MOVIE TICKET BOOKING

Software Requirements Specification

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ASPIRE SYSTEMS

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1. Abstract

We all enjoy watching movies and some of us are particularly enthusiastic about new releases. It is one of the finest forms of entertainment and we like to spend our weekends watching movies. People may feel uneasy purchasing a ticket at a theatre. The main reason for the inconvenience is the rush. The primary goal of this online application is to help users feel at ease when buying tickets. Through this website, people may order tickets according to their schedules, obtain information about the movie, costs and reserve seats in a user-friendly manner. It also allows customers to book tickets and make payments more easily.

2. Objective and Scope

The primary objective of this project is to simplify the movie ticket booking process for users, allowing them to reserve seats in advance and avoid long queues at theatres.

The scope of the project includes the following features:

- User registration and login to access booking services.
- Movie selection and showtime display.
- Theatre location information for different states and cities.
- Home (Movies Description) to showcase current and upcoming movies and their details.
- Seat booking with a graphical representation of seat availability.
- Secure payment processing for ticket reservations.
- User profile management for viewing booking history.

3. Project End Users

This project's end users are individuals who want to purchase movie tickets and make payments online.

4. Module Description

This module description highlights the features that customers will have while using this website.

4.1 User Registration and Login

This module enables users to register with the system using their personal information and create an account. Registered users can only log in securely to access movie booking services.

4.2 Home (Movies Description)

The home module showcases current and upcoming movies along with their details, including movie trailers, ratings, cast and crew information, etc.

- Current Movies: The system shall display a list of current movies with their relevant details. Only current movies can be booked for ticket reservations.

- Upcoming Movies: The system shall provide a separate section to showcase upcoming movies and their release dates.

4.3 Theatre Location

The theatre location module provides information about different theatres in various states and cities. Users can select their desired state and city to view the available theatres.

4.4 Movie Selection and Showtimes

In this module, users can view a list of available movies along with their showtimes for user selection.

4.5 Seat Booking

The seat booking module allows users to select seats from the graphical theatre layout and proceed to payment.

4.6 Payment Processing

This module handles secure payment processing for ticket reservations. Users can make online payments using their name, CCV, card number, expiry month and year.

4.7 User Profile

The user profile module provides users with access to their account information and booking history.

4.8 Admin Dashboard

The admin dashboard is a secure interface for administrators to manage user accounts, update movies, feedback and ticket bookings.

5. Requirements

5.1 Functional Requirements

In this functional requirement process are describes the operations of a program, or system. Also explains each of the subsystem in the system. Like all the user process and the admin process are coming under this section.

- **User Registration:** The system shall require users to enter their username, mobile number, Gmail email ID and password during the registration process. It shall validate the uniqueness of the entered email ID and enforce password complexity requirements for successful registration.

- **Login to the System:** Users shall securely log in using their registered email ID and password. The system shall authenticate the provided login credentials against the stored user data in the database, displaying appropriate error messages for incorrect email ID or password.

- **Home (Movies Description):** The system shall showcase current and upcoming movies along with their relevant details, such as movie trailers, ratings, cast and crew information. Only current movies can be booked for ticket reservations.

- **Theatre Location:** The system shall provide information about available theatres in different states and cities. Users shall be able to select their desired state and city to view the list of available theatres.

- **Movie Selection:** The system shall display a list of available movies and their showtimes for user selection.

- **Seat Booking:** Users shall be able to select seats from the graphical theatre layout and proceed to payment.

- **Payment Processing:** The system shall facilitate secure online payments for booked seats.

- **User Profile:** Users shall access their account information and booking history through the user profile.

- **Admin Dashboard:** Admins shall manage user accounts, review bookings and update movie and showtime information through the admin dashboard.

5.2 Non-Functional Requirements

Non-functional requirements are a set of specifications that describe the system's operation capabilities, and it helps to improve its functionality.

- **Maintainability:** The system shall be built using modular and well-structured code, making it easier to maintain, update and enhance in the future. Changes to movie details, bookings and tickets shall be easily configurable through the admin dashboard.

- **Security:** The system shall ensure the security and confidentiality of user data, including personal information, login credentials and payment details.

- **Usability:** The user interface shall be user-friendly and responsive, providing a seamless experience for users while booking movie tickets.

6. Design

6.1 High Level Design

High level design of the system has all the main modules of the system. It has the modules like

- **Architecture:** The system shall follow a client-server architecture, where the client side includes the user interfaces (UI) accessible via web browsers or mobile devices and the server-side handles the application logic and database operations.

- **Components:**

  i. **Client-Side:** The client-side shall consist of the user interfaces for user registration, login, theatre selection, movie booking and user profile management.

  ii. **Server-Side:** The server-side shall include the application logic, handling user authentication, ticket booking, payment processing and communication with the database.

  iii. **Database:** The system shall utilize a relational database to store user data, booking information and movie details.

- **Admin Dashboard:** The admin dashboard shall be a secure web application accessible only to authorized administrators. It shall have separate login credentials for admin authentication. The admin dashboard shall provide functionalities for managing user accounts, reviewing, ticket bookings and updating movie details.

6.2 Low Level Design

Low level design describes all the internal and subsystem processes. In this process, some of the modules have a sub system or maybe they do not have it. So, what are the process are going to work in this system are all explained in the low-level design.

- **User Registration and Login:** The user registration form shall collect user details such as name, email, mobile number and password. Upon successful registration, the user data shall be stored in the database. The login form shall require users to enter their registered email and password. The system shall validate the login credentials against the stored data in the database for authentication.

- **Movie Selection and Showtimes:** The system shall fetch movie details from the database, including movie name, description, trailer link, ratings, cast and crew information. The available showtimes for each movie shall be retrieved from the database and displayed to users.

- **Theatre Location:** The states and cities information shall be retrieved from the provided code and displayed to users in a dropdown list. Upon selecting a state and city, the available theatres in that location shall be shown to users.

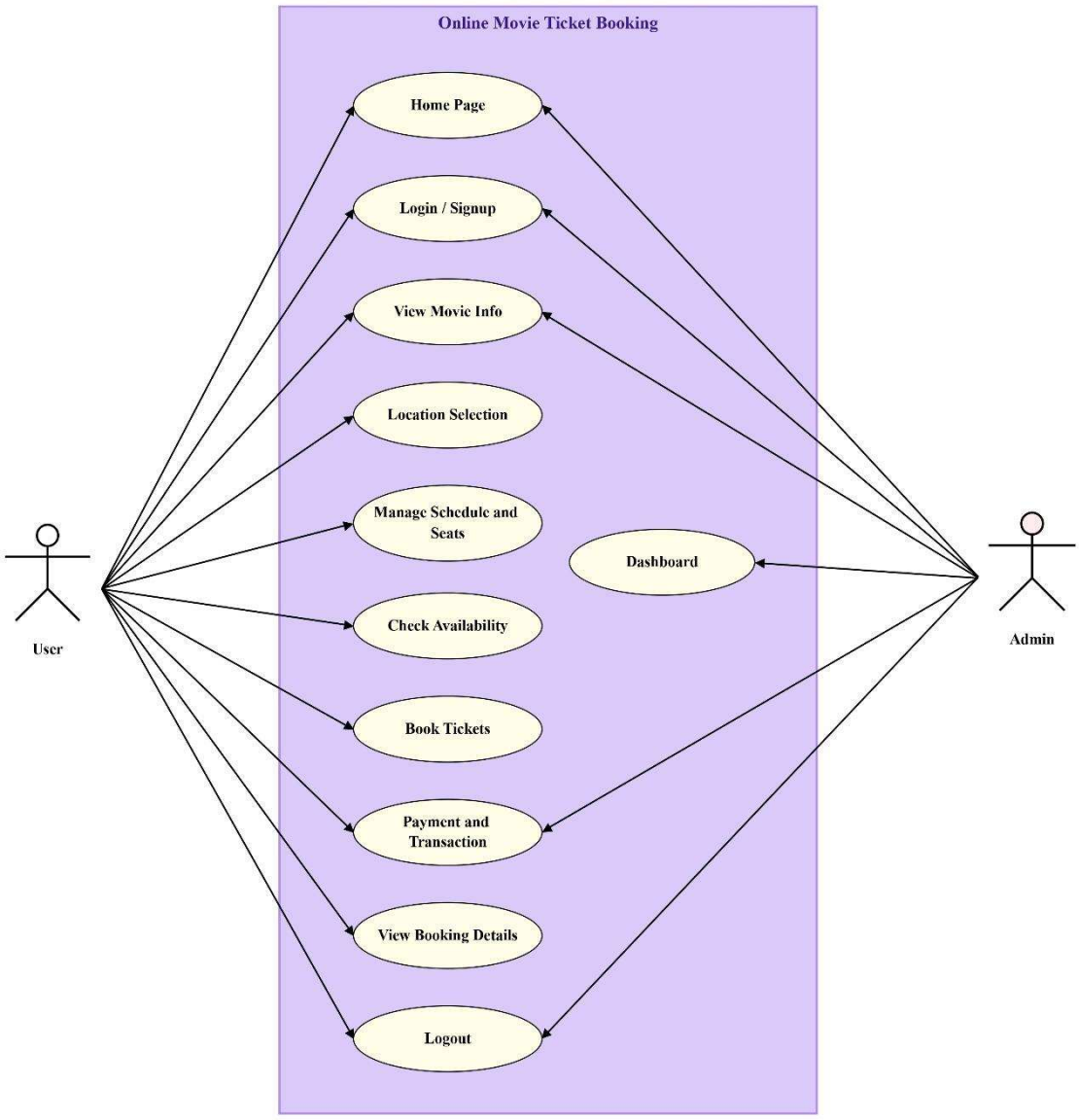
- **Home (Movies Description):** The home page shall display a list of current movies along with their relevant details, such as movie trailers, ratings, cast and crew

information. The upcoming movies section shall showcase movies that are yet to be released and their scheduled release dates.

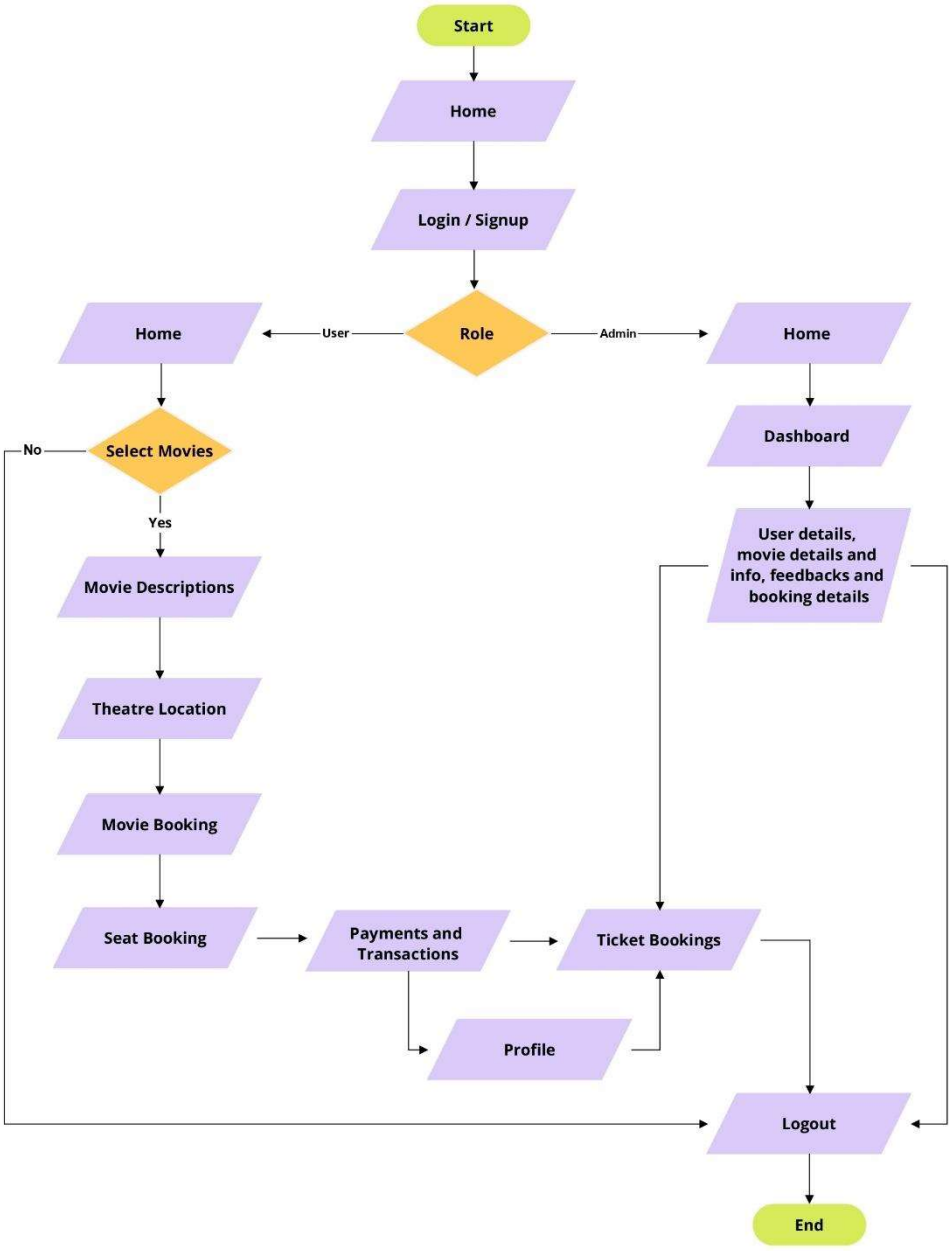
- **Seat Booking:** The seat booking interface shall display a graphical representation of the theatre layout, indicating available and booked seats. Users can select seats by clicking on the graphical representation.
- **Payment Processing:** Upon seat selection, the system shall calculate the total amount to be paid based on the selected seats and ticket prices. Users can proceed to payment by choosing from various payment methods, including debit/credit cards or UPI.
- **User Profile:** The user profile page shall allow users to view their account information, including name, email, mobile number, email and display picture. Users can edit their personal details and view the booking history.
- **Admin Dashboard:** The admin dashboard shall be accessible only to authorized administrators using their login credentials and can perform as user by admin to make ticket bookings. Admins can manage user accounts, review and confirm bookings, update movie and showtime information and manage theatre locations.

7. Diagrams

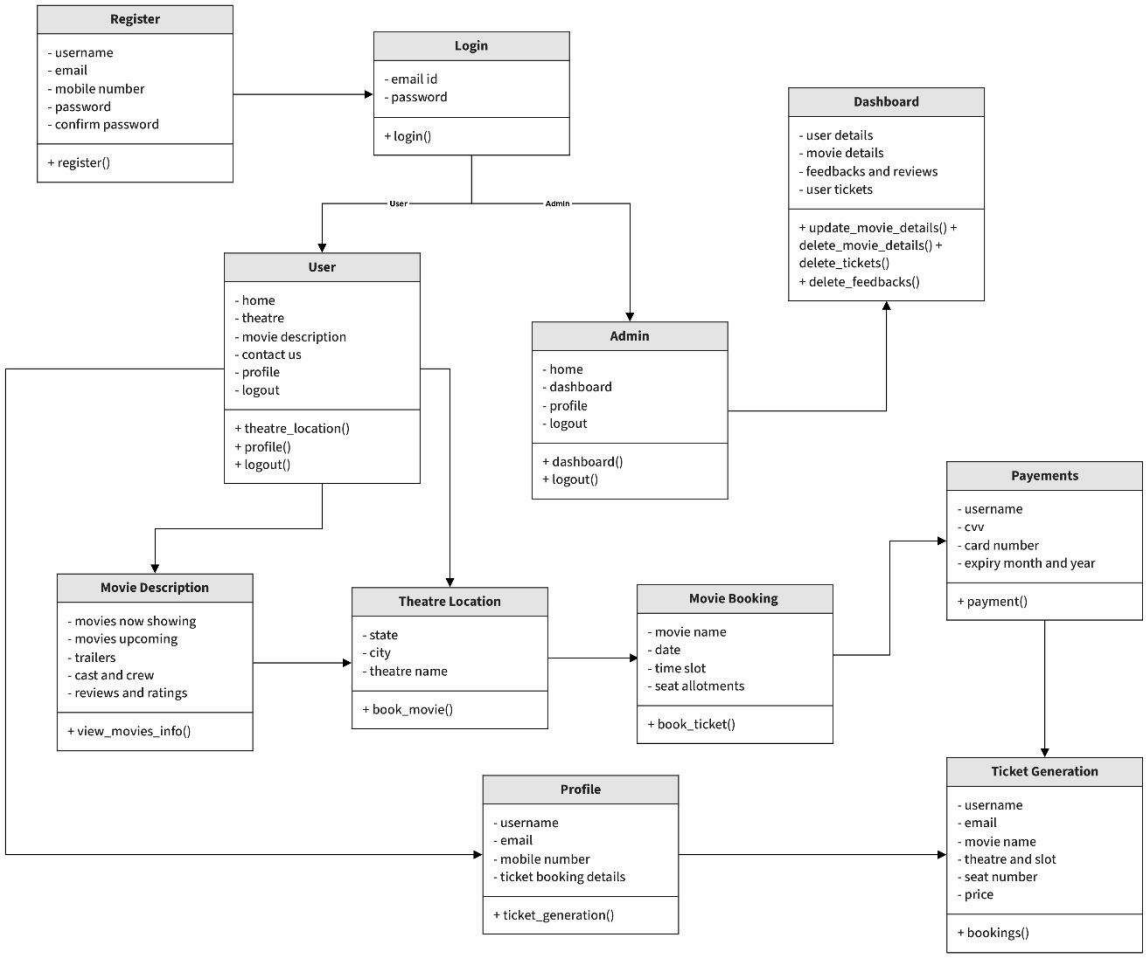
7.1 Use Case Diagram



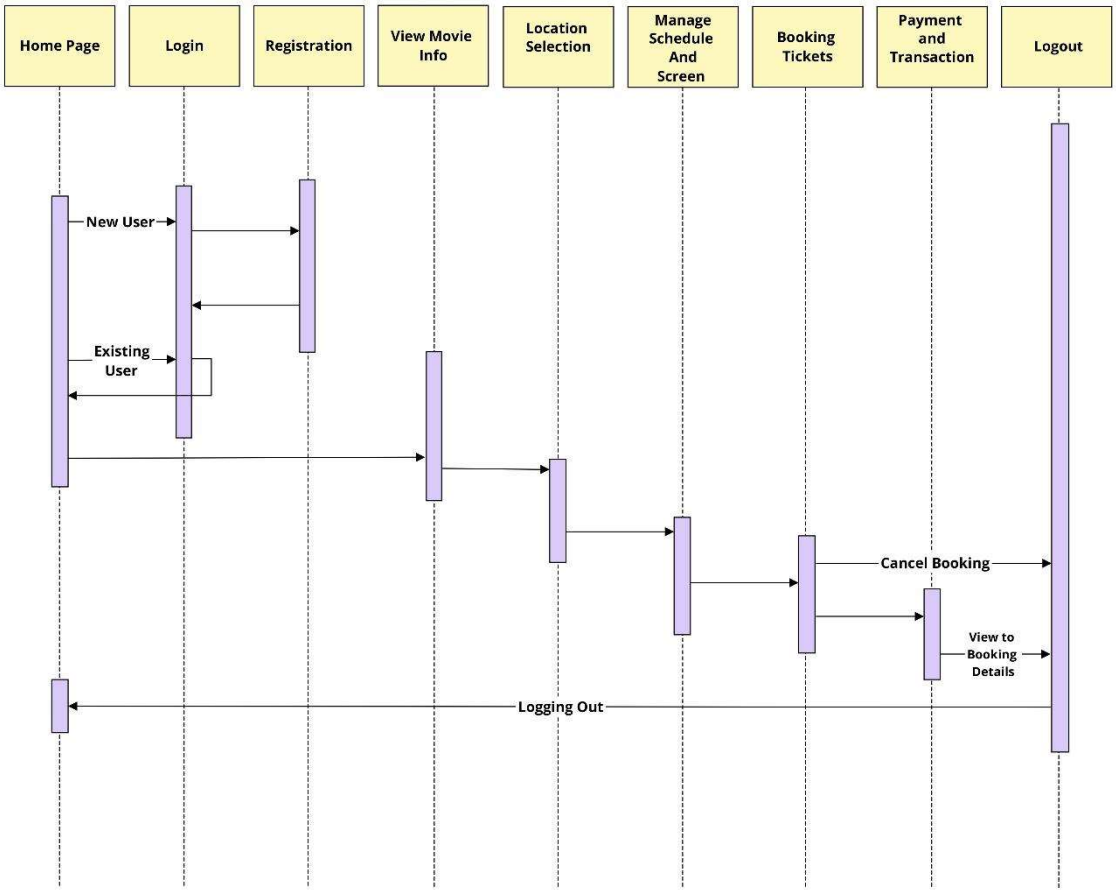
7.2 Flow Chart



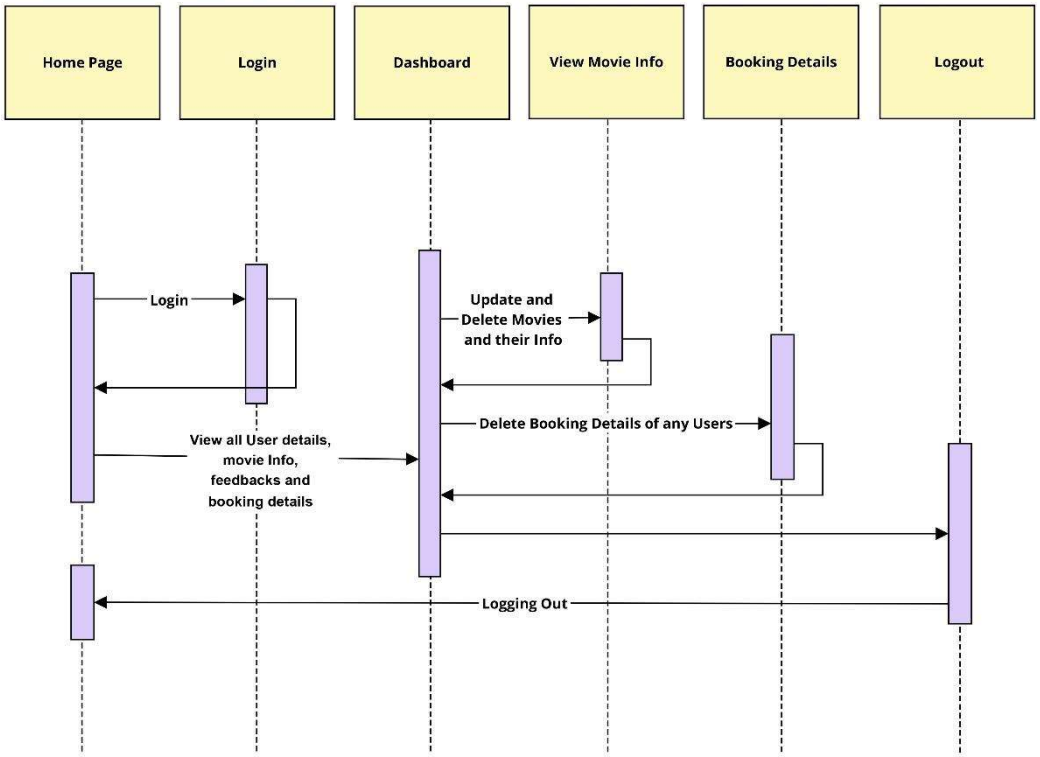
7.3 Class Diagram



7.4 Sequence Diagram

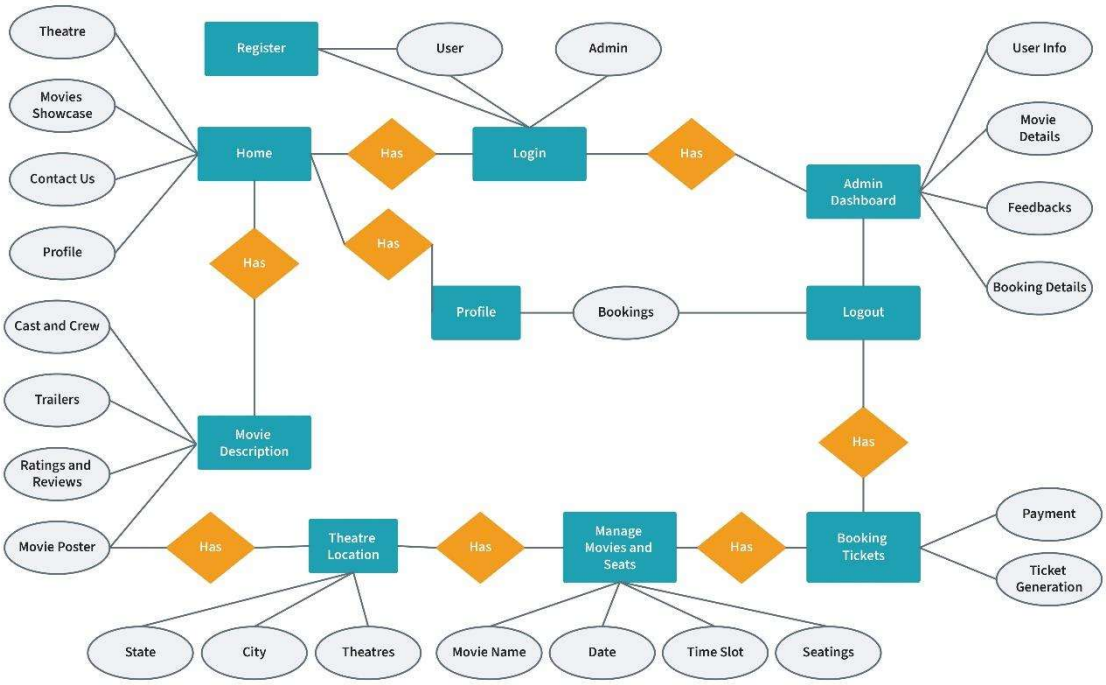


a) User Sequence Diagram



b) Admin Sequence Diagram

7.5 Entity Relationship Diagram (ER Diagram)



8. Conclusion

Customers can use this online application to book movie tickets and make payments from any device that is connected to the internet. This benefits the consumer where they can save time and money instead of rushing into theatres to buy tickets.