



Department of Computer Science & Application
Institute of Engineering & Technology

MINI-PROJECT

SYNOPSIS

SUBMITTED TO: -

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ACKNOWLEDGE

It gives us a great sense of pleasure to present the synopsis of the B. Tech mini-project undertaken during B. Tech III Year. This project is going to be an acknowledgement of the inspiration, drive and technical assistance that will be contributed to it by many individuals. We owe a special debt of gratitude to Mr. Manoj Varshney, Technical Trainer, for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also teach us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation.

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CERTIFICATE

This is to certify that the following students have completed the project.

.... Online Railway Reservation System

under the guidance of Mr. Manoj Varshney for the fulfilment of the Mini Project as prescribed by

G.L.A University in the academic year **2022-23** for the course B. Tech Computer science and engineering.

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ABSTRACT

In our country India, Indian Railways has more than 64,015 kilometres (39,777 miles) of track and 6,909 stations. It has the world's fourth-largest railway network after that of the United States, Russia, and China. The railways traverse the length and breadth of the country and carry over 20 million passengers and 2 million tons of freight daily. It is one of the world's largest commercial or utility employers,

with rolling stock, IR owns over 200,000 (freight) wagons, 50,000 coaches and 8,000 locomotives.

As with there are several counters for the reservation of seats and one can easily make reservations and get tickets. The railway reservation system, as described above, can lead to an error-free, secure, reliable, and fast management system. It can assist the user to concentrate on their other activities rather than concentrate on record keeping. Thus, it will help the organization its better utilization of resources. The administrator of the project, with the help of a password, can enter new train records, display all train records, modify train records, and delete train records. The record of the train includes its number, name, source, destination, and days on which it is available, for which tickets can be booked, the number of seats available, and several seats already booked.

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INTRODUCTION

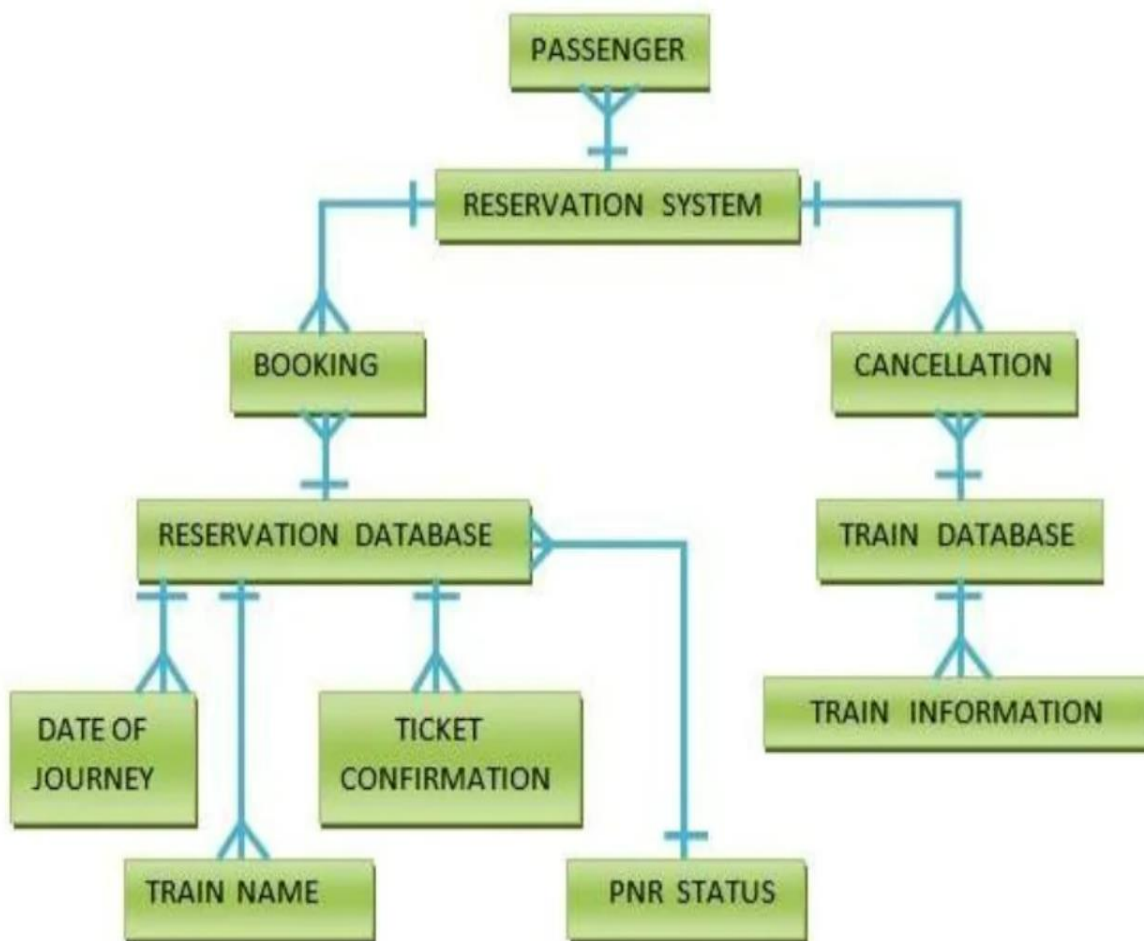
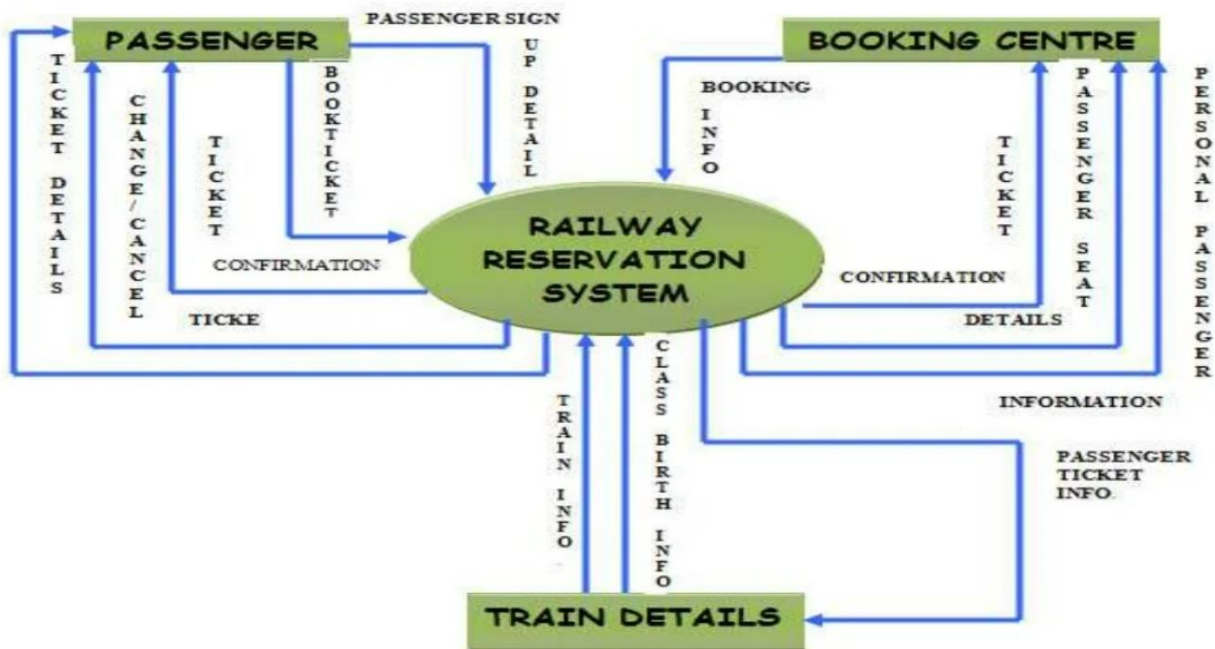
Indian Railways is the state-owned railway company of India, which owns and operates most of the country's rail transport. It is overseen by the Ministry of Railways of the Government of India.

The railway reservation system facilitates the passengers To enquiry about the trains available based on source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc. The case study aims to design and develop a database maintaining records of different trains, train status and passengers.

This project contains an introduction to the railway's reservation system. It is the computerized system of reserving the seats of train seats in advance.

It also provides an error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly.

The purpose of this project is to develop a front-to-back-end System for applications and queries using the graphical user interface.....



Select source and destination

From station*

Ajmer ▼

To station*

Delhi ▼

Date*

mm/dd/yyyy

Train-No:

TrainName:

Max-Seats:

Fare:

Source:

Destination:

Departure-
Time:

Arrival-
Time:

Edit Train

SOFTWARE AND HARDWARE REQUIREMENTS

- PHP language
- Webserver Xampp
- Html-CSS
- JavaScript
- Code Editor
- browser
- net Adapter
- 1 GB ram
- Window 10
- Internet

PROJECT DESCRIPTION

→ We are using two main techniques for requirement elicitation of our project. Their techniques are as follows

Use Cases

Ethnography

The reasons behind the use of mentioned techniques in our project are, passengers come to the railway station for ticket reservation according to their destination, available train, and desired seat in the different coaches of the train their cases vary for each passenger.

Now not all passengers come to the station to reserve a ticket but some of them are there to cancel their tickets and get the given

the amount for the seat in return. Therefore, we need use cases that will cover all the different scenarios.

When we talk about the technique of ethnography then we need to know,

what is the procedure that is being followed by the operator?

When people come and ask for a reservation?

So, these are the reasons why we are going to use the above-mentioned techniques for requirements elicitation in our project accordingly. It allows for flexible data format and delivery of its data so that each analysis application can receive only the information it needs and in the required.

- **Frontend Module:**

The front end of a website is the part that users interact with. Everything that you see when you are navigating around the Internet, from fonts and colours to dropdown menus and sliders, is a combo of HTML, CSS, and JavaScript being controlled by your computer's browser.

- **Backend Module:**

The backend (or “server-side”) is the portion of the website you do not see. It is responsible for storing and organizing data and ensuring everything on the client side works. The backend communicates with the front, sending and receiving information to be displayed as a web page.

- **Database Module:**

A web database is a system for storing information that can then be accessed via a website. For example, an online community may have a database that stores the username, password, and other details of all its members at its most simple level, a web database is a set of one or more tables that contain data.

WORKING

→Users get Information about the route, cancellation of the ticket, departure time, arrival time, and the number of trains available.

→Middleware program Store and Retrieve information about the various transaction related to Rail travel.

Keep track of all its passengers and thus schedule their journey accordingly.

→At the Backend server Maintain records of a passenger travelling in the different trains on different dates reaching the different destinations in the system.

→After that server process and the middleware program in this project, a scripting language and JavaScript working as middleware handlers fetch the data from the server and display to the user the required output data with the help of HTML-CSS language

IMPLEMENTATION

→JavaScript is a scripting language used to enhance the functionality of the browser. Java script is integrated with HTML and navigator 2.02. Java script facilitates the developer with properties related to document windows, frames, loaded documents and links. The J2EE platform specifies the logical application components within a system and defines the role played in the development process.

→Oracle is a trademark of Oracle Corporation and in common usage refersto the database engine (which looks for the data) and the rangeof frontend products. Oracle 8i is the largest-selling SQL-based RDBMS and the most commercially useful product.

→PHP allows the website builder to have more control. Long, complex documents override some programming languages, but this is not the case for PHP. Some simple lines of code are enough. Also, PHP allows tags and, thus, website builders can add and mix HTML tags, making the content more authoritative. Developers do not have to worry about putting codes in the right place when using PHP, as written between tags.

→ HTML is the language for describing the structure of Web pages. HTML gives authors the means to:

- Publish online documents with headings, text, tables, lists, photos, etc.
- Retrieve online information via hypertext links, at the click of a button.
- Design forms for conducting transactions with remote services, for use in searching for information, making reservations, ordering products, etc.
- Include spreadsheets, video clips, sound clips, and other applications directly in their documents.

With HTML, authors describe the structure of pages using markup. The elements of the language label pieces of content such as “paragraph,” “list,” “table,” and so on.

→ CSS or cascading sheet may be a text-based coding language that specifies the website formats and the way a site communicates with web browsers. The language allows web developers to regulate various style elements and functionalities, like layout, colour, fonts, and therefore the formatting and display of HTML documents.

Websites:

- www.php.com
- www.html-css.com
- www.javaworld.com
- www.projectdeveloper.com

Faculty Guidelines:

Mr. Manoj Varshney (Technical Trainer at GLA University)

GitHub Repository link:

→ [mayankgithub2020 train-booking-website- · GitHub.html](https://github.com/mayankgithub2020/train-booking-website-GitHub.html)

→ <https://github.com/mayankgithub2020/train-booking-website->