Online Movie ticket reservation system for movies:

1. SRS Document:

Document: System Requirement Specification Document

Title: Online Ticket Reservation System (Movie)

Objective:

The objective of the online ticket reservation system for movies is to provide users with a convenient platform to browse, select, and book movie tickets online. The system aims to simplify the ticket reservation process and enhance the user experience by offering a user-friendly interface and various features.

Scope:

The online ticket reservation system will allow users to view movie listings, check showtimes, select seats, and make secure online payments. It will also include features such as seat availability tracking, ticket cancellation, and user account management.

Functional Requirements:

User Registration and Login

Movie Listing and Showtimes

Seat Selection and Reservation

Payment Processing

Ticket Confirmation

Non-functional Requirements:

- Usability

- Availability

- Compatibility

- Reliability

- Scalability

- Security

- Performance

- User Privacy

Functional Operations List for Online Ticket Reservation System (Movie):

User Registration and Login

Movie Listing

Movie Details Viewing

Showtime Listing for a Movie

Seat Selection and Reservation

Payment Processing

Ticket Confirmation

Ticket Cancellation

Seat Availability Tracking

User Account Management

User Profile Editing

Booking History Viewing

Movie Genre Filtering

Theater Selection

Movie Search by Title

Seat Upgrades

Discounts and Promotions Handling

Booking Reminders and Notifications

Refund Processing

Customer Support and Helpdesk Integration

Rating and Review Submission for Movies

2. Business Entities and Table Queries:

Business Entities:

User (UserID [PK], Username, Password, Email, Phone)

Movie (MovieID [PK], Title, Genre, Director, Duration)

Showtime (ShowtimeID [PK], MovieID [FK], DateTime, Availability)

Booking (BookingID [PK], UserID [FK], ShowtimeID [FK], Seats, TotalAmount, Status)

Table Creation Queries:

```
CREATE TABLE User (

  UserID INT PRIMARY KEY,

  Username VARCHAR(50),

  Password VARCHAR(50),

  Email VARCHAR(100),

  Phone VARCHAR(20)

);


CREATE TABLE Movie (

  MovieID INT PRIMARY KEY,

  Title VARCHAR(100),

  Genre VARCHAR(50),

  Director VARCHAR(100),

  Duration INT

);
```

```
CREATE TABLE Showtime (

  ShowtimeID INT PRIMARY KEY,

  MovieID INT,

  DateTime DATETIME,

  Availability INT,

  FOREIGN KEY (MovieID) REFERENCES Movie(MovieID)

);


CREATE TABLE Booking (

  BookingID INT PRIMARY KEY,

  UserID INT,

  ShowtimeID INT,

  Seats INT,

  TotalAmount DECIMAL(10,2),

  Status VARCHAR(50),

  FOREIGN KEY (UserID) REFERENCES User(UserID),

  FOREIGN KEY (ShowtimeID) REFERENCES Showtime(ShowtimeID)

);
```

3. ER Diagram:

USER
Email
Phone
UserID
Password
Username

Booking
BookingID [PK]
UserID [FK],
ShowtimeID [FK],
seats
TotalAmount,

Movie
duration
movieID
name
genre
director

Showtime
date
availability
id
movieID