Ticket Booking System - Software Requirements Specification

1. Introduction

The Ticket Booking System is an online platform that allows users to book tickets for various events such as movies, concerts, sports events, etc. The system provides a user-friendly interface for browsing available events, selecting seats, and making reservations. This document outlines the functional and non-functional requirements for the Ticket Booking System.

2. Scope

The Ticket Booking System will provide the following features:

User registration and login.
Event browsing and searching.
Seat selection and reservation.
Payment processing.
Ticket confirmation and generation.
User profile management.
Admin panel for event management and user administration.

3. Functional Requirements

3.1 User Registration and Login

Users can register with the system by providing their basic information (name, email, password).
Users can log in to the system using their registered email and password.

3.2 Event Browsing and Searching

Users can browse and search for events based on categories, dates, locations, etc.
Users can view event details such as title, description, date, time, venue, and available seats.

3.3 Seat Selection and Reservation

Users can select seats from the available seating layout of the event venue.
Users can choose the number of seats to reserve.
The system should prevent double booking of seats.

3.4 Payment Processing

Users can make payments for their ticket reservations using various payment methods (credit card, PayPal, etc.).

The system should securely handle payment transactions and ensure data privacy.

3.5 Ticket Confirmation and Generation

After successful payment, users should receive a confirmation email with the ticket details.

Users can view and print their tickets from their user profile.

3.6 User Profile Management

Users can update their profile information (name, email, password, etc.).

Users can view their booking history and ticket details.

3.7 Admin Panel

Admin users have access to an admin panel for managing events and users.

Admin can add, edit, and delete events from the system.

Admin can view and manage user accounts (block, delete, etc.).

Admin can generate reports on ticket sales, revenue, etc

A **Ticket Booking System** involves various entities that interact with each other. Here are the key entities typically involved:

User: Represents individuals who use the Ticket Booking System. Users can have roles such as guest, registered user, or admin. They have attributes like User ID, Name, Email, and Password.

Event: Represents a specific event for which tickets can be booked. Events have attributes such as Event ID, Title, Description, Date, Time, Venue, and Ticket Availability.

Ticket: Represents a ticket for a specific event. Tickets have attributes like Ticket ID, Event ID, Seat Number, Price, and Status (booked, canceled, etc.).

Booking: Represents a user's booking of one or more tickets for an event. Bookings have attributes like Booking ID, User ID, Event ID, Booking Date, Total Price, and Status (confirmed, pending, canceled).

Payment: Represents a payment made by a user for a booking. Payments have attributes like Payment ID, Booking ID, Payment Method, Transaction ID, and Amount.

Venue: Represents the location or venue where events take place. Venues have attributes like Venue ID, Name, Address, Capacity, and Facilities.

User

User_ID (Primary Key)
Name
Email
Password
Role
Event

Event_ID (Primary Key)
Title
Description
Date
Time
Venue_ID (Foreign Key referencing Venue table)
Ticket_Availability
Ticket

Ticket_ID (Primary Key)
Event_ID (Foreign Key referencing Event table)
Seat_Number
Price
Status
Booking

Booking_ID (Primary Key)
User_ID (Foreign Key referencing User table)
Event_ID (Foreign Key referencing Event table)
Booking_Date
Total_Price
Status
Payment

Payment_ID (Primary Key)
Booking_ID (Foreign Key referencing Booking table)
Payment_Method
Transaction_ID
Amount
Venue

Venue_ID (Primary Key)
Name
Address
Capacity
Facilities