**Software Requirements Specification (SRS) Document  
Cinema Web Application**

### **1. Introduction**

**1.1 Purpose**The purpose of this document is to specify the requirements for the development of a cinema web application that allows users to view movie sessions, browse showtimes, and purchase tickets online.

**1.2 Scope**This document outlines the functional and non-functional requirements for the Cinema Web Application. The system will provide features for users to search for movies, view available sessions, select seats, and complete ticket purchases.

### **2. General Description**

**2.1 Product Perspective**The Cinema Web Application will operate as a standalone system, interacting with internal/external databases for movie details, session schedules, and payment processing systems. It will provide a user-friendly interface for cinema customers and an administrative interface for cinema staff to manage sessions and ticketing.

**2.2 Product Features**

* **User Management:** User registration and login, user profile management.
* **Movie Listings:** Display of movies currently showing and upcoming releases.
* **Session Management:** Selecting the desired movie and a suitable cinema.
* **Seat Selection:** Selecting and booking a seat/seats in the hall.
* **Ticket Purchase:** Purchase tickets with selected parameters.

**2.3 User Classes and Characteristics**

* **Guest (Unregistered):** Individuals who browse movies, check session times, purchase tickets.
* **Customers**: Personalized advertising. View shopping history. Saved personal data. Has personal offers.
* **Cinema Staff (Admin):** Users who manage movie listings, session schedules, and seat availability.

**2.4 Operating Environment**The web application will run on modern web browsers (e.g., Chrome, Firefox, Safari) and mobile devices.

The application should work on Windows 10/11.

The application uses mysql v3.11,

**2.5 Design and Implementation Constraints**The application will use a relational database for managing movie data and user bookings.

Server is writed with Node and Express, uses Sequelize like ORM.

### **3. Functional Requirements**

**3.1 Movie Listings**The system will display current and upcoming movies, including the following details:

* Movie title, poster, and description
* Rating and duration
* Available languages and subtitles
* Session times for each cinema location

**3.2 Session Management**The user has the ability to select a session parameters:

* Cinema location
* Date and time of the session
* Cinema hall (if there is a choice) and a seat/seats
* Ticket price (depending on the seat)

**3.3 Rate the Movie**The user can rate the movie after session (if the movie has already been rated the user's rating will change).

**3.4** [Fill in…]

### **4. Non-Functional Requirements**

**4.1 Performance**

* [Fill in…]

**4.2 Security**

* [Fill in…]

**4.3 Usability**

* [Fill in…]

**4.4 Reliability**

* [Fill in…]

**4.5 Scalability**

* [Fill in…]

**4.6 Legal and Compliance**

* The application must comply with GDPR for user data protection.
* [Fill in…]

### **5. System Models**

**5.1 Use Case Diagram**A use case diagram will illustrate the interactions between customers, admin staff, and the system, such as browsing movies, selecting seats, and purchasing tickets.

**5.2 Sequence Diagrams**Sequence diagrams will show the flow of actions for purchasing a ticket and managing session data.

**5.3 Data Flow Diagrams**Data flow diagrams will depict the flow of information within the system, such as how movie session data is displayed to users and how bookings are processed.

### **6. External Interface Requirements**

**6.1 User Interfaces**

* A user-friendly interface for customers to browse movies, view sessions, and buy tickets.
* An admin interface for cinema staff to manage movies and sessions.

**6.2 Hardware Interfaces**

* [Fill in…]

**6.3 Software Interfaces**

* [Fill in…]

**6.4 Communication Interfaces**

* [Fill in…]

### **7. Testing and Validation**

**7.1 Test Case**

[Fill in…]

**7.2 Validation Criteria**

[Fill in…]

### **8. Maintenance and Support**

**8.1 Maintenance Procedures**

[Fill in…]

**8.2 Support and Helpdesk**

[Fill in…]

### **9. Appendices**

**9.1 Glossary**

* SRS: Software Requirements Specification
* GDPR: General Data Protection Regulation
* [Fill in…]

**9.2 Revision History**

* Document revisions will be logged with dates and descriptions of changes.