A Project Report

on

Railway Ticket Booking Application

Submitted in partial fulfillment of the
requirement for the award of the degree of

B.TECH (COMPUTING SCIENCE)

(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

Under The Supervision of
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CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the thesis/project/dissertation, entitled **"Railway Ticket Booking Application"** in partial fulfillment of the requirements for the award of the B.tech submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of month, Year to Month and Year, under the supervision of Name… Designation, Department of Computer Science and Engineering/Computer Application and Information and Science, of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the thesis/project/dissertation has not been submitted by me/us for the award of any other degree of this or any other places.

Nishant Kumar,20SCSE1010257

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor Name

Designation

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of Nishant Kumar 20scse1010257

has been held on _____ and his/her work is recommended for the award of B.tech.

Signature of Examiner(s)   **Signature of Supervisor(s)**

Signature of Project Coordinator   **Signature of Dean**

Date: November, 2013

Place: Greater Noida

Abstract

In the given project we will be developing a website which will help users to find railway train details, book and cancel tickets and the exact rate of their tickets to the desired destination. The project objective is to book railway tickets in online. Railway ticket booking application can be accessed by anyone who has a net connection. The project involved creation of a web application which is intended for railway booking which is hosted on "Amazon Web Services" cloud platform. The front end of the web application is designed using HTML and CSS. The server connectivity to the database is done using PHP. AWS EC-2 lnstance was used on to which XAMPP server was installed to host the application. Also, Various AWS services are used to make the website more responsive and user friendly. Our application will have a landing page, login & signup feature for an individual. This application will reserve the ticket. We will be using Cloud computing in our application. Cloud computing enables tasks to be assigned to a combination of software and services over a network. This network of servers is the cloud.

Table of Contents

List of Figures

Acronyms

B.Tech.	Bachelor of Technology
M.Tech.	Master of Technology
BCA	Bachelor of Computer Applications
MCA	Master of Computer Applications
B.Sc. (CS)	Bachelor of Science in Computer Science
M.Sc. (CS)	Master of Science in Computer Science
SCSE	School of Computing Science and Engineering

CHAPTER-1

1.1 Introduction
Our website has various kinds of information that helps regarding booking of tickets via railways. User can login and create an account to book a ticket. Users will be able to search the train availability of the train and they can also book the ticket by using the debit, credit or master card and after booking the ticket if the user want to cancel it then they can easily do it also. Our website has login feature to protect user privacy. In the given project we will be developing a website which will help users to find book and cancel tickets to the desired destination. Our website works 24/7 so user can book tickets from any where any time. Our website offers hassle free management of bookings also payment are easier and faster.

1.2 Formulation of Problem
On most of the website there are long queues, so it takes a long time for any individual to book the ticket. Now days it is not possible to physically go and book train tickets.

1.2.1 Tool and Technology Used
The project involved creation of a web application which is intended for railway and bus ticket booking which is hosted on "Amazon Web Services" cloud platform. The front end of the web application is designed using HTML and CSS. The server connectivity to the database is done using PHP. AWS EC-2 Instance was used on to which XAMPP server was installed to host the application. Also, Various AWS services are used to make the website more responsive and user friendly.

Development Environments

Hardware

- Intel core 2 duo T6400 2.00 GHz with 2GB RAM, 250 GB hard disk space and other Standard accessories.

Environment and Applications:

- Microsoft Windows 10.
- Microsoft Visual Studio 2019.
- Microsoft SQL Server 2017.
- Microsoft Internet Explorer.

Hardware configuration:

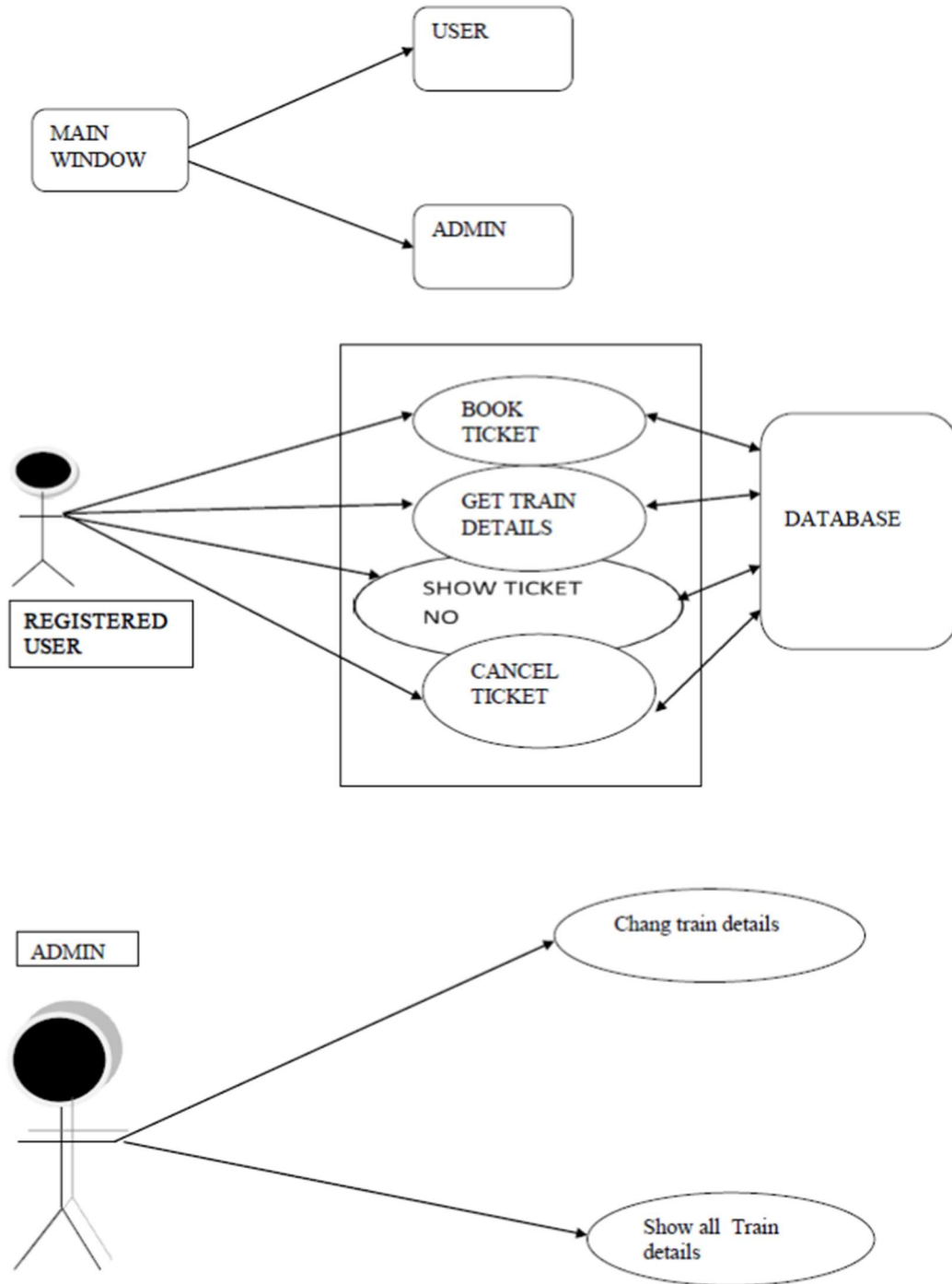The minimum configuration for hardware is given below:

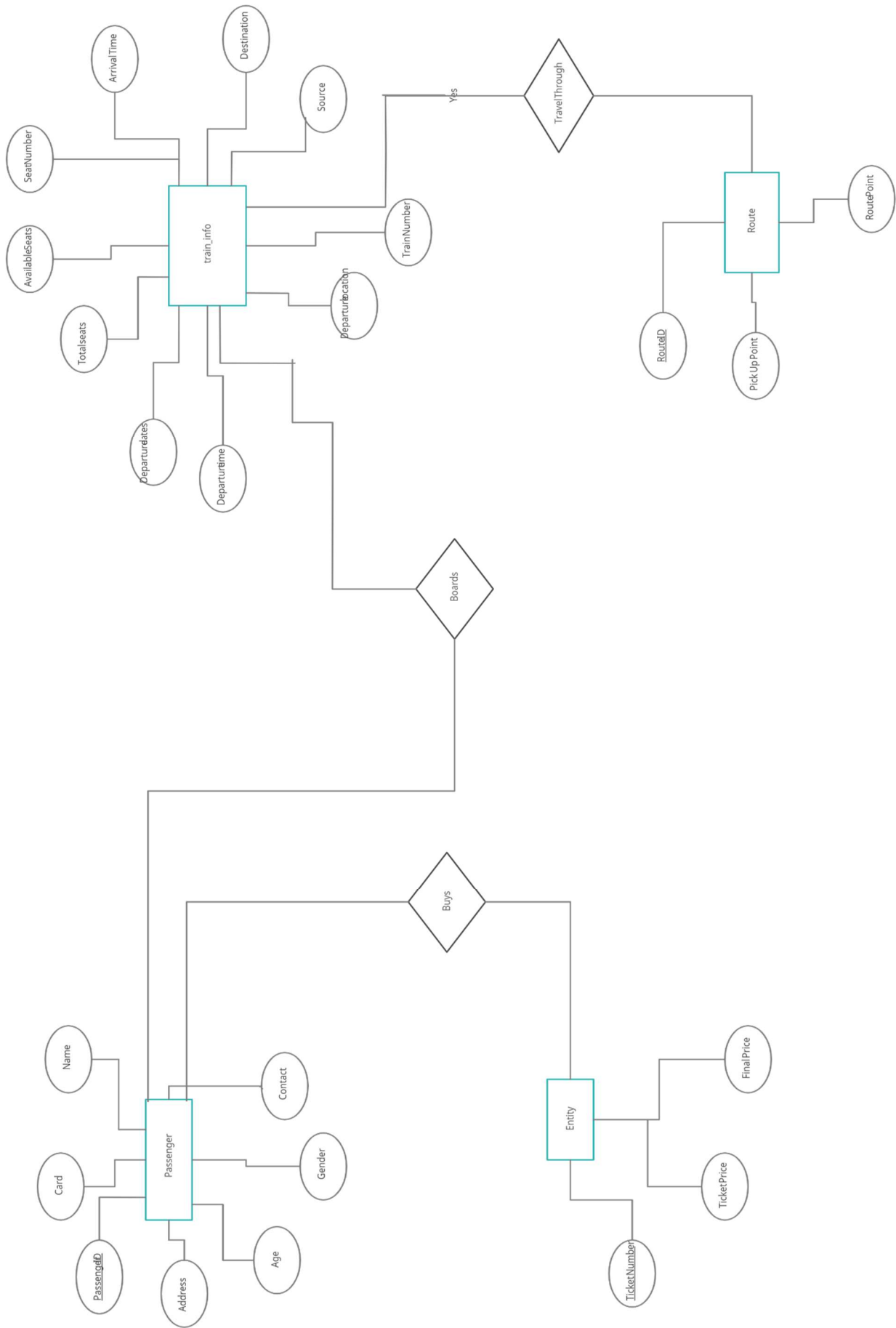- Intel® Pentium® or higher processor.
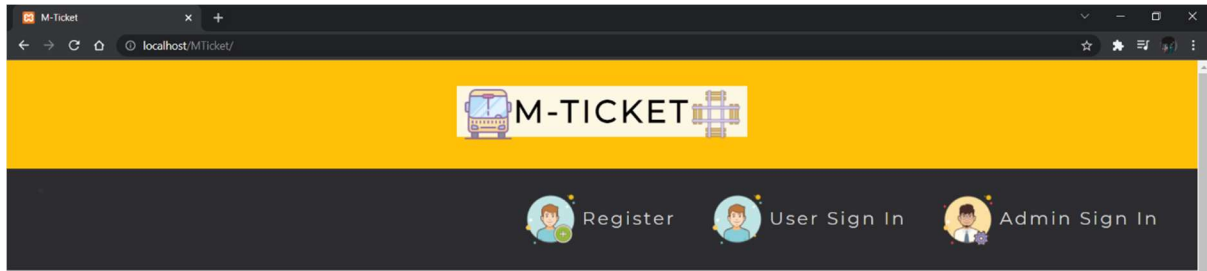- 2 GB RAM or higher

Software configuration:

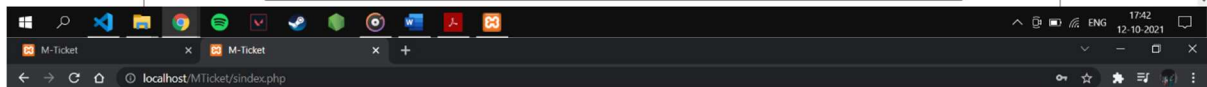- Microsoft® Windows® XP or later versions
- A standard web browser.

Chapter 2
Literature Survey/Project Design

train_info entity attributes: ArrivalTime, Destination, Source, SeatNumber, TrainNumber, AvailableSeats, Departurelocation, Totalseats, Departurdates, Departuretime

TravelThrough (Yes)

Route entity attributes: RoutePoint, RouteID, PickUpPoint

Boards

Buys

Passenger entity attributes: Name, Contact, Card, Gender, PassengerID, Address, Age

Entity attributes: FinalPrice, TicketPrice, TicketNumber

M-TICKET

👤 Register   👤 User Sign In   👤 Admin Sign In

Welcome To M-Ticket Booking Portal

🚆 Book Train Tickets

🚌 Book Bus Tickets
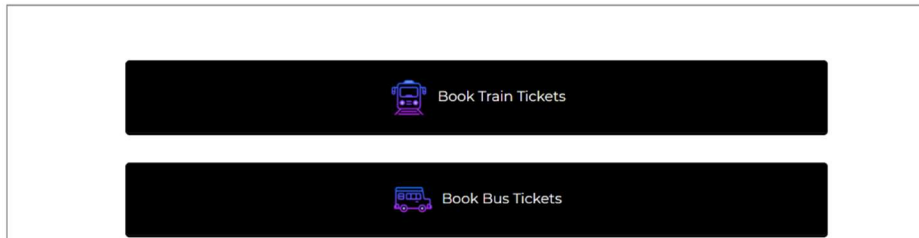
M-TICKET

User Sign In

Email id:

Password:

Sign In
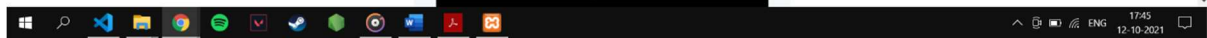
User Registeration

Name :

Email Id :

Gender :   ○ Male   ○ Female

Date of Birth :   yyyy-mm-dd

Password :

Train Ticket Booking

SOURCE STATION :

Panvel

FINAL DESTINATION :

Panvel

Train Class :

First

JOURNEY TYPE :

Single

NO OF PASSENGERS :

5

Proceed

Chapter 3
Functionality/Working of Project

In software engineering, a functional requirement defines a function of a software-system or component. A function is described as a set of inputs, the behavior and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that show how a use case to be fulfilled. Typically, a requirements analyst generates functional requirements after building use cases. However, this may have exceptions since software development is an iterative process and sometime certain requirements are conceived prior to the definition of the use case. Both artifacts (use cases documents and requirements documents) complement each other in a bidirectional process. A typical functional requirement will contain a unique name and number, a brief summary, and a rationale. This information is used to help the reader understand why the requirement is needed, and to track the requirement through the development of the system. The core of the requirement is the description of the required behavior, which must be a clear and readable description of the required behavior. This behavior may come from organizational or business rule, or it may be discovered through elicitation sessions with users, stakeholders and other experts within the organization. Software requirements must be clear, correct unambiguous, specific and verifiable.

RESERVATION OF TICKET:
• REQUEST TIME TABLE: Passenger requests database to display railway timetable.
• DISPLAY TIMETABLE: Database displays timetable to the customer.
• REQUEST TO RESERVE TICKET: Passenger requests the clerk to reserve his/her ticket.
• INPUT DETAILS: Clerk asks customer to enter details for the reservation of ticket.
• CALCULATE FARE: Clerk calculates the total fare of the journey according to the number of passengers and tells the customer.
• RESERVE TICKET: Ticket is reserved and customer pays the fare.
• REQUEST TO PRINT: Customer requests to print the ticket.
• PRINT TICKET: Ticket is been printed and handled to the customer

CANCELLATION OF TICKET:
• REQUEST TO CANCEL TICKET: Customer requests to cancel his/her ticket for which he/she has to give the PNR number.
• CANCEL TICKET: Once the PNR number is received, the ticket is cancelled.

Chapter 4

Results and Discussion

Our project introduces railway reservation system with an objective to make the reservation system more efficient, easier and fast. This project explores how computer technology can be used to solve the problem of user.

The main objectives provided by this software are as follows:
¬ We can enquire about availability of trains
¬ We can reserve and cancel their seats
¬ We can modify the information related to Trains

This project is dedicated to model existing railway reservation systems that aim at development of Railway Reservation System that facilitates the railway customer to manage their reservations and the railway administrator to modify the backend database in a user-friendly manner.

Chapter 5

FUTURE SCOPE

If anyone wants to extend this project then he/she can make an additional database of Train Fare. And database for updated availability of seats which is available after the cancellation of ticket on that specific train etc. He/she can also add some more command buttons in the existing software and extend working of the existing software.

Implementations of this project idea are in industrial use. Hence, this can be used for suggesting improvements in design, performance and greater usability. Apart from the industrial applications, it is a research-oriented project as well, the task of performance evaluation of different database designs, for efficiency, is in this spirit.

REFERENCES

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- **http://www.indianrail.com/**
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