

CLOUD BASED RAILWAY RESERVATION SYSTEM

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1. Abstract

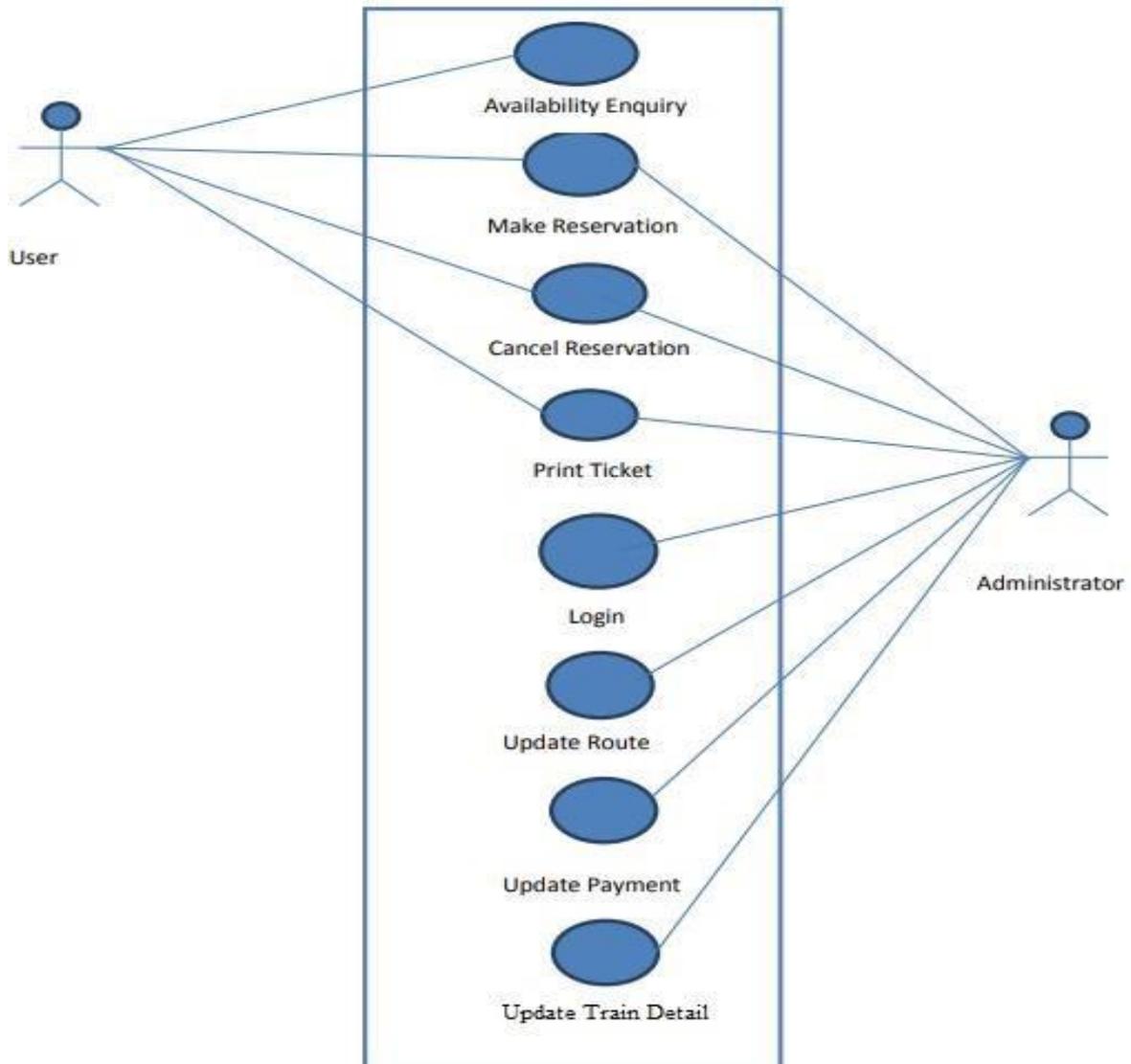
The Railway Reservation System facilitates the passengers to enquire about the trains available on the basis of source and destination, Booking and Cancellation of tickets, enquire about the status of the booked ticket, etc. The objective of case study is to design and develop a database maintaining the records of diverse trains, train status, and passengers. This project holds Introduction to the Railways reservation system. It is the computerized scheme of reserving the seats of train seats in innovative. It is mainly used for long route. Accessible reservation has made the development for the reservation of seats very much calmer 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. Then this development comprises unit relationship model diagram created on railway reservation system and introduction to relation model. There is also project of the database of the railway reservation system based on relation model. Sample of approximately SQL queries to recovers data after rail management database.

2. Introduction

We propose to build a unique and easy to use local train ticketing system for our project using cloud infrastructure. The organization allows operators to register and as soon as they list an account with unique ID is formed in the system. Separately from keeping tickets, through our system a passenger can compare online fares 'from' one city 'to' other cities. The cloud server allows for management a large number of users using effective computing authority. It permits for efficient and reckless computing for ticket costs to frequent users at a time.

The main goal of the project was to progress a website which would enable the reservation of online train tickets through an effective and yet modest GUI for a usual passenger intending to travel in trains. Separately from reserving tickets, through our system a passenger can compare online fares 'from' one city 'to' other cities.

3. Module Architecture



4. Methodology

1. Registration: This module is meant to record user details on the website database. It collects general information about the user such as name, mobile number, email address, etc. This module also includes a unique Email Id. and Password that would permit the user to sign-in to the website. The information established by the user is recorded in the 'Register' database. Once the user has given all the information needed for registration, the website redirects the user to the sign-in page.

2. Sign-In and Authentication: This module facilitates the user to sign-in on to the website. It collects user information, such as email address and password, and compares the information against the entries in the database. If the user entered information that matches the authentication parameters that is email address and password entered during the registration process, the user shall be authenticated and will be redirected to the user homepage. If the user arrived information that does not content the necessities for authentication, the user will not be authenticated and cannot admittance the user homepage.

3. Booking and Allocation: This component is accessible once the user has contracted-in onto the website, our submission displays two modes of transference to the user that are the train and the bus. User can select any one mode affording to his choice. If the user picks train he is provoked with the form where he has to enter his desired selection for booking process, that form includes source station, final destination, train class, train type, number of tickets, route. Once the user selects these limitations the script code accepts the entries and checks for matching entries in the server database and accordingly presentations the fare amount. after that user can go onward and continue to checkout. Similar functionality is accessible for bus booking but form choices are different.

4. Transaction: This module presentations a authorization message that the user has effectively booked the ticket. It also makes an entry in the transaction database and the unique transaction ID is assigned to the user in this module. User can design a ticket in the next step.

5. Admin: This module is designed for Ticket-Checker. Firstly, Ticket-Checker must sign-in to use the application. Once user has singed-in, he is providing with the transaction database for both bus and train ticket. The checker can choice any one of this option to authenticate and authorize the ticket. In this module the checker is provided with an selection to search a precise keyword this will help checker to save time if user has to select any specific entry.

1. User: Open web-application in the suitable browser. Enter wanted information to book the ticket.

2. Admin: Deploy and accomplish the system database by adding new bus stops or train stations, removing stops. Adding new Verifier if mandatory.

3. Server: Takes the desired entries from the user. Calculates the fare by checking in the database. Displays the ticket in a valid format. Upright the details of user on cloud with its ticket.

4. Verifier: Open the web application in the appropriate browser Takes booking id or other relevant information of the user and verifies.

✓ Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud.

✓ Access reliable, scalable infrastructure on demand. Scale capacity within minutes with SLA commitment of 99.99% availability.

✓ Optimize performance and cost with flexible options like AWS Graviton-based instances, Amazon EC2 Spot instances, and AWS Savin.

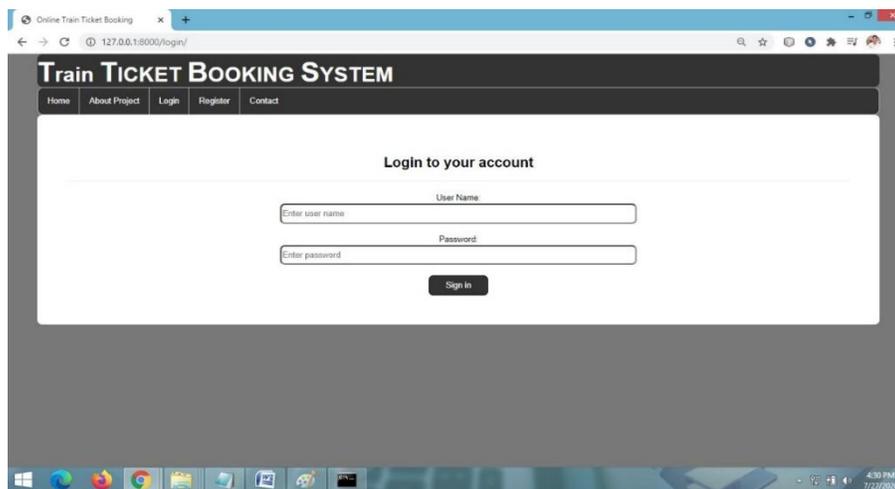
How to Get Your Project Ready for Deployment

We essential to take your CSS, HTML, and JS code from Code Pen and place them into their individual distinct files in a text editor.

In the CodePen environment, CodePen links your CSS to your HTML code, as well as your JS file to your HTML. We need to explanation for this previously we deploy to S3, so we are going to test locally first.

Open your editor of choice, and create a new directory (folder) to hold your three Code Pen files. Next, generate three new files:

- index.html
- styles.css
- main.js



Fig(1.1) Login Page

5.Future Scope

This web application contains virtually all the structures of the online train ticket booking. The future implementation will be online assistance for the customers and chatting with website administrator. Transparency, scalability, security and intellectual monitoring are approximately of the maximum imperative constraints which every cloud infrastructure should practice. Recent study on other important constraints is selection cloud computing system to come up with new features and strategies with a great capability of providing more advanced cloud solutions. Cloud Computing allows storage and access to data like files, images, audio, and videos on the cloud storage.

6.Conclusion

The project entitled “Online Train Ticket Booking System” is developed using HTML, CSS and Bootstrap as front end and Python and SQLite database in back end to computerize the process of online train ticket booking. This project covers only the basic features required. Therefore, using cloud computing technology in train reservation system is the maximum efficient, cost-saving, time-saving and sterilizable system for to come ticket holders.

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