

Introduction

- **FilmGo - Movie Ticket Booking System** is a user-friendly platform designed to simplify the process of reserving movie tickets online. Developed using **Java, JSP, Servlets**, and **JDBC**, the system allows users to browse movies, select showtimes, book seats, and make secure payments.
- With features like **real-time updates**, **interactive seat selection**, and an **admin dashboard** for managing schedules and bookings, FilmGo addresses the growing demand for convenient, digital solutions in the entertainment industry.

Survey of Existing Websites

1.BookMyShow

Overview: BookMyShow is one of the largest and most popular online ticket booking platforms in India. It allows users to book tickets for movies, concerts, plays, sports events, and more.

Features:

- Movie listings with filters for language, genre, and location.
- Interactive seat selection with real-time availability.
- Multiple payment options, including wallets, UPI, and cards.
- Personalized recommendations based on user history.
- Mobile app for on-the-go bookings.

Limitations:

- High convenience fees charged on each booking.
- Overloaded during peak times or large-scale events, leading to slower performance.

2.Cinepolis India

Overview: Cinepolis is a leading multiplex chain with its own ticket booking platform for Cinepolis theaters.

Features:

Easy browsing of Cinepolis-exclusive movie schedules and availability.

Facility to pre-order food combos with tickets.

User-friendly mobile app for quick bookings.

Limitations:

Focused only on Cinepolis outlets, limiting user options.

Fewer offers and discounts compared to BookMyShow or Paytm Movies.

Technology Stack

Frontend (User Interface):

- **HTML:** For structuring web pages.
- **CSS:** For styling and layout.
- **JavaScript:** For basic interactivity (e.g., form validation, seat selection highlighting).

Backend (Server-Side):

- **Java:** Core programming language for implementing the logic.
- **JSP** (Java Server Pages): To create dynamic web pages and handle user interactions.
- **Servlets:** For processing user requests and generating responses

Database:

- **MySQL:** For storing and managing data such as user details, movie schedules, seat availability, and booking records.

Connectivity:

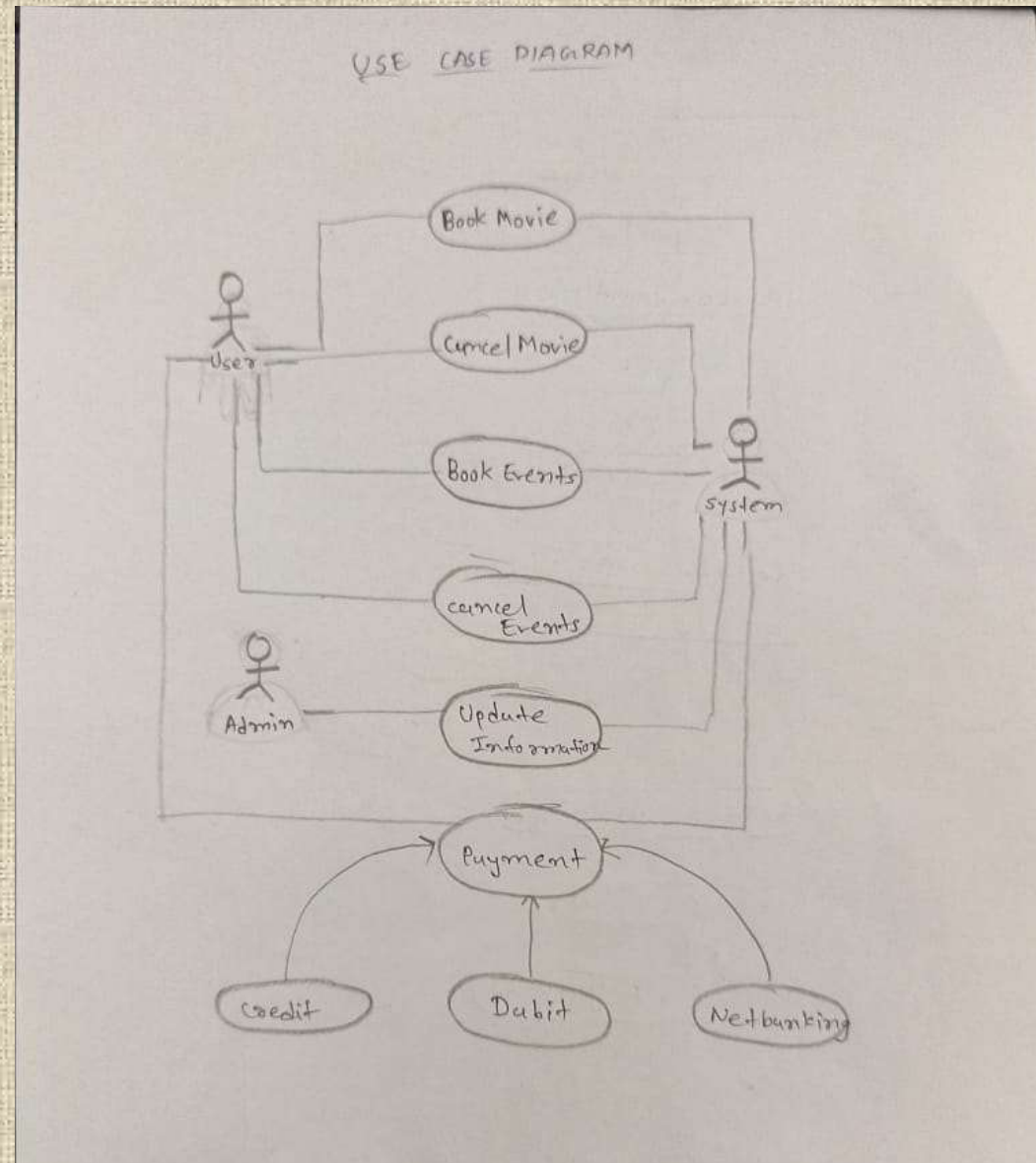
- **JDBC** (Java Database Connectivity): For connecting the Java application to the MySQL database and executing queries.

Development Tools:

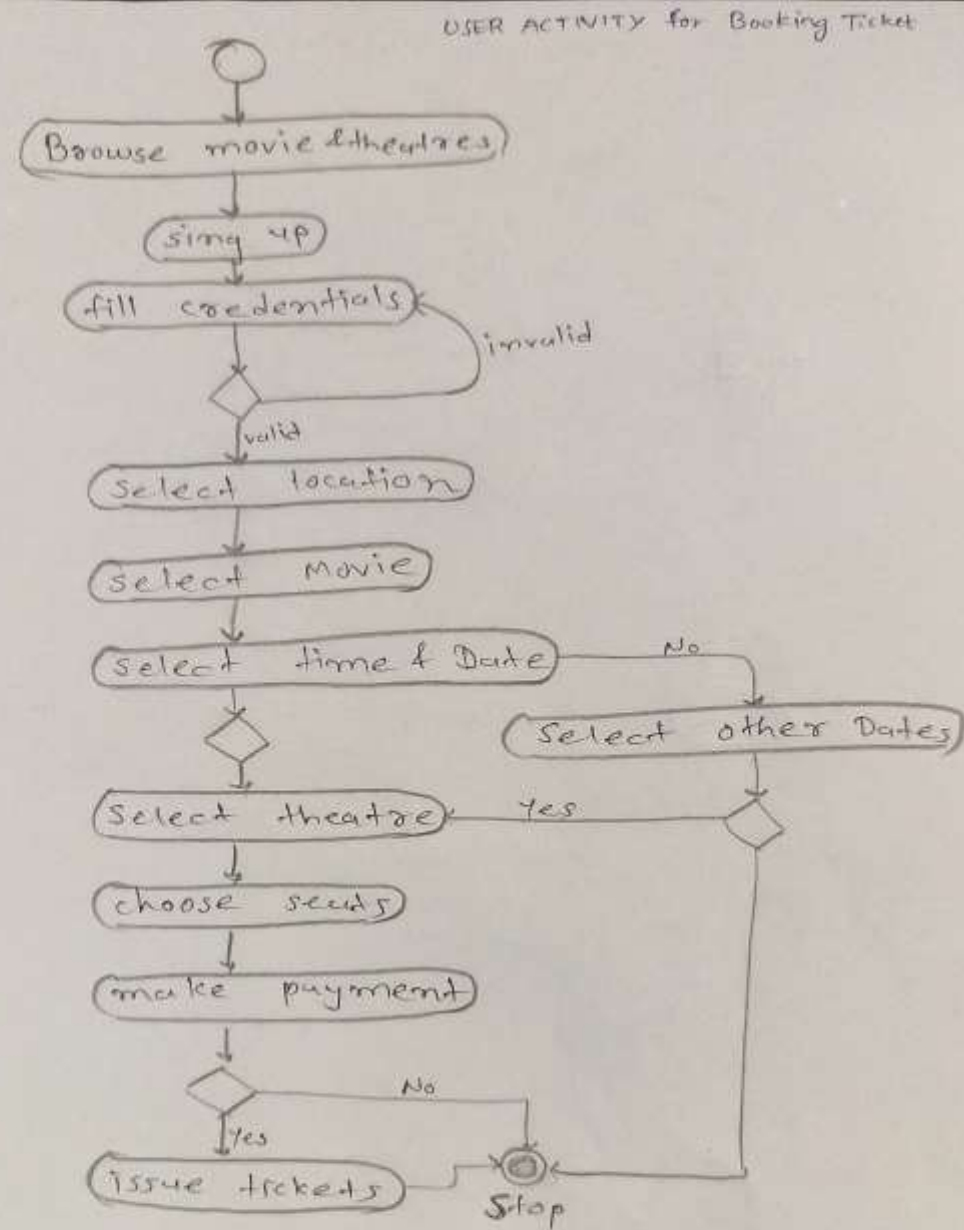
- **IDE:** Eclipse or IntelliJ IDEA for writing and managing Java code.

Design an Architecture

Use case Diagram:



User Activity for Booking Movie Ticket



Features and Functionalities

1. User Features

User Registration and Login:

- Secure account creation with unique email and password.
- Login functionality with user authentication.

Browse Movies:

- View a list of currently available movies with details like title, genre, language, duration, and show timings.
- Filter movies by genre, language, or location.

Interactive Seat Selection:

- View available seats for a selected movie and showtime.
- Select preferred seats with a real-time seat availability display.

Booking Confirmation:

- Confirm seat selection and receive booking details (movie, showtime, seats, and payment status).
- Generate a booking ID for reference.

Payment Processing:

- Integration with basic payment options (e.g., cash on delivery, simulated online payments).
- Secure transaction handling.

View Booking History:

- Check previous bookings and download tickets.

Cancel Bookings:

- Option to cancel a booking before the showtime.

2. Admin Features

Movie Management:

- Add, update, or delete movie details (title, genre, language, and showtimes).

Schedule Management:

- Create and manage show schedules for specific dates and times.

Booking Management:

- View all user bookings with details like user name, movie, and payment status.

Seat Availability Management:

- Update and monitor real-time seat availability.

3. Additional Functionalities

Search Functionality:

- Quick search bar to find movies based on keywords (title, genre, or language).

Responsive Design:

- Compatible with both desktop and mobile browsers for ease of use.

Real-Time Updates:

- Automatic updates to seat availability and show timings when bookings are made or canceled.

Error Handling:

- Informative error messages for invalid login, booking failures, or payment issues.

Development Workflow

Planning and Requirements Gathering



Setup Development Environment



Design Database



Frontend Development



Backend Development



Integrate Model, View, and Controller



Testing and Debugging

Roles

- Dheeraj Kumawat : API & Database Handler
- Jeel Lukhi : Tester/Debugger
- Manthan Patel : Frontend Dev
- Harshvardhan G. : Backend Dev
- Lohith N. Database Administrator