

Web - Based Online Movie Ticket Booking Using Java

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Abstract : This software project is a traditional movie ticket booking system with some added functionality. This system is built for fast data processing and bill generation for theatre customers. The main purpose of our online ticket booking system is to provide an alternate and convenient way for a customer to buy cinema tickets. It is an automatic system. After the data has been fed into the database, the staff does not need to do anything with the order once it is received through the system. a goal to develop a backend system for a movie ticket booking platform that allows users to search for movies, book tickets, make payment and view booking history. In this project we book ticket using online movie Ticket reservation system. A ticket when billed is searched from the database and its price is added to the bill based upon the ticket quantity

I. INTRODUCTION

The main purpose of our online ticket booking system is to provide an alternate and convenient way for a customer to buy cinema tickets. It is an automatic system. After the data has been fed into the database, the staff does not need to do anything with the order once it is received through the system.

In today's digital age, convenience and efficiency have become key aspects of modern services. The Online Movie Ticket Booking System is designed to streamline the process of reserving movie tickets, offering users the ability to view available movies, check showtimes, select preferred seats, and make secure payments all from the comfort of their homes.

Traditional methods of ticket booking, such as standing in long queues or relying on third-party agents, are often time-consuming and prone to errors. This system addresses those inefficiencies by providing a user-friendly, web-based platform that operates in real-time and ensures seat availability is updated dynamically.

The system serves primary user types: customers, who book tickets; theater administrators, who manage movie schedules and seat layouts; and system administrators, who maintain and oversee the entire platform. With secure login functionalities, responsive design, and integration with digital payment gateways, the platform enhances the overall movie-going experience while reducing operational overhead for theaters.

II. Literature Survey

Mykola Pasyeka and Andrew Malitchuk (2020) proposed a distributed online movie ticket booking system using microservice architecture. The paper explains system development stages, online booking challenges, and technologies for improving scalability and efficiency in ticket booking systems.

Vaibhav Gupta, Kukdeep Singh, Siddhartha Kumar Arjaria, and Bhaskar Biswas (2019) introduced a dynamic pricing model for movie tickets using clustering and regression techniques. The system adjusts ticket prices based on demand patterns to maximize revenue and improve customer management.

Samar M. Alkhuraiji (2020) developed the Cinema Station Application (CSA), an augmented reality-based movie booking application. The system allows users to search movies, book tickets online, and view trailers, ratings, and cast details through AR technology.

Sara Lazarevic and Tamara Zuvela (2022) designed a web-based information system for automating movie ticket booking and cinema operations. The system helps users easily search movie schedules and reserve tickets online, improving operational efficiency.

P. Kirubanantham, A. Saranya, and D. Senthil Kumar (2021) proposed a neural network-based movie recommendation system using user reviews and ratings. The system provides personalized movie suggestions and improves recommendation accuracy for better user experience.

III. Methodology

A. Data Collection

The system collects user details such as username, email ID, password, and phone number during registration. Admin adds movie details, theatre information, show timings, and seat availability into the database.

B. Data Preprocessing

The collected data is validated before storing in the database. Passwords are encrypted and duplicate or invalid entries are removed to improve security and accuracy.

C. User Authentication

Users must log in using a valid username and password. The system verifies the credentials and allows only authorized users to access the booking platform.

D. Movie & Showtime Management

The admin manages movie details, theatres, and show timings. Users can view available movies, timings, and seat availability in real time.

E. Booking & Seat Selection

Users can select seats and book movie tickets online. After booking, the selected seats are updated automatically in the database.

F. Payment Processing

The system supports secure online payment for ticket booking. After successful payment, booking confirmation and bill details are generated.

G. Result Generation

After booking completion, the system displays ticket details such as movie name, theatre, timing, seat number, and booking ID. The admin can also monitor all booking records and reports.

IV. SYSTEM ARCHITECTURE

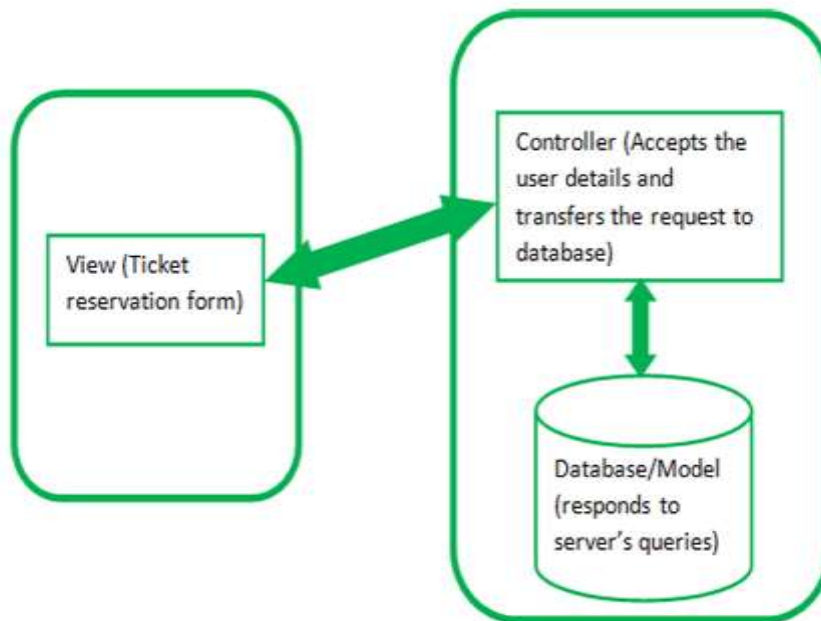


Fig 1 : System Architecture

V. IMPLEMENTATION

The implementation of the Web-Based Online Movie Ticket Booking System is carried out using Java, JSP, Servlets, MySQL, and Apache Tomcat. The user interface is designed to provide an easy and interactive environment for registration, login, movie browsing, ticket booking, and payment processing. The user module manages customer registration, authentication, profile management, and booking history securely through the database. The movie and showtime management module allows the admin to add, update, and remove movie details and schedules dynamically. The booking and payment module enables users to select seats, confirm bookings, and perform secure online transactions, after which ticket details are generated automatically. The admin module is implemented to manage users, movies, theatres, bookings, and payments through a dedicated admin panel. The database stores all user details, movie information, booking records, and payment data efficiently. Finally, all modules are tested and integrated together to ensure smooth communication and proper functioning of the complete system.

Existing System

The existing main objective of project is to create an Online Movie Ticket Booking processing that allows customers to know about new movies, their schedules, cinema locations, class and ticket price etc. In the booking process when customer selects his city then cinemas of that city are filtered. — The Online Movie Ticket Booking System is a popular project for understanding the integration of web technologies and handling real-world business processes. An existing system for this project typically provides functionalities like movie browsing, booking tickets, user authentication, and admin management for show times and movies.

Proposed System

The Movie Ticket booking system is built to help theatres calculate and display bills and serve the customer in a faster and efficient manner and decrease manpower. — This software project consists of an effective to help the employee in easy bill calculation and providing an efficient customer service. We enter into Web page by logging with User Name and Password. Then we select the Movie and later in which Theatre movie is running. Finally, it displays the details of the procedure and print the form to show at respective ticket counter to get ticket.

VI. RESULTS

LOGIN PAGE

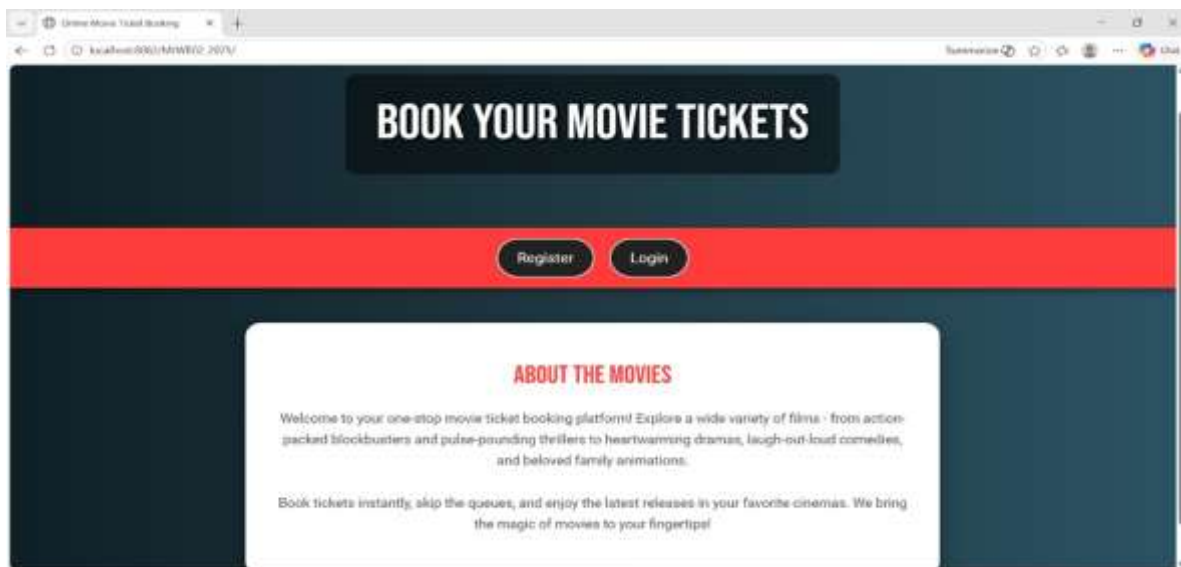
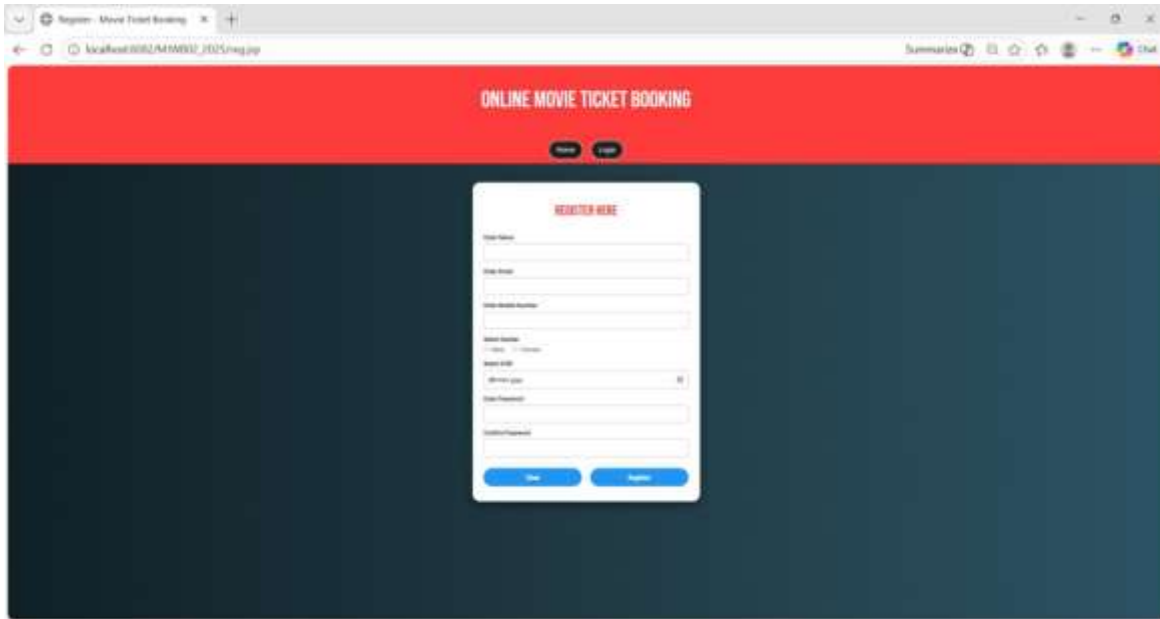


Fig 1: Home page

The home page of the Online Movie Ticket Booking System provides an attractive and user-friendly interface for customers. It contains options such as Register and Login for accessing the system. The page also displays information about movies and allows users to navigate easily through the booking platform. The design is implemented using JSP, HTML, and CSS to improve user interaction and usability.

REGISTRATION PAGE



The screenshot shows a web browser window with the title 'Register - Movie Ticket Booking'. The URL is 'localhost:8082/AMMB02_2025/reg.jsp'. The page has a red header with the text 'ONLINE MOVIE TICKET BOOKING'. Below the header, there are two buttons: 'Home' and 'Login'. The main content area is dark blue. In the center, there is a white registration form titled 'REGISTER HERE'. The form contains the following fields: 'First Name', 'Last Name', 'Email Address', 'Phone Number', 'Gender' (with radio buttons for Male and Female), 'Date of Birth' (with a date picker), 'Password', and 'Confirm Password'. At the bottom of the form, there are two buttons: 'Clear' and 'Register'.

Fig 2: Registration Page

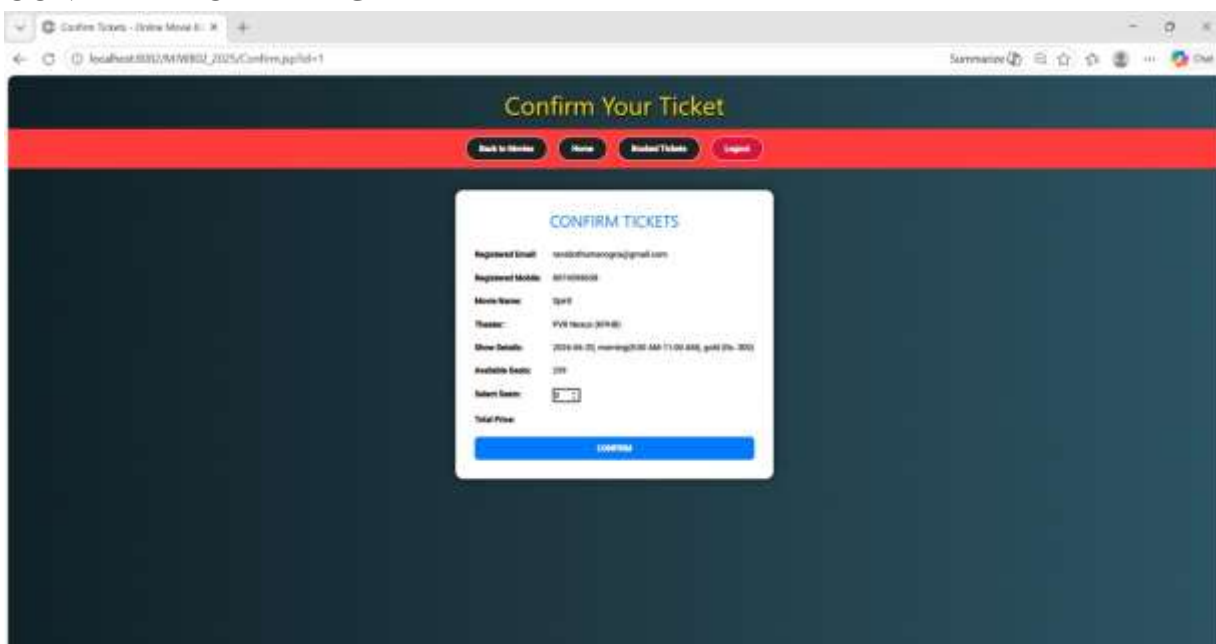
The registration page allows new users to create an account in the system by entering details such as name, email ID, mobile number, gender, date of birth, and password. The entered information is validated and stored securely in the database. This module helps in maintaining user records for future login and booking activities.

LOGIN PAGE

Fig 3 : Login Page

The login page is implemented to provide secure authentication for both users and administrators. Users enter their email ID and password to access the booking system. The system verifies the credentials from the database and grants access only to authorized users, thereby improving security and preventing unauthorized access.

CONFIRM TICKET PAGE



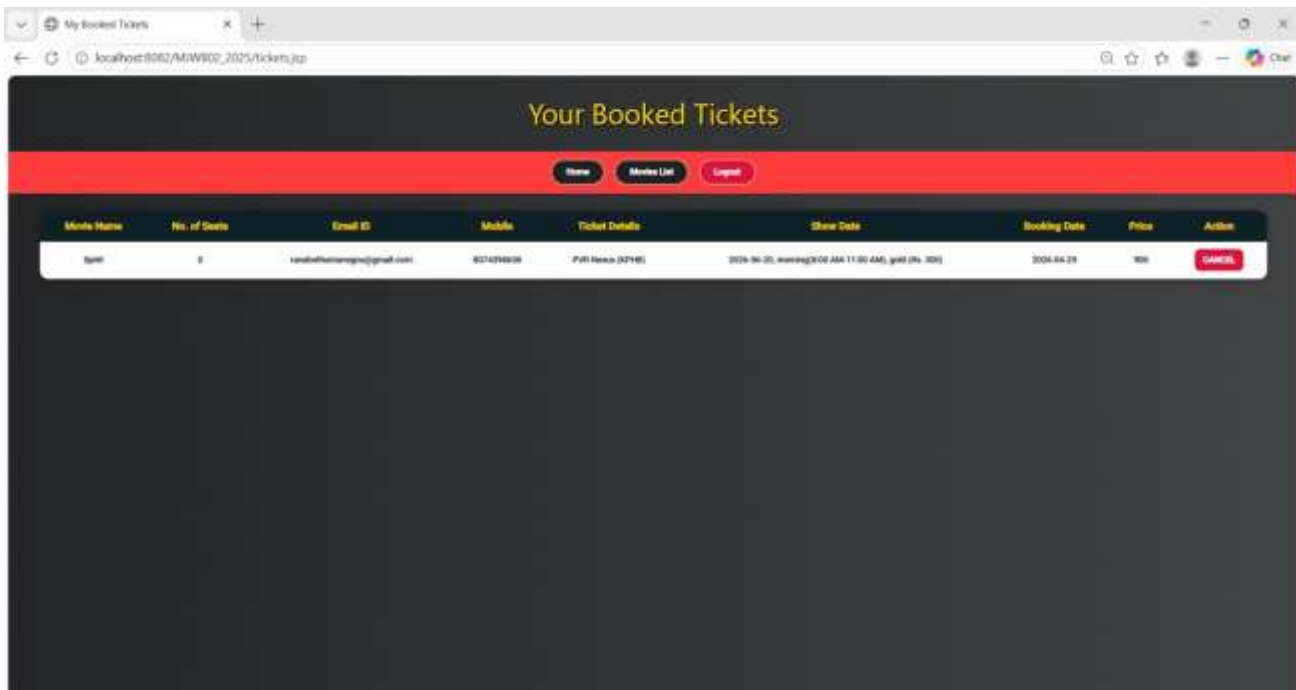
The screenshot shows a web browser window with the title 'Confirm Tickets - Online Movie B...'. The URL is 'localhost:8082/AMMB02_2025/Confirm.jsp?id=1'. The page has a red header with the text 'Confirm Your Ticket'. Below the header, there are four buttons: 'Back to Home', 'Home', 'Booked Tickets', and 'Logout'. The main content area is dark blue. In the center, there is a white confirmation form titled 'CONFIRM TICKETS'. The form displays the following information: 'Registered Email: nandabhumangra@gmail.com', 'Registered Mobile: 9871234567', 'Movie Name: Spide', 'Theater: PVR Noida (30946)', 'Show Details: 2024-04-20, evening(2:00 AM-11:00 AM), gold (2h-30m)', 'Available Seats: 100', 'Selected Seats: 5', and 'Total Price:'. At the bottom of the form, there is a blue button labeled 'CONFIRM'.

Fig 4: CONFIRM TICKET PAGE

The Ticket Confirmation page is implemented to allow users to verify their booking details before confirming the reservation. The page displays information such as registered email ID, mobile number, movie

name, theatre name, show timing, available seats, selected seats, and total ticket price. Users can select the required number of seats and confirm the booking through the system. After successful confirmation, the booking details are stored in the database and the ticket is generated automatically. This module improves booking accuracy, user convenience, and secure ticket reservation management.

TICKET BOOKING PAGE



The ticket booking page allows users to view booked tickets and booking details such as movie name, number of seats, theatre details, show date, booking date, and total price. Users can also cancel tickets directly through the system. This module improves convenience and provides easy access to booking history and ticket management.

VII. CONCLUSION

So, First we login to the system with username and password that we already data has been fed into the database. Then it takes into another page where we select movie and then after we selecting movie another page comes then we select show timings. After selecting show timings it takes into another page there we select number of tickets we want. After selecting number of tickets it takes into another page there we print ticket with cost. This software project is a traditional movie ticket booking system with some added functionality. This system is built for fast data processing and bill generation for theatre customers. The main purpose of our online ticket booking system is to provide an alternate and convenient way for a customer to buy cinema tickets. It is an automatic system. After the data has been fed into the database, the staff does not need to do anything with the order once it is received through the system. a goal to develop a backend system for a movie ticket booking platform that allows users to search for movies, book tickets, make payment and view booking history. In this project we book ticket using online movie Ticket reservation system. A ticket when billed is searched from the database and its price is added to the bill based upon the ticket quantity.

VIII. FUTURE ENHANCEMENT

As this is minor project, we have done everything in a simple manner when this project is developed in future it may have future developments and specialized features like real time payment and more attractive display. This project is aimed at being more user friendly with the movie lovers. To overcome three major problems this project is designed, which is standing in a queue for parking, unavailability, canceling the tickets, snacks and unavailability of paying on spot along with booking tickets. **REFERENCES**

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