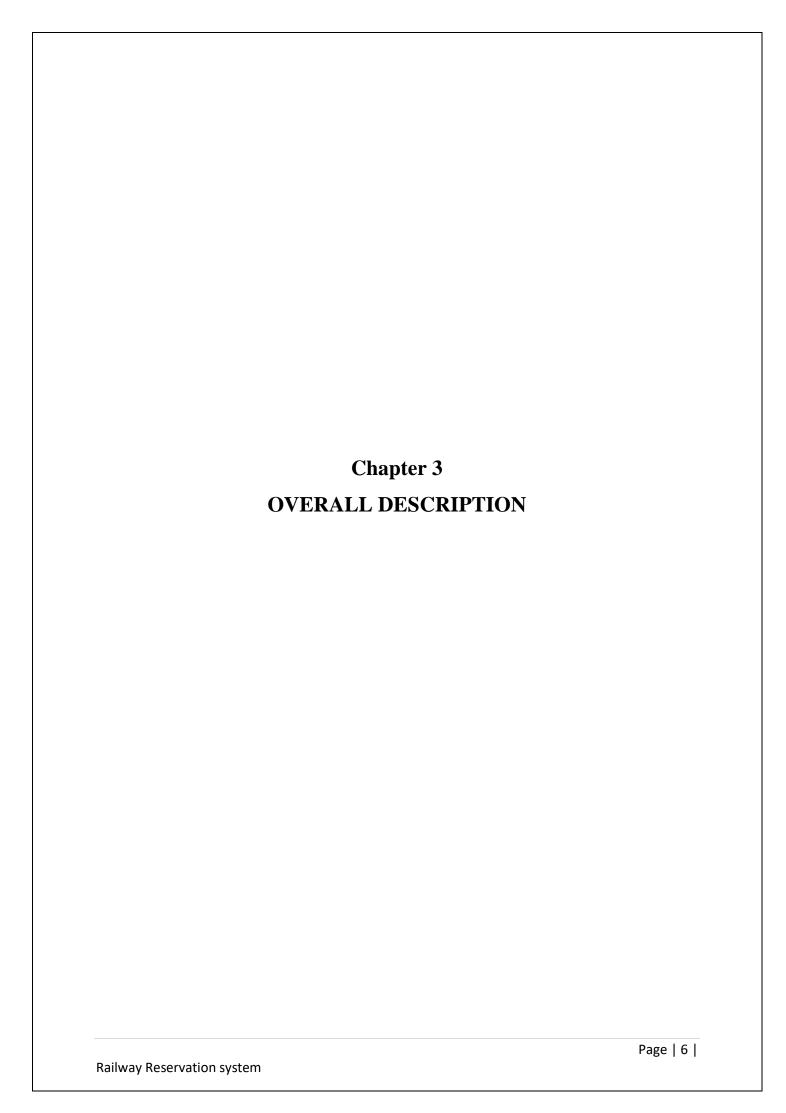
2.1.1 Existing System

The existing system that is the railway reservation system is a reservation system for ticket booking, cancellation of tickets, viewing the status of the tickets booked and trains etc. Here the tickets can be booked through website or using an application software.

2.1.2 Drawbacks of Existing System

The drawbacks of the existing reservation system are

- 1. The website is not so user friendly
- **2**. To many ads
- **3.** For a user booking for a group for different destination can't be possible in the current system



3.1 Proposed system

The research paper entitled "Railway E-Verification Information and Ticketing System" presents a technical approach related to online ticket booking and verification of ticket. Online ticketing helps in the booking of tickets from anywhere. It provides easy and faster method of booking tickets for travel. 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.

3.2 Features of proposed system

The system is to book ticket and reserve tickets for traveling on a train. Due to increased demand for ticket and less availability of ticket for travel and difficulty of booking tickets offline the online reservation system is introduced.

The research provides effective solution for ticket booking by avoiding crowding for booking for ticket at ticket counters and easier way for booking ticket for users by creating an account and can book tickets for more than one person.

Therefore, in this work, we presented a system for reservation of tickets for railway and its management thereby playing a key role in reservation of railway tickets

3.3 Functions of proposed system

A **railway reservation system** is software that handles distribution, pricing, scheduling, and other railway operations. Most providers have some of these functions digitized, but as we mentioned, this is done sporadically. We want to talk about four main modules of reservation systems and cover extra integrations to be on the lookout for.

- 1.user login
- 2.admin login
- 3. Ticket booking

1. User login

User login is used to book tickets by individual for one or more peoples.

Therefore, we can cancel or view states of the tickets. Before we book ticket, we must login to our account if there is no account then create an account the we can book tickets.

2. Admin login

Admin login is used to monitor or manage the railway systems such as input new trains and their routes view the reserved tickets etc.

3. Ticket booking

Ticket booking is done by user by login into the website using their credentials then they can the no of tickets to be booked and their boarding point and destination in the page. After that the total amount for the tickets are calculated and is paid online then the bill is displayed

3.4 Requirement specification

1. Accuracy

The proposed system should be accurate on generating results based on given inputs.

2. Speed

The proposed system should be in real time for generating results.

3. Flexible

The proposed system should be flexible to new updates and patches in near future.

4. Good Interface

The proposed system should maintain good interface even after upgradations.

3.5 Feasibility Analysis

Feasibility study is a test of system proposed regarding its workability, impact on the organization, ability to meet the needs and effective use of resources. Thus, when a new project is proposed, it normally goes through a feasibility study before it is approved for development. A feasibility study is made to see if the project on completion will serve the purpose of the organization for the amount of work, effort and the time that is spend on it. Feasibility study lets the developer foresee the future

of the project and its usefulness. All the projects are feasible given unlimited resources and infinite time. Unfortunately, the development of the computer-based system is more likely to be played by a security of resources and difficulty delivery dates. Feasibility and risk analysis are related in many ways. If project risk is great, the feasibility of producing the quality software is reduced.

3.5.1 Technical feasibility

Technical Feasibility centers on the existing computer system (hardware, software, etc.) And to what extend it can support the proposed addition. For example, if the current computer is operating at 80 percent capacity, an arbitrary ceiling, then running another application could over load the system or require additional hardware. This involves financial considerations to accommodate technical enhancements. If the budget is a serious constraint, then the project is judged not feasible.

3.5.2 Operational feasibility

The main problem faced during development of a new system is getting acceptance from the user. People are inherently resistant to changes and computers have been known to facilitate change. It is mainly related to human organizational and political aspects.

The points to be considered are:

- What changes will be brought with the system?
- What new skills will be required? Do the existing staff members have these skills?If not, can they be trained due course of time?

Generally, project will not be rejected simply because of operational feasibility but such considerations are likely to critically affect the nature and scope of the eventual recommendations. This feasibility study is carried out by a small group of people who are familiar with information system techniques, who understand the parts of the business that are relevant to the project and are skilled in skilled analysis and design process.

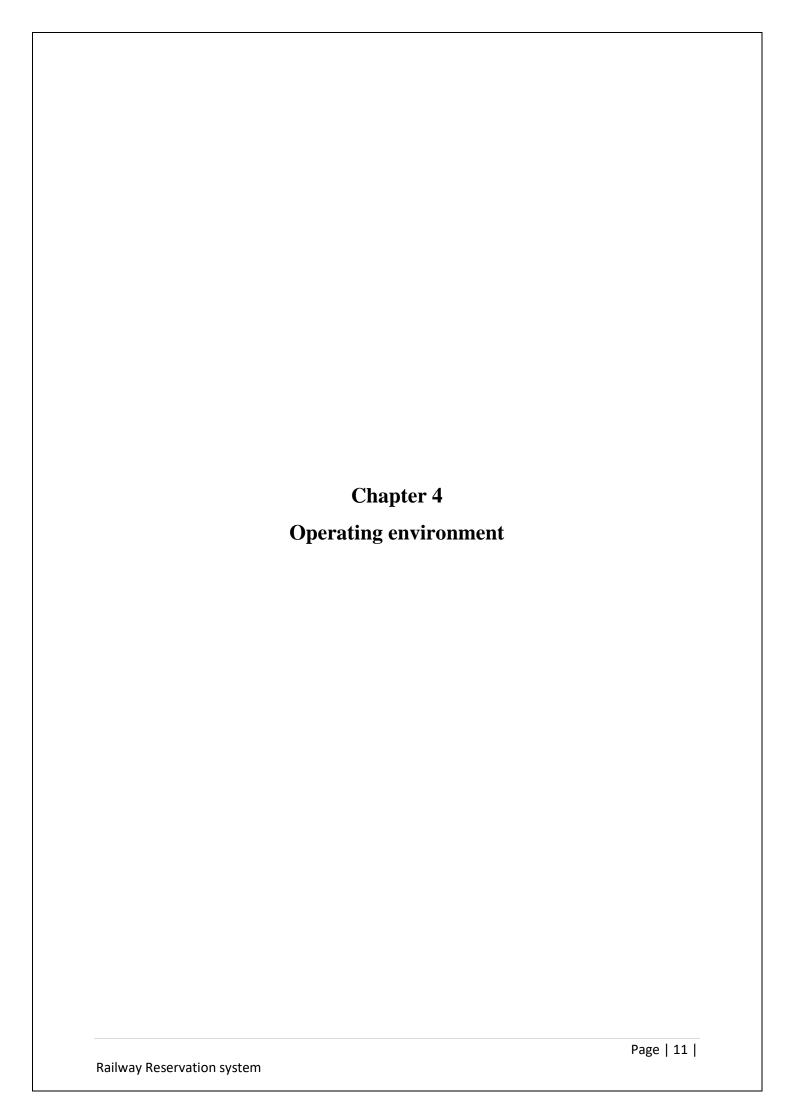
3.5.3 Economic feasibility

Economic Feasibility is the most frequently used method for evaluating the effectiveness of the candidate system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate

system and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system. Otherwise, further justifications or alterations in the proposed system will have to be made if it is having a chance of being approved. This is an ongoing effort that improves in accuracy at each phase of the system life cycle

3.5.4 Behavioural feasibility

It is behavioral feasibility because our system can be accessed and used even for a normal user. The user can easily understand menus used on the system. The proposed system is planned in such a way that every user can easily operate the system without difficulty. Hence it is behaviorally feasible. Behavioral Feasibility mainly includes how strong the reaction of staff will be towards the development of the proposed system that involves computer's use in their daily work. So resistant to change is identified



4.1 Hardware requirements

1. Processor: Dual Core 1.60 GHz or higher

2. Hard disk: 500 GB

3. RAM: 4GB

4.Monitor: 17" Colour Monitor

5. Mouse: Microsoft

6. Keyboard: Microsoft multimedia keyboard

4.2 Software requirements

1. Language: MySQLi (10.4.21-mariadb), PHP.

2. Framework: Microsoft .Net Framework

3. Operating System: Windows 7 or higher

4. Environment: Visual Studio 2012

5. Documentation: Microsoft Word 2010 or higher

4.3 Tools and platforms

4.3.1 Visual Studio

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silver light. It can produce both native code and managed code. A fully-featured, extensible, free IDE for creating modern applications for Android, ios, Windows, as well as web applications and cloud services. Visual Studio does not support any programming language, solution or tool intrinsically; instead, it allows the plugging of functionality coded as a VS Package. When installed, the functionality is available as a Service. The IDE provides three services: svs Solution, which provides the ability to enumerate projects and solutions; svs UI Shell, which provides windowing and UI functionality (including tabs, toolbars, and tool windows); and svs Shell, which deals with registration of VS Packages. In addition, the IDE is also responsible for coordinating and enabling communication between services. An editor, designers, project types and other tools are implemented as VS Packages. Visual Studio uses COM to access the VS

Packages. The Visual Studio SDK also includes the Managed Package Framework (MPF), which is a set of managed wrappers around the COM- interfaces that allow the Packages to be written in any CLI compliant language. However, MPF does not provide all the functionality exposed by the Visual Studio COM interfaces. The services can then be consumed for creation of other packages, which add functionality to the Visual Studio IDE.

4.3.2 MySQL

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the abbreviation for Structured Query Language. A relational database organizes data into one or more data tables in which data may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

4.3.3 PHP

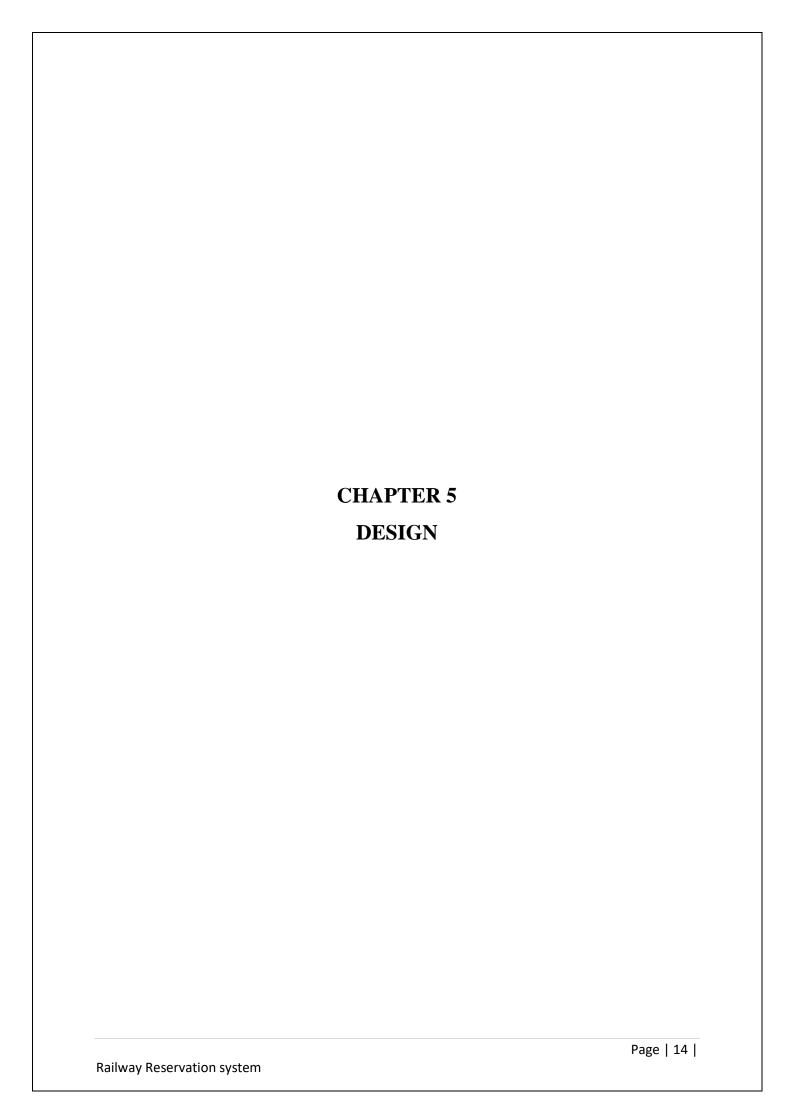
PHP (PHP: Hypertext Pre-processor) is a scripting language that helps people make web pages more interactive by allowing them to do more intelligent, complex things. PHP code is run on the web server.

A website programmed with PHP can have pages that are password protected. A website with no programming cannot do this without other complex things. Standard PHP file extensions are: .php .php3 or .phtml, but a web server can be set up to use any extension.

4.3.4 HTML

The Hyper Text Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.



5.1 SYSTEM DESIGN

System design is the process of defining the architecture, modules, and data for a system to satisfy specified requirements. It is the phase where the SRS document is converted into a format that can be implemented and decides how the system will operate. The purpose of design phase is to plan a solution for problem specified by the requirements. System design aims to identify the modules that should be in the system, the specification of those modules and how they interact with each other to produce the result. The goal of the design process is to produce a model for or representation of a system can be used later to build. The produced model is called design of the system.

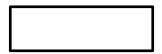
5.2 Data flow diagram

A data flow diagram is a graphical technique that depicts information flow and transforms that are applied as data move from input to output. The DFD is also known as Data Flow Graph or Bubble Chart. The DFD is used to represent increasing information flow and functional details. Also, DFD can be stated as the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. A Level 0 also called a fundamental system model or a context level DFD that represent the entire software elements as a single bubble with input and output data indicated by incoming and outgoing arrows, respectively. Additional process and information flow parts are represented in the next level, i.e., level 1 DFD. Each of the processes represented at level 1 are sub functions of overall system depicted in the context model. Any processes that are complex in level 1 will be further represented into sub functions in the next level, i.e., level 2. Data flow diagram is a means of representing a system at any level of detail with a graphic network of symbols showing data flows, data stores, data processes and data sources. The purpose of data flow diagram is to provide a semantic bridge between users and system developers. The diagram is the basis of structured system analysis. A DFD describes what data flows rather than how they are processed, so it does not depend on hardware, software, data structure or file organization.

Components of Data Flow Diagram

There are four symbols that are used in the drawing of Data Flow Diagrams:

Entities



External entities represent the sources of data that enter the system or the recipients of data that leave the system.

• Process



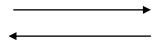
Processes represent activities in which data is manipulated by being stored or retrieved or transformed in some way. A circle represents it. The process will show the data transformation or change.

Databases



Databases represent storage of data within the system.

Data Flow



A data flow shows the flow of information from its source to its destination. A line.

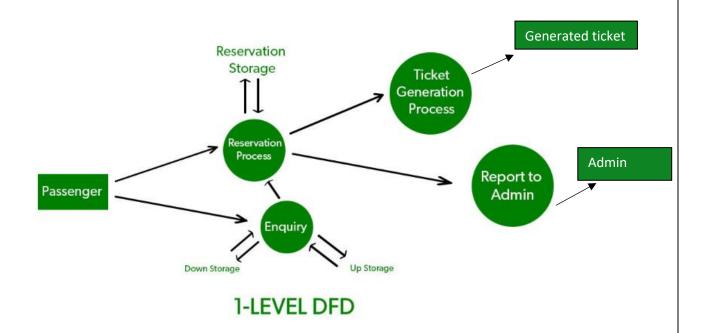
5.2.2 Project DFD

Level 0 Diagram

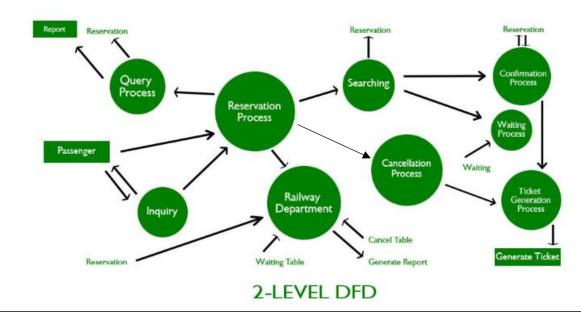


O-LEVEL DFD

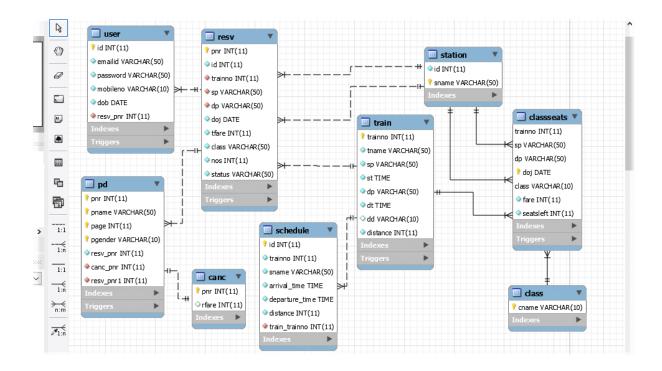
Level 1 Diagram



Level 2 Diagram



5.3 Database Design



5.4 Input Design

Input is the process of converting user inputs computer-based format. The project requires a set of information from the user to prepare a report. In the order, when organized input data are needed. Input data is collected and organized into groups of similar data. The goal behind designing input data is to make the data entry easy and make it free from logical error. So, the input screens in the system should be really flexible and faster to use. Here user input the credentials for login and ticket booking.

Objectives: -

- To produce a cost-effective method of input.
- To achieve the highest possible level of accuracy of data.
- To ensure that the input is acceptable and understandable
- The prevention of irrelevant data entry
- To make a user-friendly input screen

Here in our system, user use the credentials of user to login to their account. Here the credentials of user is verified and then allowed to login to their account. At time of ticket booking the given user credentials are verified and ticket booking is allowed. The input design determines whether the user can interact directly with the computer. With input design, we can say that it is more user friendly as compared to the existing manual system containing paper operations

5.5 Output Design

Outputs are the most important direct source of information to the user and to the management. Efficient and eligible output design should improve the system's relationship with the user and help in decision making, Output design generally deals with the results generated by the system i.e., ticket bills. These reports can be generated from stored or calculated values. Reports are displayed either as screen window preview. Most end users will not actually operate the

information system or enter data through workstation, but they will use the output from the system. The system provides a comprehensive output screen with graphical representations for user to better understand the provided data.

5.6 PROGRAM DESIGN

As a user, I want an account in the irctc web site so that I can view my history and booked tickets.

As a user, I want to view the available trains on the day of my travel.

As a user, I want to book multiple seats for different people.

As a user, I want to cancel my tickets at any time.

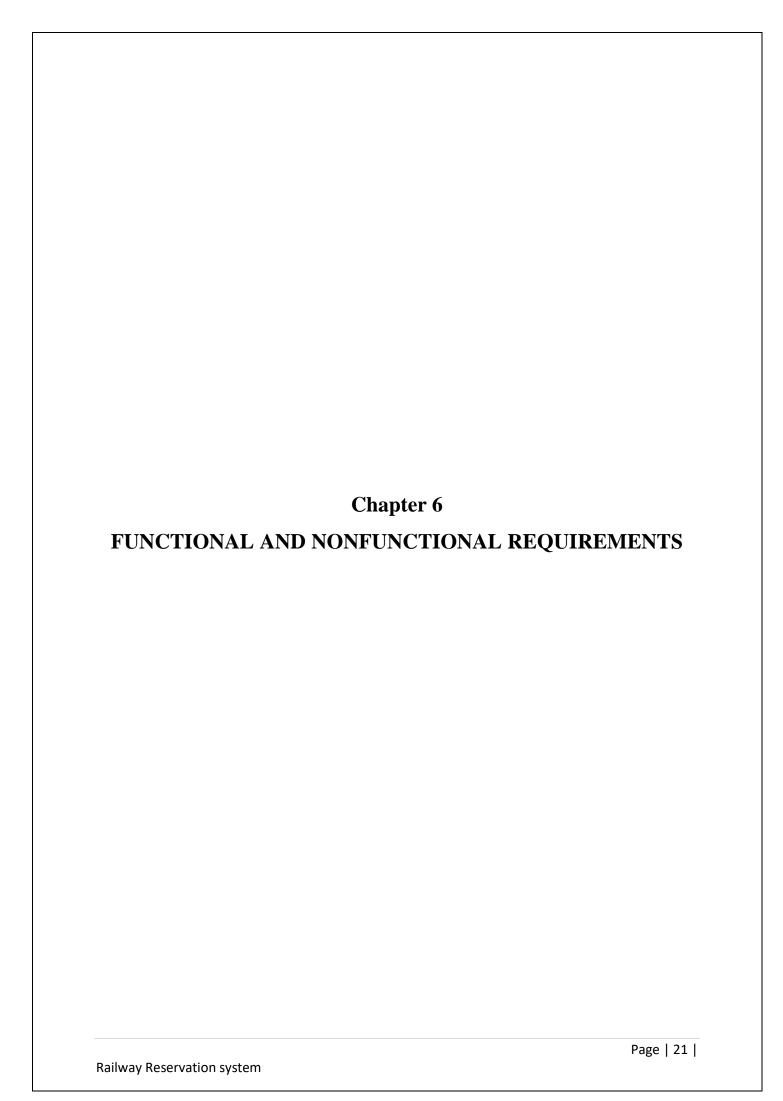
As a user, I need to book tickets for different people who have different starting point and end point.

As a user, I need to do all the payment for different people's tickets that is booked at a time.

As a client, we need an admin login.

As a client, we need an admin who can add train, train stations, ticket money from one place to another, etc.

As a client, we need the admin to view the users, ticket booked, ticket cancelled.



6.1 Functional Requirements

In software engineering, a functional requirement defines a function of a software system or its component. A function is described as set of inputs, the behavior, and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. Generally functional requirements are expressed in the form of "system must do requirement".

6.2 Non-functional Requirements

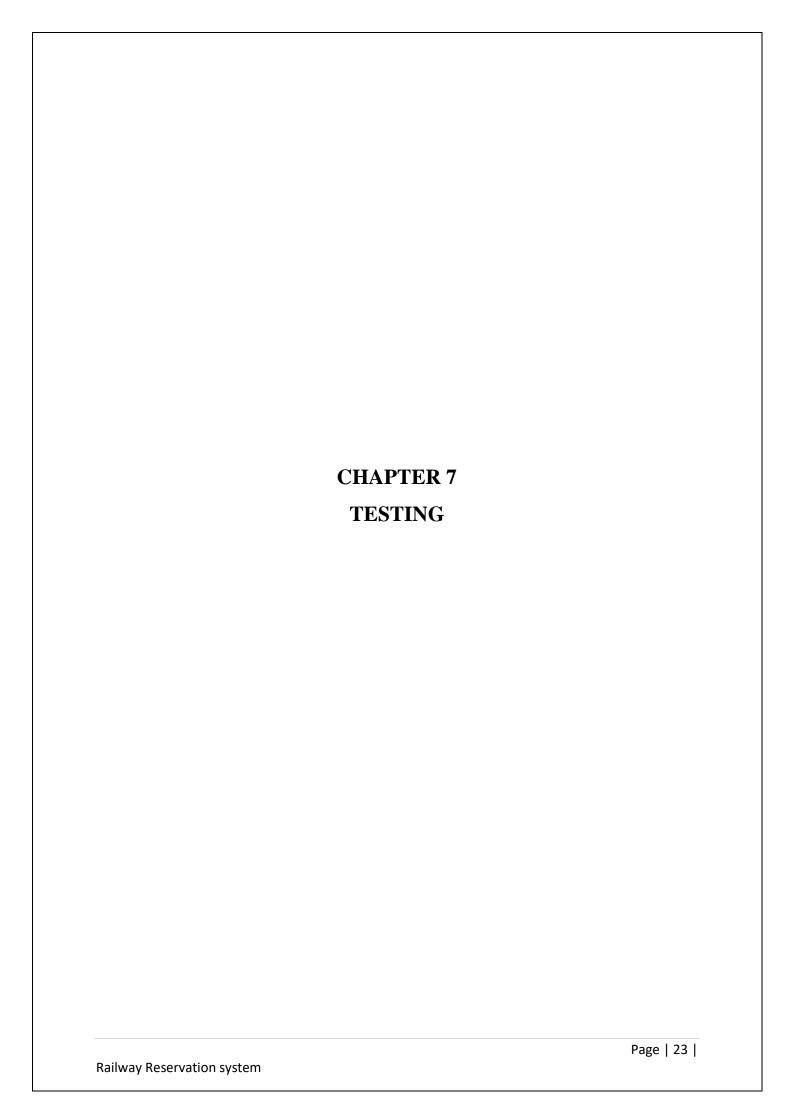
A nonfunctional requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. Some of the non-functional requirements are mentioned below.

Usability: The system shall have a clean interface with only needed features, clear terminology and tools tips where necessary. Warnings or alerts shall be specified in clear way.

Efficiency: The system shall respond to different searches being conducted like searching particular product, search quantity, etc. in a very fast way.

Interoperability: The system shall be able to interact with other systems. The system should able to be supported at least one software which has a relationship with Payment process Portability: The system shall be independent of the specific technological platform used to implement it.

Reliability: Reliability defined as a measure of the time between failures occurring in system, so that the system shall operate without any failures for a particular period of time. Availability: Availability measures the percentage of time the system is in its operational state so that the system be available for use 24 hours per day and 365 days per year.



Software Testing is the process of executing a program or system with the intent of finding errors. Testing involves any activity aimed at evaluating an attribute or capability of a program or system and determining that it meets its required results. The scope of software testing includes examination of code as well as execution of that code in various environments and conditions as well as examining the quality aspects of code: does it do what it is supposed to Do and do what it needs to do. Testing helps not only to uncover errors introduced during coding, but also locates errors committed during the previous phases.

Testing Objectives Include:

- Testing is a process of executing a program with the intent offending an error.
- A good test case is one that has a probability of finding an as yet undiscovered error.

Testing Principles:

- All tests should be traceable to end user requirements
- Tests should be planned long before testing begin
- Testing should begin on a small scale and progress towards testing in large
- Exhaustive testing is not possible.
- To be most effective testing should be conducted by an independent third party.

Implementation is the stage of the project where the theoretical design is turned into a working system. At this stage the main workload, the greatest upheaval and the major impact on the existing system shifts to the user department. If the implementation is not carefully planned and controlled it can cause chaos and confusion.

7.1 Testing Strategies

A test strategy is an outline that describes the testing approach of the software development

life cycle. The purpose of a test strategy is to provide a rational deduction from organizational, high-level objectives to actual test activities to meet those objectives from a quality assurance perspective. The creation and documentation of a test strategy should be done in a systematic way to ensure that all objectives are fully covered and understood by all stakeholders. It should also frequently be reviewed, challenged and updated as the organization and the product evolve over time. Furthermore, a test strategy should also aim to align different stakeholders of quality assurance in terms of terminology, test and integration levels, roles and responsibilities, traceability, planning of resources, etc.

7.2 Unit Testing

This is the first of testing. In this different module are tested against the specification produces during the design of the modules. It refers to the verification of single program module in an isolated environment. Unit testing focuses on the modules independently of one another to locate errors.

In our project we test each module and each forms individually. Each form may test using appropriate values. The input screens need to be designed very carefully and logically. While entering data in the input forms, proper validation checks are done and messages will be generated by the system if incorrect data has been entered.

7.3 Integration Testing

Data can be lost across an interface; one module can have an adverse effect on the other sub functions when combined by May not produce the desired major functions. Integrated testing is the systematic testing for constructing the uncover errors within the interface. This testing was done with sample data. The need for integrated test is to find the overall system performance.

7.4 System Testing

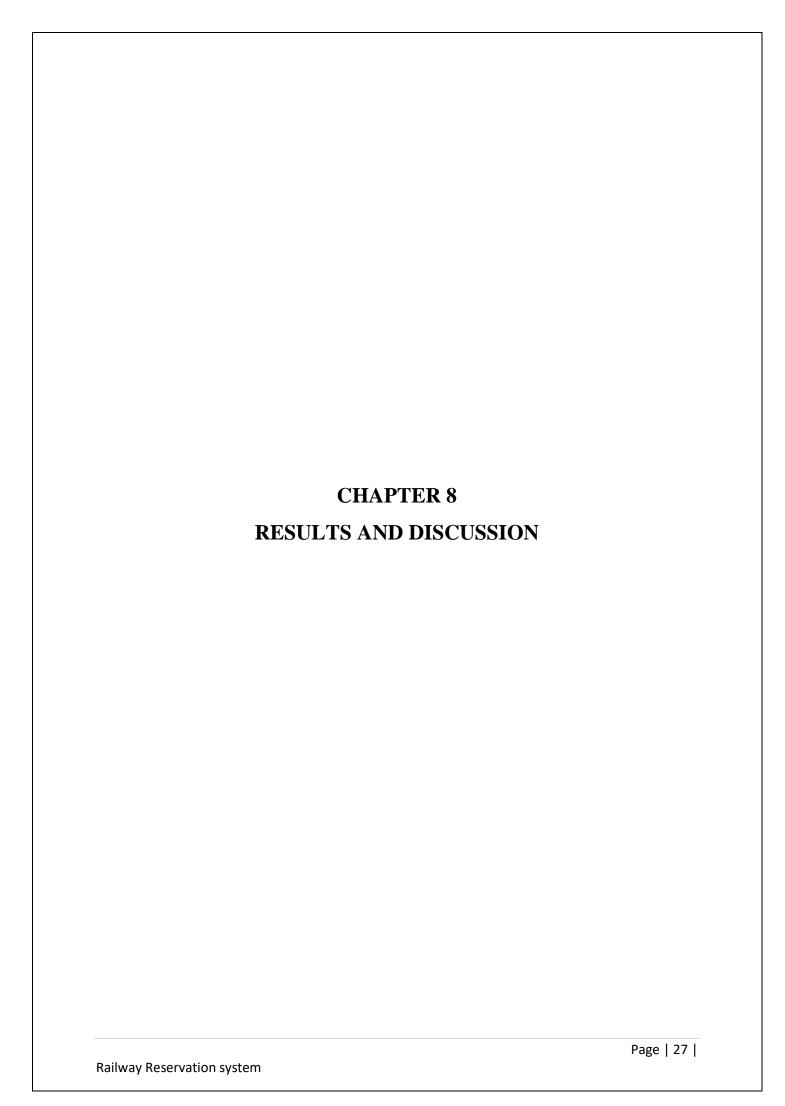
System testing takes, as its input, all of the integrated components that have passed integration testing. System testing is performed on the entire system in the context of either functional requirement specifications (FRS) or system requirement specification (SRS), or both. System testing tests not only the design, but also the behaviour and even the believed expectations of the customer. It is also intended to test up to and beyond the bounds defined in the software or hardware requirements specification(s).

7.5 Testing Results

The primary goal of software implementation is the production of source code that is easy to read and understand. Clarification of source code helps in easier debugging, testing and modification. Source code clarification is enhanced by structural coding techniques, by good coding style, by appropriate supporting documents, by good internal comments and by the features provided in the modern programming language.

In our implementation phase, source code contains both global and formal variables. It contains predefined functions as well as the user defined functions. The result of the new system is compared with old system and supposes if the result is wrong the error must be debugged.

After the acceptance of the system by the user, the existing system should be replaced by this system. Any user handles this package very easily. It does not require any intensive training for the user. Procedures and functions involved in this system are very simple that anyone can understand and correspondingly act to the system with no difficulty.



8.1 Results (Salient features)

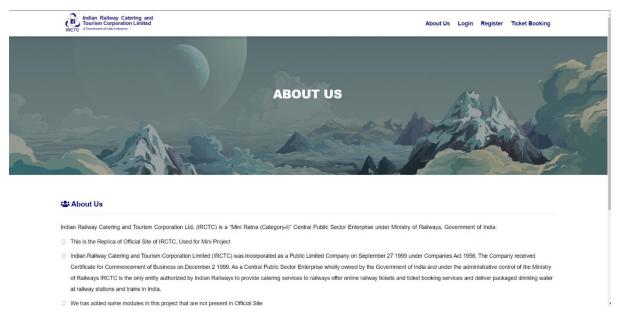
The objective of the proposed system is for booking tickets in irctc site for different people from one user account where ticket should be like each person can join and leave train from different locations as their need. We make this possible with the help of technologies like HTML, PHP, JAVA Script, SQL. Then we should be able to view our ticket details after login with our credentials. User interface is designed such that they are very user friendly and the user can input data easily.

- Not much training required.
- Easy analysis of data.
- There are no needs of experts.
- The new system is more user friendly.
- This system is much faster and efficient than the old system.
- No need for expensive equipment.
- System provides various information's through report quickly and accurately in easily understandable formats.

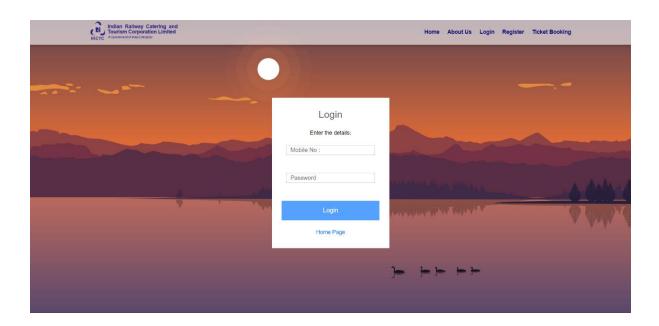
8.2 Screen Shots

8.3

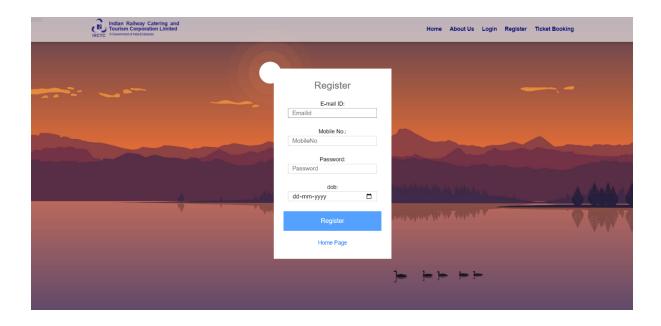
1. Home page



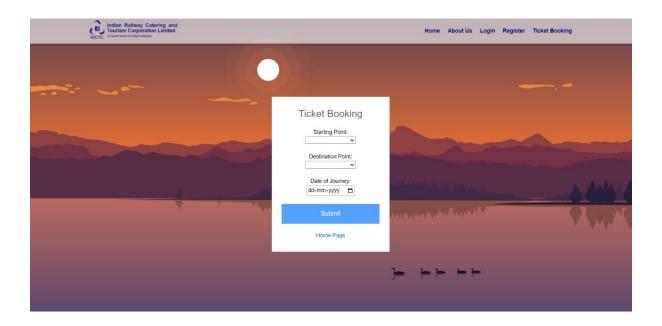
2. login

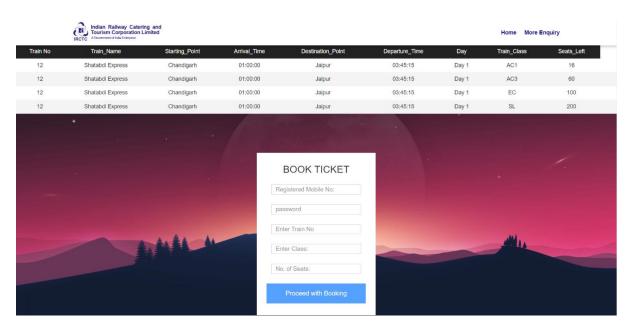


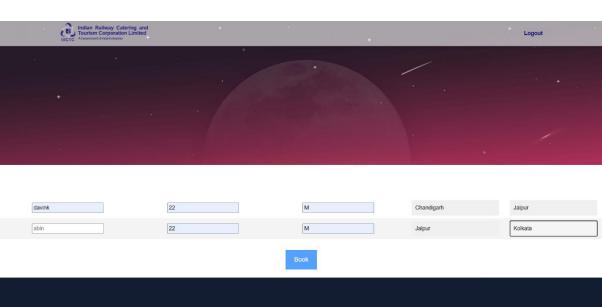
3. Register

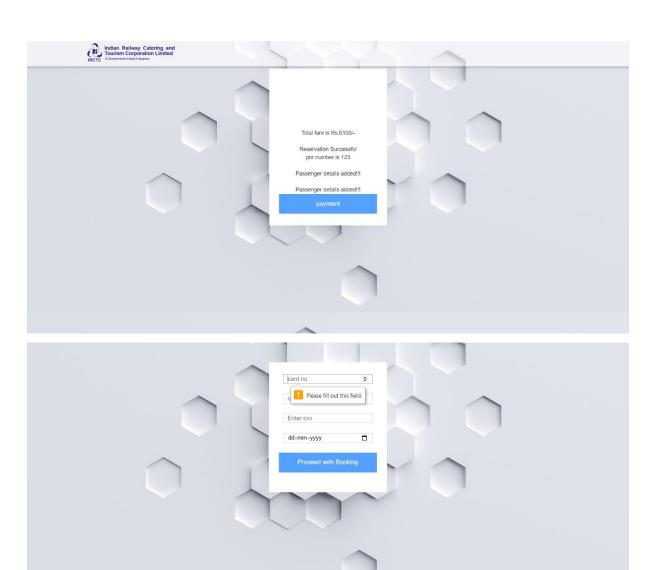


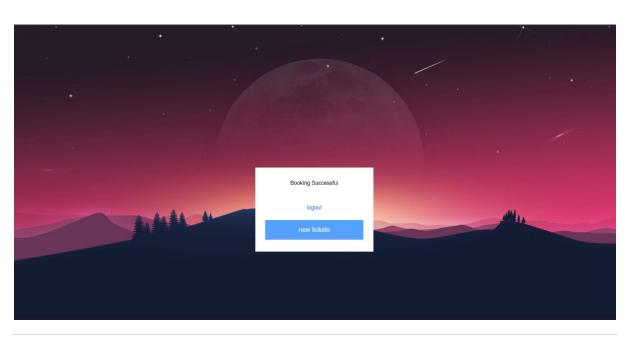
4. Ticket booking

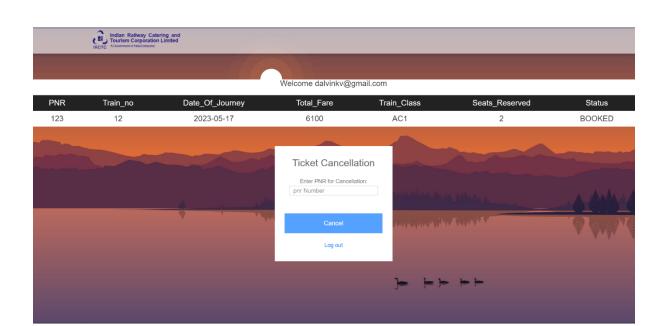


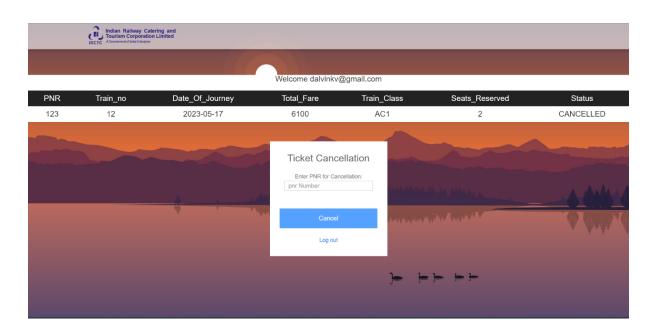




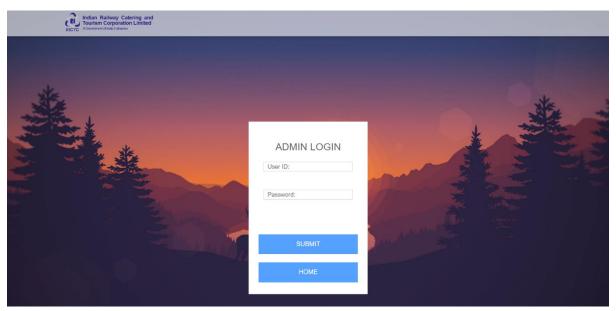


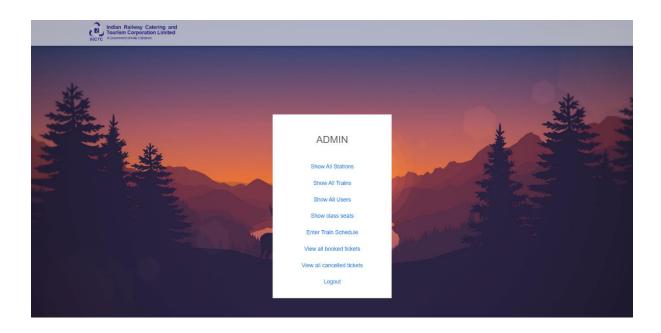


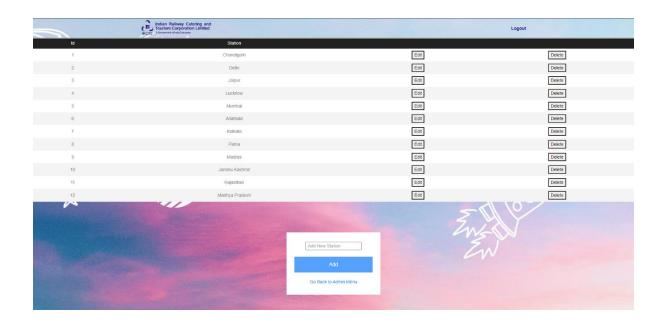


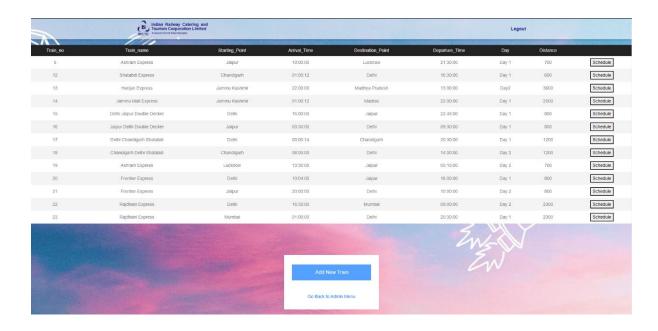


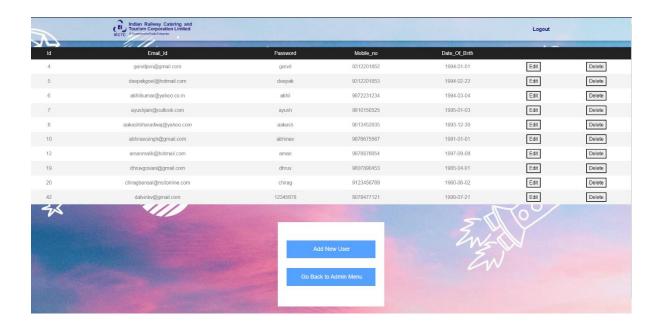
5. Admin login

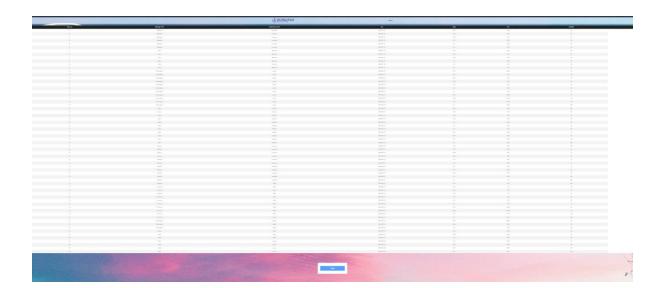


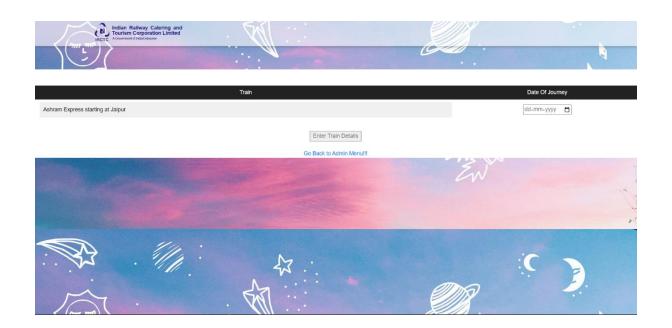


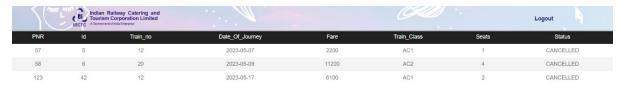








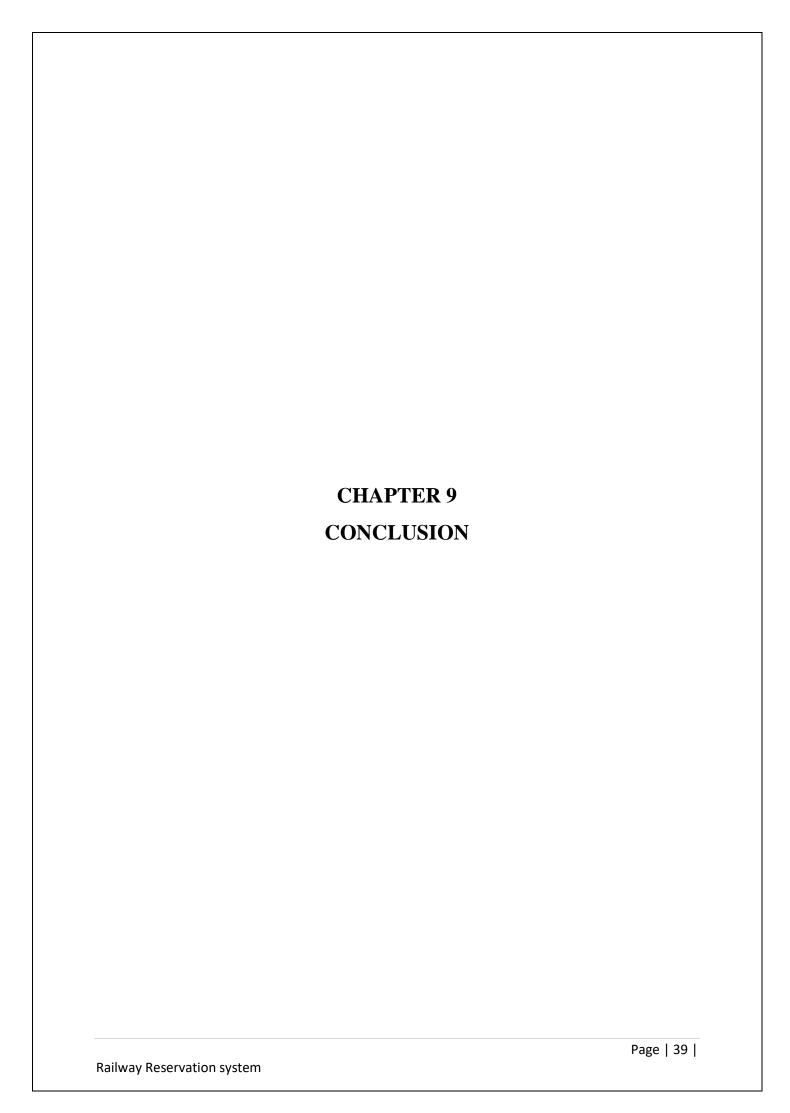












9.1 System Implementation

After the system has been tested, the implementation type or the change overtechnique from the existing system to the new system is a step-by-step process. In the system at first only a module of the system is implemented and checked for suitability and efficiency. When the end user related to the particular module is satisfied with the performance, the next step of implementation is preceded.

Backups are necessary since any time unexpected events may happen. And so during the program execution, the records are stored in the workspace. This helps to recover the original status of the records from any accidental updating or intentional deletion of records.

An Implementation plan is a management tool for a specific policy measure, or package of measures, designed to assist agencies to manage and monitor implementation effectively. Implementation plans are intended to be scalable and flexible; reflecting the degree of urgency, innovation, complexity and or sensitivity associated with the particular policy measure. Agencies are expected to exercise judgment in this area; however, the level of detail should be sufficient to enable the agency to effectively manage the implementation of a policy measure. At a minimum, plans should reflect the standards outlined in the Guide to Preparing Implementation Plans.

The implementation stage involves following tasks:

- ➤ Careful planning
- ➤ Investigation of system and constraints
- ➤ Design of method to achieve the changeover phase

9.2 Conclusion

Online reservation systems help in more easer way for ticket booking and reservation without any waiting in a large queue. This help in better time management for us. This project is about railway ticket reservation form different people with different journey.

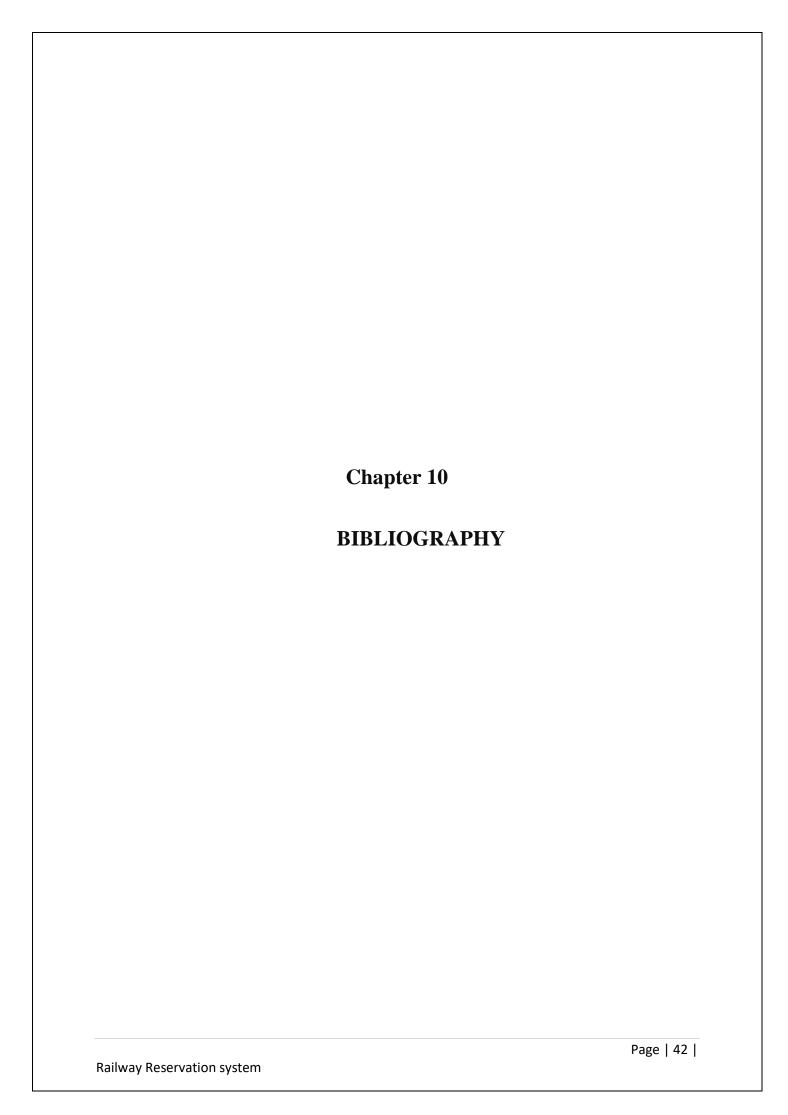
Here we are able to reserve tickets from a user account for different people and they can start a journey from different points and end their journey at different point in a train. we can view our tickets from our login page after login to our account and even cancel our ticket with our pnr number. Each time we get different pnr number so that we can view our ticket info in our login page. Before login we have to register ourselves in the site so that we can login to our account.

9.3 Future Enhancement

The future enhancements of the proposed system contain

Adding an GPS tracking system integrated with the project to track our train real time.

At the time of booking, we will get anS additional number other than pnr so that we can use that number to track our train real time. Here the number is only unique for a train rather than a person that is the number given will be unique for a train not users.

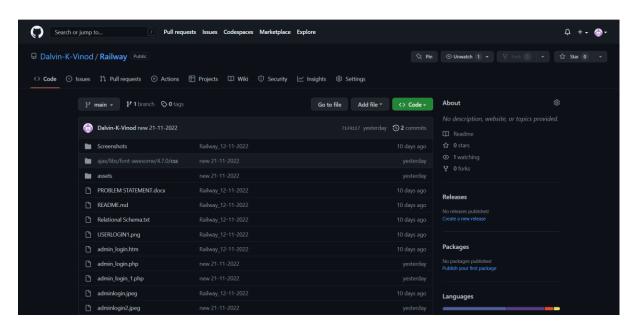


1. Website

- scholar.google.com
- stackoverflow.com
- geeksforgeeks.org
- javapoint.com
- w3schools.com
- quora.com

APPENDICES-1

1. Git Repositories



2. Git History

