



**Faculty of Computing &  
Information Technology**

# **Software Design and Architecture**

**Assignment # 02**

**Requirement Document**

**Web Based Online Movie Ticket Reservation System**

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**Project Topic:** Web Based Online Movie Ticket Reservation System

**Project Name:** PopCorn Pass

**Description:** Popcorn Pass cuts through the hassle of movie ticket lines, offering a user-centric web platform for online booking. Browse upcoming releases, dive into detailed film information, select your preferred showtime and seats – all with the convenience of a few clicks. Built for responsiveness across devices, Popcorn Pass ensures a smooth user experience. Security remains paramount, with robust measures in place to protect your data. This initial launch prioritizes secure digital e-tickets, laying the groundwork for future features like in-app concessions. Popcorn Pass – your key to a streamlined and secure moviegoing experience.

**Scope:** Popcorn Pass aims to streamline the moviegoing experience by allowing users to browse upcoming releases, view detailed movie information, select showtimes, choose seats, and book tickets securely. Features like in-app concessions or physical tickets are excluded, with a focus on digital e-tickets. Users can easily see which seats are available at the time of booking, eliminating guesswork. Based on viewing history, the platform could suggest movies users might enjoy. User experience is a priority, with the system designed for responsiveness across various devices. Robust security measures will safeguard user data and financial information.

**Features:**

1. User Registration
2. Login
3. Browse Movies
4. Movie Information
5. Seat Selection
6. Secure Booking
7. Booking Confirmation
8. Booking History

9. Search Functionality
10. Digital E-Tickets
11. User Profile Management
12. Responsive Design
13. Notification System
14. Accessibility Features

**Requirement details with actors (External Entity):**

<b>Sr. no</b>	<b>External Entity</b>	<b>Requirement Details</b>
1	System	Restrict access to registered users only.
1.1	User (Moviegoer)	User registration with username, email, password, and optional profile details (name, preferences).
1.2	System (Optional)	Allow for future expansion of user roles (e.g., theater admins) if needed.
2	System	Allow access to the home page or dashboard upon successful login (User/Admin).
3	System	Enable user updates for profile information (optional).
3.1	System (Optional)	User Profile Management: Allow users to update their profile information (e.g., name, contact information, preferences). Validate user input to ensure accuracy and completeness.
3.2	System	Password Management: Allow users to change their passwords for security reasons. Enforce password strength requirements.
3.2.1	User (Moviegoer)	User Password Change: Users can change their passwords to maintain account security.
4	User (Moviegoer)	Provide search functionality to find movies based on various criteria (title, genre, cast, release date, etc.).
4.1	System	Recommend movies to users based on their watch history, preferences, and popular selections.
5	User (Moviegoer)	Offer a dashboard for viewing upcoming tickets, past booking history, managing preferences (language, subtitles), and setting watchlists.
6	User (Moviegoer)	Facilitate a seamless payment process for movie ticket purchases with various payment methods (credit card, debit card, digital wallets).
7	System	Handle invoice generation, confirmation receipts, and secure payment processing.
8	System (Optional)	Integrate with loyalty programs to allow users to earn and redeem points for ticket purchases.
9	User (Moviegoer)	Allow users to rate and review movies after watching them.

10	System	Display movie trailers, synopses, cast information, showtimes, and theater details for browsing users.
11	Admin	Provide an admin dashboard for managing user accounts, content (movie listings, showtimes, theater information), platform configurations (pricing, promotions), and generating reports.
12	System	Deliver notifications to users about new releases, promotions, booking updates, and seat availability alerts.
13	User (Moviegoer)	Provide a Frequently Asked Questions (FAQ) section for users.
14	System	Offer a logout functionality for all user types (User/Admin).
14.1	User (Moviegoer)/Admin	User Logout: Allow logged-in users to securely terminate their session and return to the login page or home page (depending on context).
14.2	System	Session Termination: Upon logout, the system securely terminates the user's session, invalidating their login credentials and preventing unauthorized access.
15	User (Moviegoer)	Allow users to filter movie searches by accessibility options (closed captioning, audio description).
16	System	Display theater locations and amenities (seating options, concessions) on the platform.
17	User (Optional)	Allow users to purchase concessions (food and drinks) along with movie tickets for pick-up at the theater.
18	System	Manage inventory and track concession sales (Optional).
19	Admin	Provide tools for managing theater content (showtimes, seat availability) and updating theater information (amenities, promotions).
20	System	Implement a secure ticketing system to prevent ticket duplication and fraud.
21	User (Moviegoer)	Allow users to easily gift movie tickets to others via email or SMS.
22	System	Facilitate secure gift ticket redemption by recipients.
23	User (Moviegoer)	Allow users to leave comments and engage in discussions about movies on the platform (Optional).
24	System	Implement moderation tools for managing user-generated content (comments, reviews) to maintain a safe and respectful environment (Optional).
25	Admin	Access user feedback and reviews to identify trends and improve platform features.
26	System	Offer multi-language support for the platform interface to cater to a wider audience (Optional).
27	User (Moviegoer)	Allow users to subscribe

**Use Case Diagram:**

**Primary Actor(s):** Moviegoers (Users)

**Secondary Actor:** System/Database Administrator