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Project report

On

RAILWAY RESERVATION SYSTEM

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Computer Science & Engineering

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DECLARATION

We hereby declare that the work being presented in this report entitled "RAILWAY RESERVATION SYSTEM " is an authentic record of our own work carried out under the supervision of Dr. S. Annamalai.

Date:

Signature of the student

Rahul Narayan Tyagi

Department SCSE

SCHOOL OF COMPUTING AND SCIENCE AND ENGINEERING
BONAFIDE CERTIFICATE

Certified that this project report “RAILWAY RESERVATION SYSTEM” is the bonafide work of “RAHUL NARAYAN TYAGI (17SCSE121004)” who carried out the project work under my supervision.

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ABSTRACT

The railway reservation system facilitates the passengers to enquire about the trains available on the basis of source and destination, Booking and Cancellation of tickets, enquire about the status of the booked ticket etc. the aim of case study is to design and develop a database maintaining the records of different trains, train status and passengers.

The projects contains Introduction to the Railway Reservation System. It is the computerized system of reserving the seats of train seats in advance. It is mainly used for the 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 counter of the reservation of the seats and one can easily make reservation and get tickets. Then this project contains entity relationship diagram base on railway reservation system and introduction to relation model.

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Figure1: ER Diagram.

Figure2: Use Case Diagram for Cancellation

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Figure5: System Design Diagram.

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Figure7: Screenshot of enquiry details.

Figure8: Screenshot of reservation form.

Figure9: Screenshot of destination form.

Figure10: Screenshot of Selecting the seats.

CHAPTER 1

INTRODUCTION

This system is basically concerned with the reservation and cancellation of railway tickets to the passenger. The need of this system arose because as is the known fact the India has the largest railway network in the whole world and it is not possible to handle such a large system manually. By computerizing it, it became possible to overcome the limitations and make the system operations more efficient. The complexity in handling data and record of such a vast system got reduced and become easier by computerizing the system.

Being more specific, this online reservation system can perform the basic function like reservation and cancellation. The users are required to register on the server for getting access to the database and query result retrieval. Upon registration completion, each user has an account which is essentially refer to as the view level of the customer. The account contains comprehensive information of the user entered during the registration and allows the user to access their past reservations, cancellations, enquire about trains and train schedule,

seat availability and make afresh reservations. The user will also be able to update their account details etc.

EXISTING SYSTEM

There are various system existing system like “IRCTC” i.e

Indian Railway Catering and Tourism

Corporation (IRCTC) is a subsidiary of the [Indian Railways](#) that handles the catering, tourism and online ticketing operations of the latter, with around 5,50,000 to 6,00,000 bookings everyday. It is the world's busiest and highest of 15 to 16 Lakhs tickets every day.

IRCTC held an [initial public offering](#) on the [National Stock Exchange](#) on 30 September 2019, the IPO got oversubscription of 112 times. IRCTC started running private trains, and "[Tejas Express](#)" become [India's first private train](#) on 4th Oct 2019. Uttar Pradesh Chief Minister Yogi Adityanath flagged off the first Tejas Express, the country's first "private" train run by its subsidiary IRCTC, on the Lucknow-New Delhi route.

PROPOSED SYSTEM

To avoid all the above pitfalls the system proposed is Railway Reservation System. In this all the reservation process through online. This system saves money, manpower, time. It provides security compared to existing system.

The basic functions being performed by our system are status, reservation and cancellation.

These functions will be handles with the help of following sub functions:

<< It reserves and cancels seats of passenger.

<< It contains information about the stations.

<< It contains information about the trains.

<< It contain information about the passenger.

<< It contains the details of reservation fare.

<< It makes entries for reservation, waiting, cancelled tickets,

<< It will update for uptime and downtime trains.

<< The passenger could search for trains from a particular source to destination.

<< The record of train status includes dates for which tickets can be booked, total no of seats available, no of seats already booked and waiting slot.

CHAPTER 2

HARDWARE REQUIREMENT

SOFTWARE USED

Operating System: Windows 2000/ XP/7

Front End: Visual Basic 6.0

Back End: MS Access 2003/07

HARDWARE USED

Processor: Intel Pentium Dual Core, 1.7 GHz

RAM: 512 MB

Hard Disk: 20 GB or more

LANGUAGES USED

FRONT END

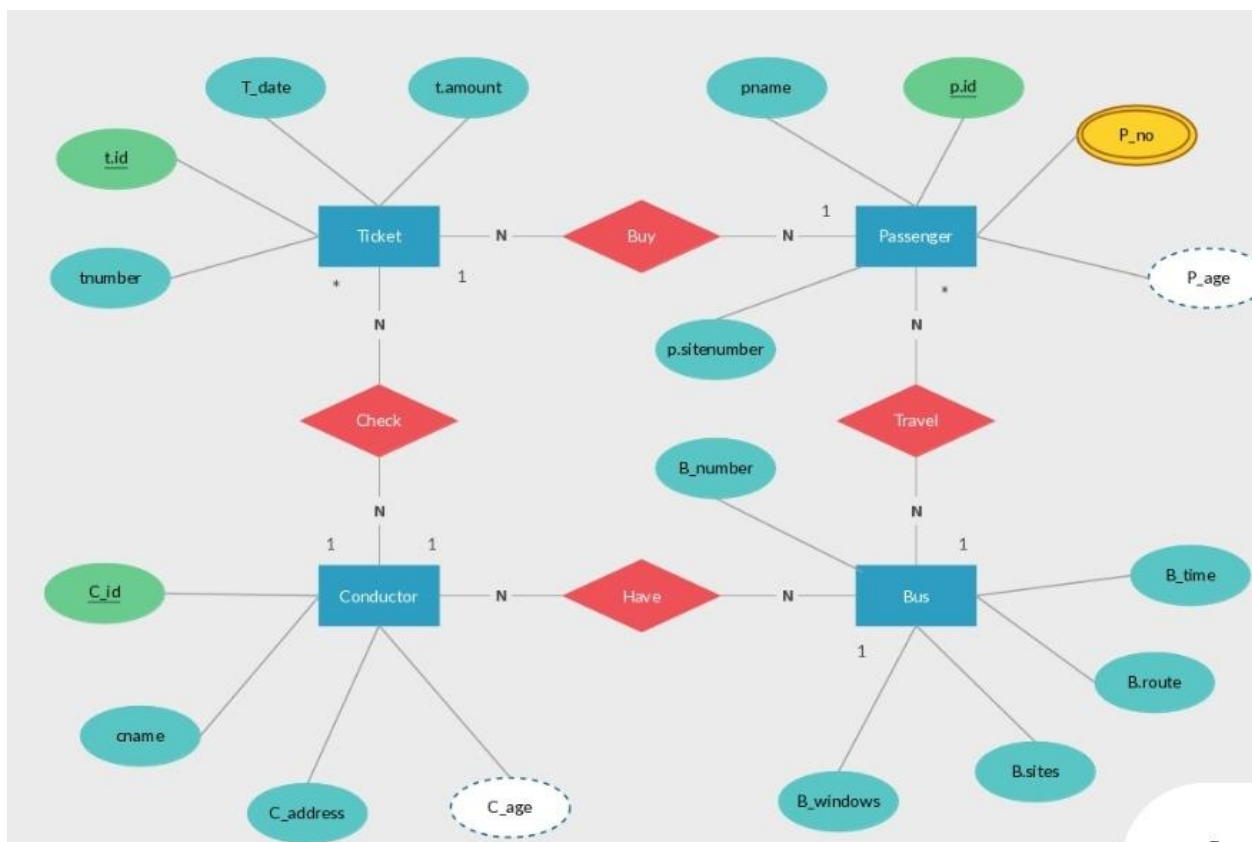
1. JAVASCRIPT
2. HTML
3. CSS

BACK END

- 1.PHP
- 2.MYSQL

IMPLEMENTATION OR ARCHITECTURE DESIGN

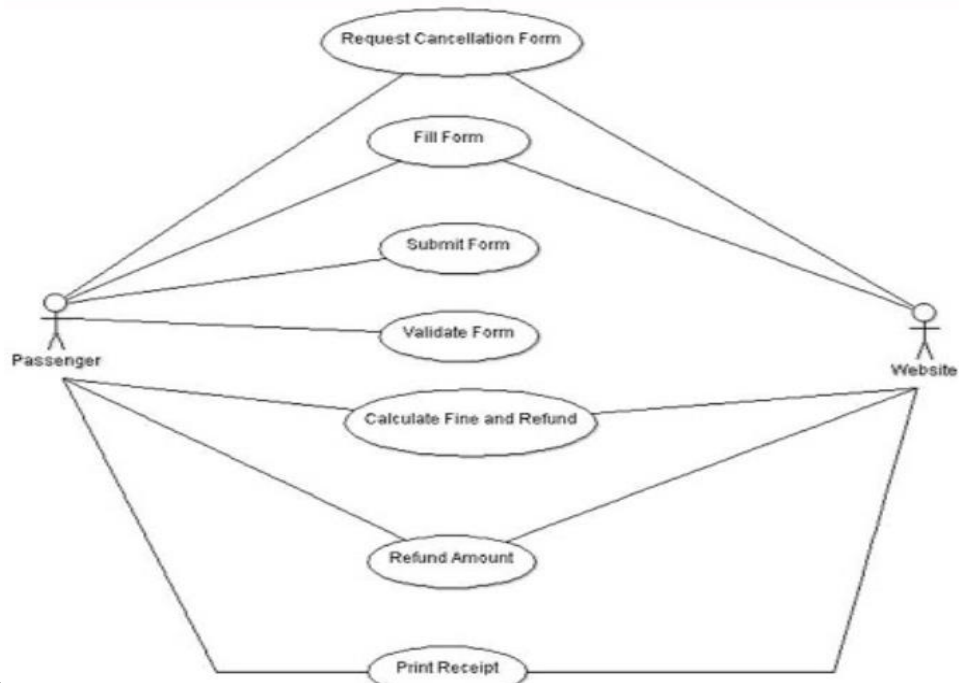
1. ENTITY RELATIONAL (ER) MODEL is a high-level conceptual data model diagram. ER modeling helps you to analyze data requirements systematically to produce a well-designed database. The Entity-Relation model represents real-world entities and the relationship between them. It is considered a best practice to complete ER modeling before implementing your database. ER modeling helps you to analyze data requirements systematically to produce a well-designed database.



2. USE CASE DIAGRAM

A **use case diagram** at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different [use cases](#) in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses

USE CASE DIAGRAM FOR CANCELLATION



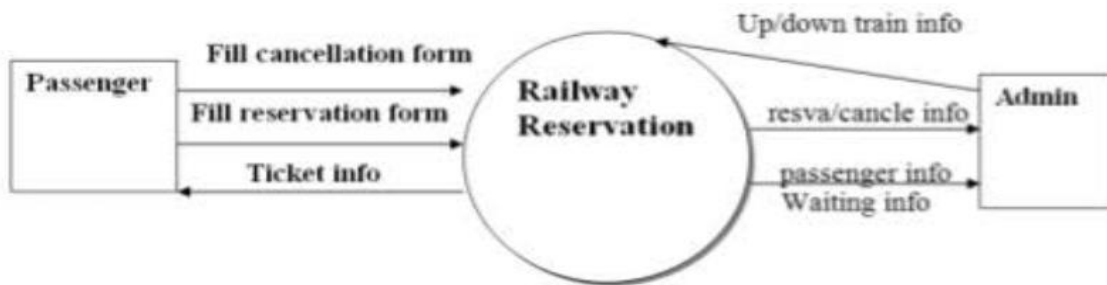
USE CASE DIAGRAM FOR TICKET BOOKING



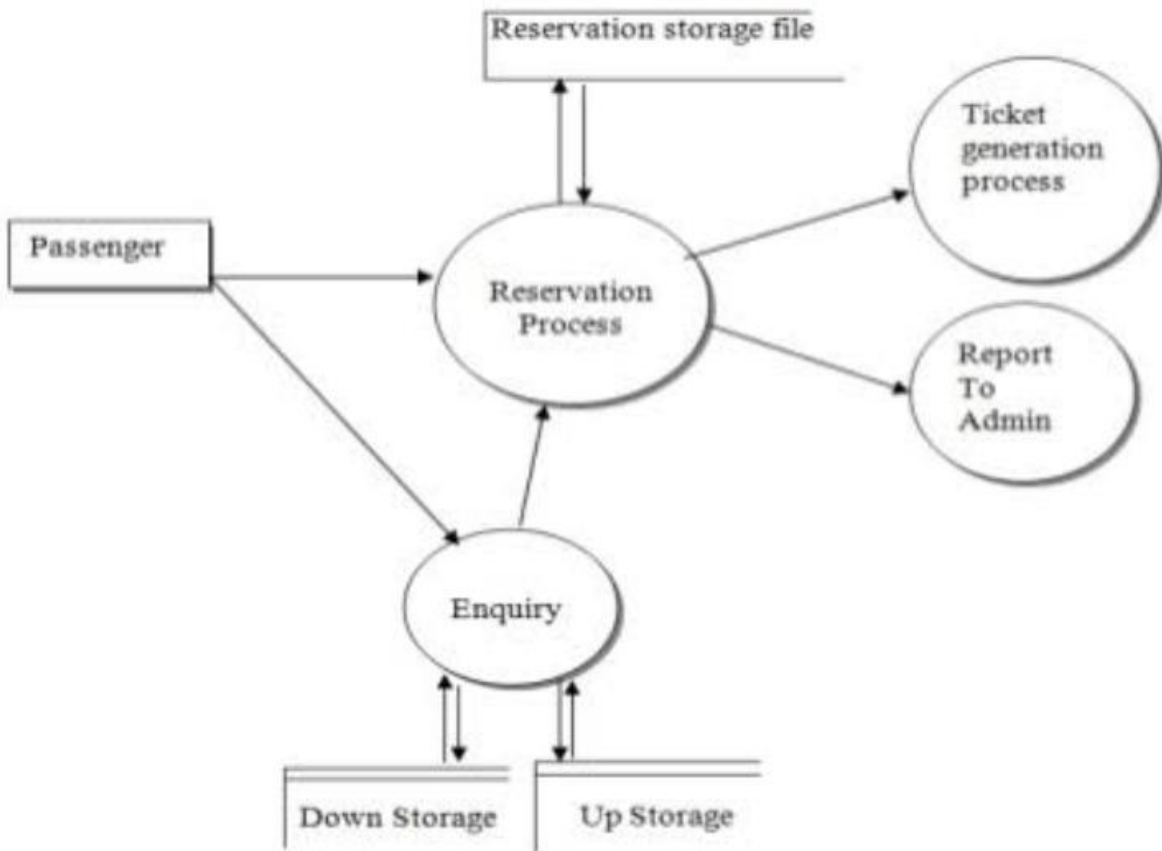
3. DATA FLOW DIAGRAM

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and report generation

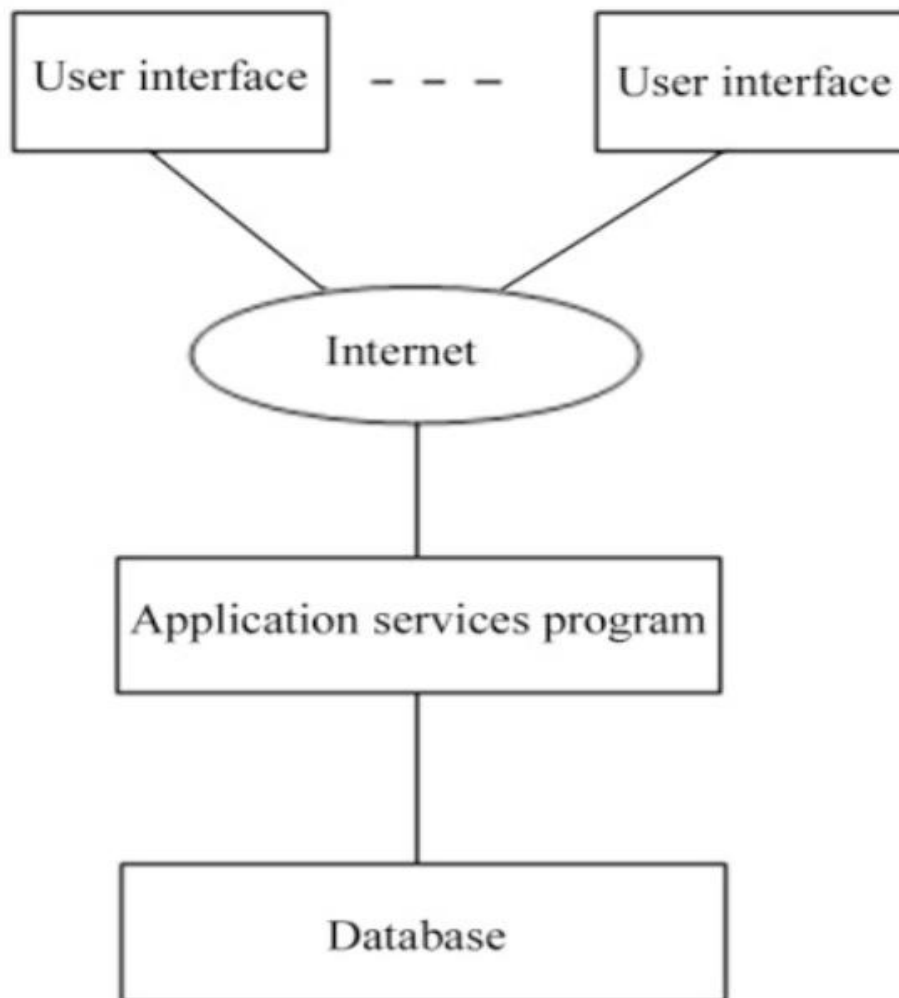
DATA FLOW DIAGRAM FOR LEVEL 0



DATA FLOW DIAGRAM FOR LEVEL 1



SYSTEM DESIGN DIAGRAM



CHAPTER 3

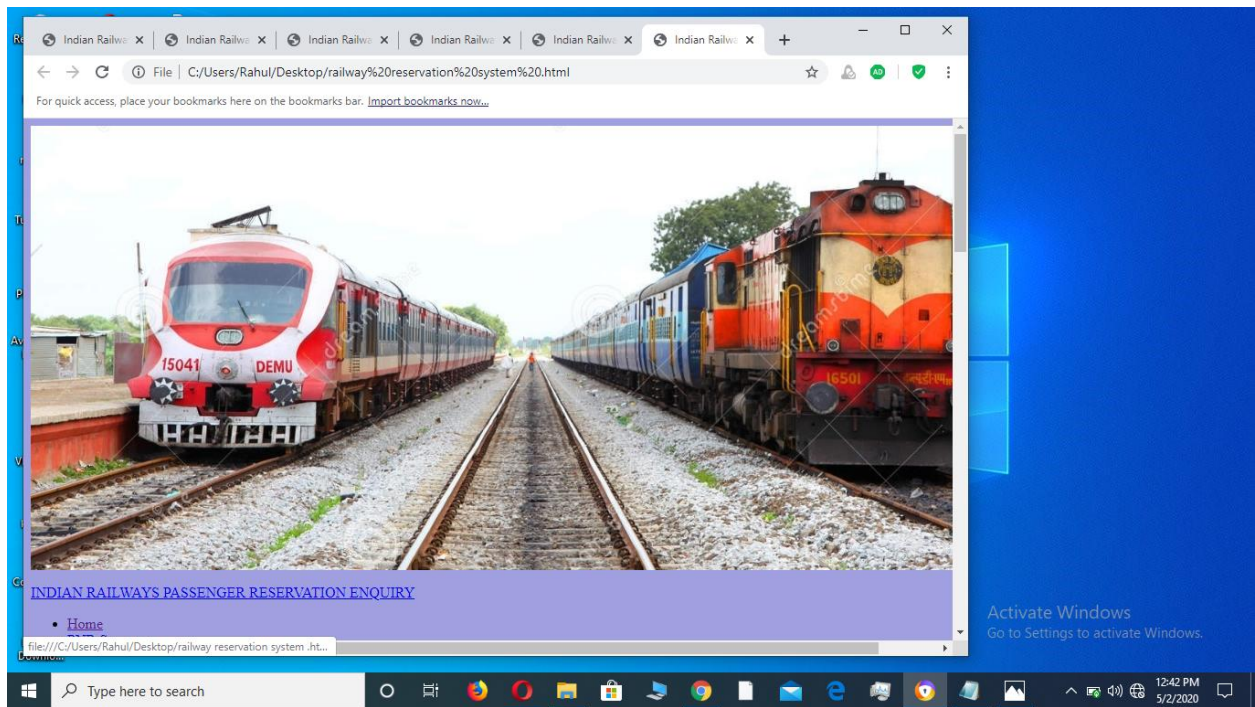
OUTPUT/ RESULT/ SCREENSHOT

1. For background image

```
file:///C:/Users/Rahul/Desktop/railway_reservation_system.html - Notepad
File Edit Format View Help
>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Indian Railways</title>
<meta name="keywords" content="Green Black, Web Design" />
<meta name="description" content="Green Black " />
<link href="templatemo_style1.css" rel="stylesheet" type="text/css" />
<script language="javascript" type="text/javascript">
function clearText(field)
{
    if (field.defaultValue == field.value) field.value = '';
    else if (field.value == '') field.value = field.defaultValue;
}
</script>
</head>
<body>
<div id="templatemo_container_wrapper">
<div id="templatemo_container">
    <div id="templatemo_banner">
    <div id="site_title">
        <a href="#"></a>
        <p><a href="railway.html" target="_parent"> <span>INDIAN RAILWAYS PASSENGER RESERVATION ENQUIRY</span></a></p>
    </div>

    <div id="templatemo_menu">
    <ul>
    <li><a href="#">Home</a></li>
    <li><a href="pnrenquiry.php">PNR Status</a></li>
    <li><a href="findtrains.php">Train Between Important Stations</a></li>
    <li><a href="seat_availability.php">Seat Availability</a></li>
    <li><a href="fare_enquiry.php">Fare Enquiry</a></li>
    <li><a href="#">Internet Reservation</a></li>
    </ul>
    </div> <!-- end of menu -->

</div> <!-- end of banner -->
```



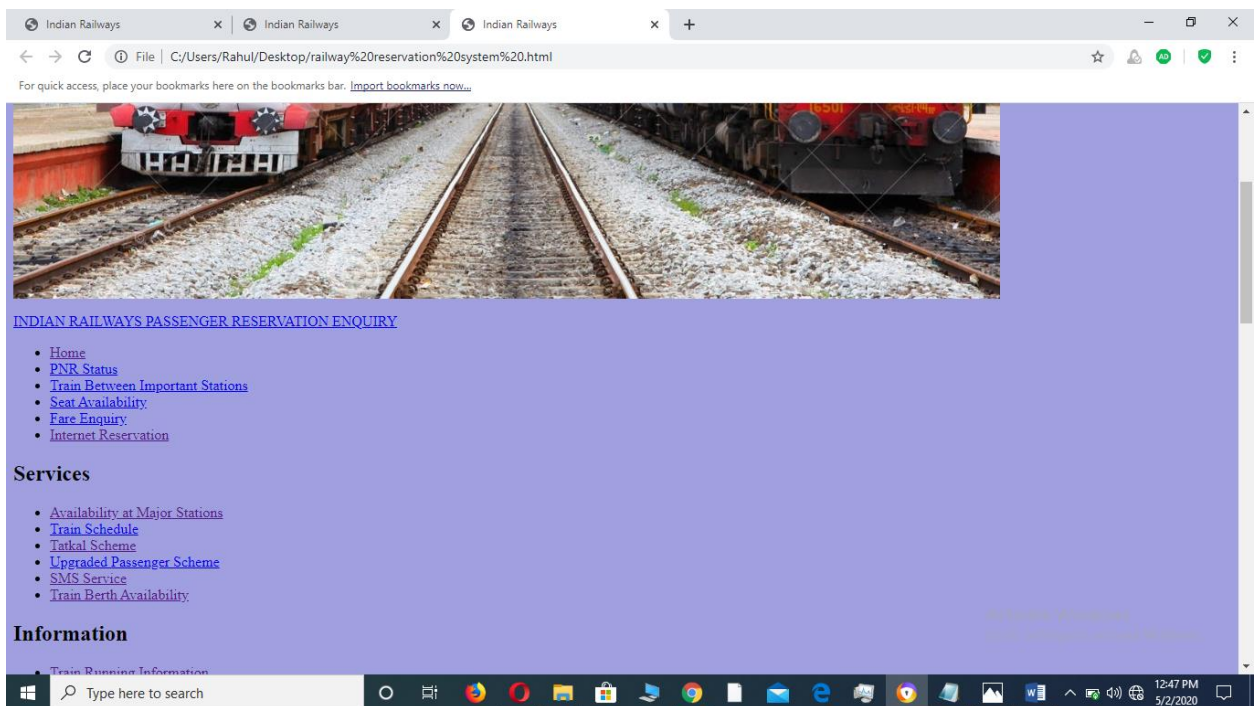
2. Enquiry for railway reservation system

```
*railway reservation system.html - Notepad
File Edit Format View Help
<p><a href="railway.html" target="_parent"> <span>INDIAN RAILWAYS PASSENGER RESERVATION ENQUIRY</span></a></p>
</div>

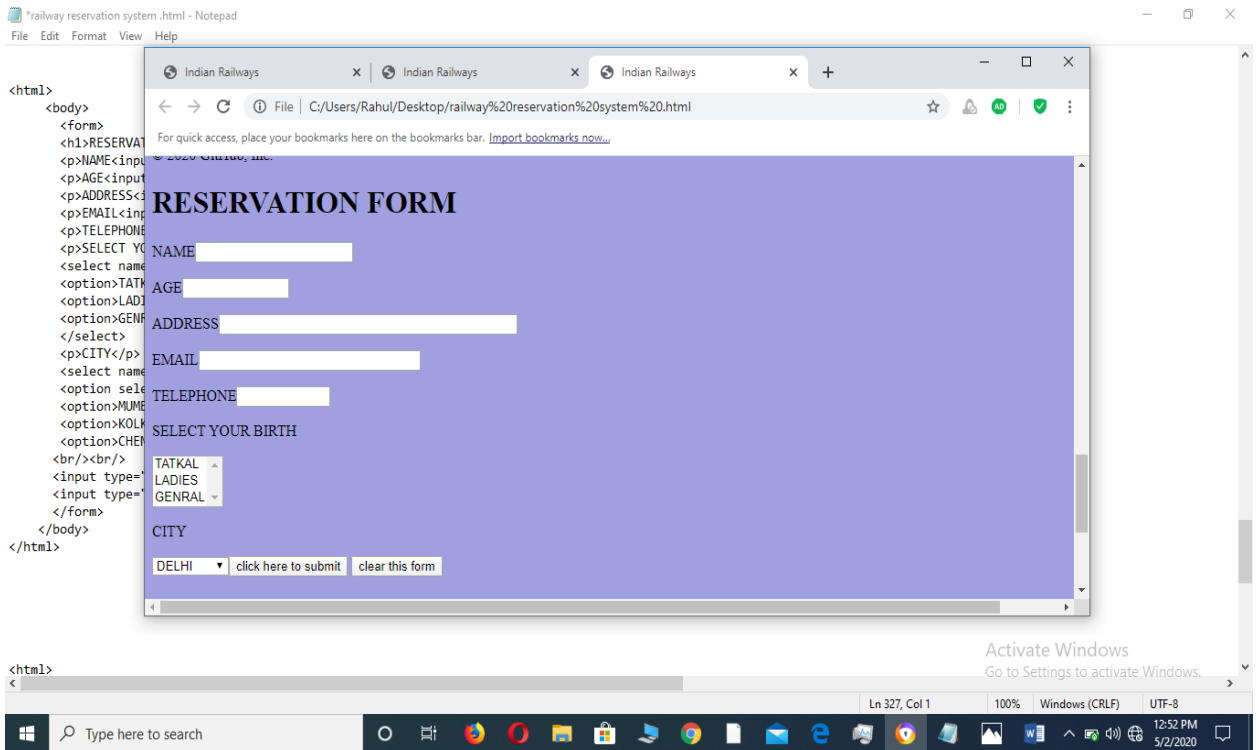
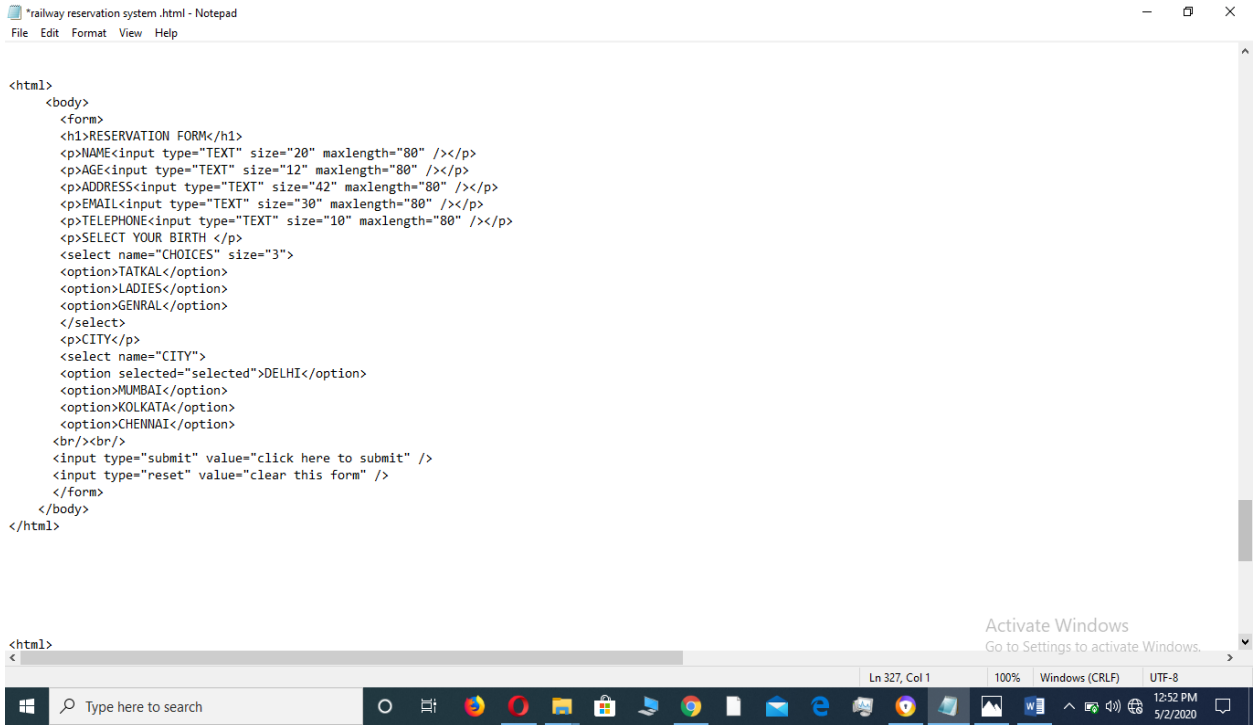
<div id="templatemo_menu">
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="pnrenquiry.php">PNR Status</a></li>
    <li><a href="findtrains.php">Train Between Important Stations</a></li>
    <li><a href="seat_availability.php">Seat Availability</a></li>
    <li><a href="fare_enquiry.php">Fare Enquiry</a></li>
    <li><a href="#">Internet Reservation</a></li>
  </ul>
</div> <!-- end of menu -->

</div> <!-- end of banner -->

<div id="templatemo_content">
  <div id="side_column">
    <div class="side_column_box">
      <h2><span></span>Services</h2>
      <div class="side_column_box_content">
        <ul>
          <li><a href="#" class="current">Availability at Major Stations</a></li>
          <li><a href="http://www.templatemo.com" target="_parent">Train Schedule</a></li>
          <li><a href="#">Tatkal Scheme</a></li>
          <li><a href="http://www.koflash.com" target="_blank">Upgraded Passenger Scheme</a></li>
          <li><a href="#">SMS Service</a></li>
          <li><a href="#">Train Berth Availability</a></li>
        </ul>
      </div>
    </div>
  </div>
</div>
```



3. Reservation form output with screenshot



4. DESTINATION FORM OUTPUT SCREENSHOT

```
File Edit Format View Help

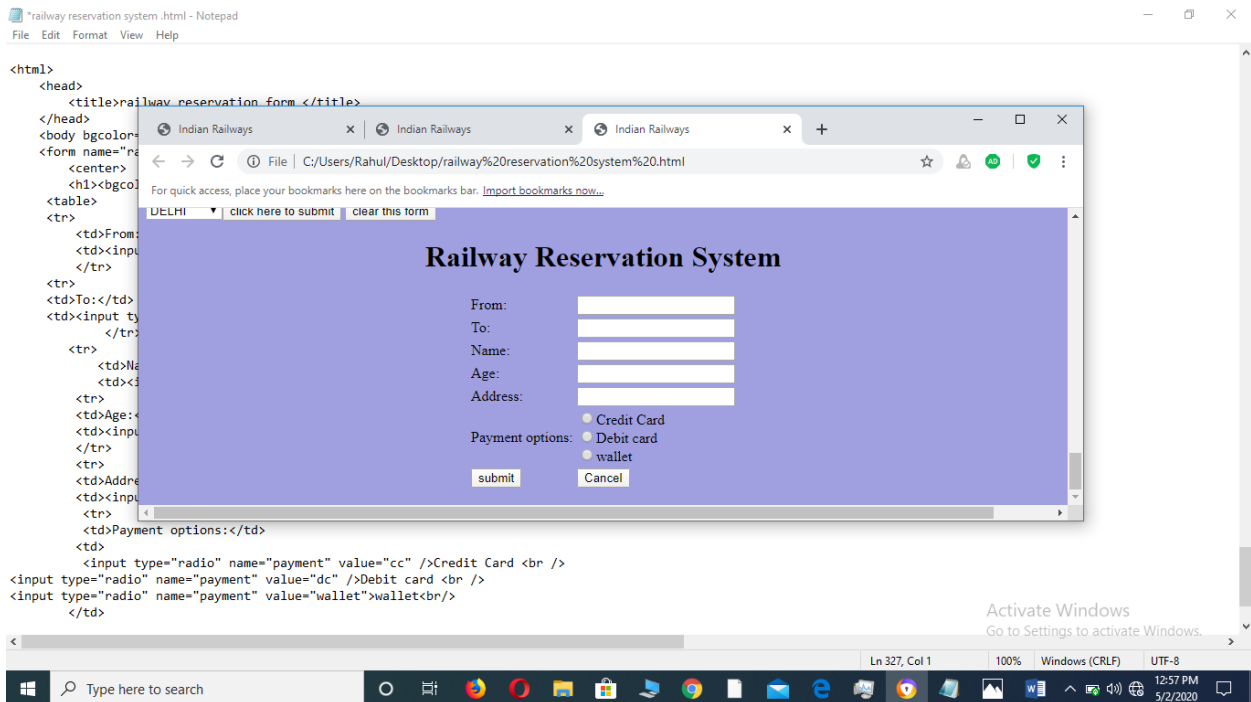
<html>
  <head>
    <title>railway reservation form </title>
  </head>
  <body bgcolor="image_train.jpeg">
    <form name="railway">
      <center>
        <h1><bgcolor="image_train.jpeg">Railway Reservation System </h1>
      </center>
      <table>
        <tr>
          <td>From:</td>
          <td><input type="text" name="" railway">
        </tr>
        <tr>
          <td>To:</td>
          <td><input type="text" name="txt2">
        </tr>
        <tr>
          <td>Name:</td>
          <td><input type="text" name="">
        </tr>
        <tr>
          <td>Age:</td>
          <td><input type="number" name="">
        </tr>
        <tr>
          <td>Address:</td>
          <td><input type="text" name="">
        </tr>
        <tr>
          <td>Payment options:</td>
          <td>
            <input type="radio" name="payment" value="cc" />Credit Card <br />
            <input type="radio" name="payment" value="dc" />Debit card <br />
            <input type="radio" name="payment" value="wallet">wallet<br />
          </td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

Activate Windows
Go to Settings to activate Windows.

Ln 327, Col 1 | 100% | Windows (CRLF) | UTF-8

Type here to search

12:56 PM 5/2/2020



```
<div>
  <div>
    <label>RESERVATION seat</label>
  </div>
  <form target="_blank" onsubmit="try {return window.confirm(&quot;This form may not function properly due to certain security constraints.\nContinue?&quot;)} catch(e){return false}">
    <div>
      <label>Name:</label>
      <input type="text">
    </div>
    <div>
      <label>Number Of Seats:</label>
      <input type="number">
    </div>
    <div>
      <button type="button">Start Selecting</button>
    </div>
    <div>
      <font color="Red"><label></label></font>
    </div>
  </form>
  <div>
    <div>
      <font color="white">SCREEN</font>
    </div>
    <table>
      <thead>
        <tr>
          <th></th>
        </tr>
      </thead>
    </table>
  </div>

```

Activate Windows
Go to Settings to activate Windows.

RESERVATION seat
Name:
Number Of Seats:
Start Selecting

SCREEN
Confirm Selection

31	■	■	■	■	■	■	31
32	■	■	■	■	■	■	32
33	■	■	■	■	■	■	33
34	■	■	■	■	■	■	34
35	■	■	■	■	■	■	35
36	■	■	■	■	■	■	36
37	■	■	■	■	■	■	37
38	■	■	■	■	■	■	38

Activate Windows
Go to Settings to activate Windows.

CHAPTER 4

CONCLUSION

In this paper, we design and achieve a railway online ticketing system. The system is structured into the data access layer, business logic layer and business exterior layer. We implement customer registration, customer cancellation, ticket inquiries, online booking, online ticket refund in the system. Business process design and database design is the focus of this system which are clearly and effectively designed by the business process diagrams and database ER diagram. Real-time tickets messages will be feedback to customers by the online railway booking system. The efficiency of booking is improved, manual booking errors is reduced, the management of railway passenger transport and customer booking is facilitates.

FUTURE ENHANCEMENT

This report has been prepared to implement the theory in the real field with the purpose of fulfilling all the needs.

The aim of this project is to make familiar to the practical aspect and uses of theoretical knowledge and clarifying the career goal.

May be I will take it for higher level and make some of the changes in it.

REFERENCE

1. www.w3school.com
2. www.google.com
3. IRCTC
4. Yatra.com
5. Indianrail.gov.in
6. www.creatly.com(for making diagrams)