**Requirements Analysis for Ticket Reservation System Website**

# 1. Scope of the Project

The **Ticket Reservation System** is an online platform designed to allow users to book tickets for various services, such as movies, trains, buses, flights, concerts, and other events. The system aims to provide a seamless and user-friendly experience for customers while offering administrative functionalities for event organizers and service providers.

# 2. Intended Audience

- **General Users:** Individuals looking to book tickets for transportation, entertainment, or events.
- **Event Organizers & Service Providers:** Businesses managing events, transport services, and bookings.
- **Administrators:** System managers responsible for updating ticket availability, processing transactions, and managing user queries.

# 3. Functional Requirements

## 3.1 User Features

- **User Registration & Login:**
    - Sign up/login with email and password.
    - Option to log in using Google or social media accounts.
- **Search and Booking System:**
    - Users can search for tickets based on filters (event type, location, date, availability).
    - Display detailed event/transport listings including pricing, available seats, and schedule.
    - Seat selection interface with a visual map.
- **Payment and Checkout:**
    - Multiple payment options: Credit/Debit cards, UPI, Net Banking, Wallets.
    - Secure billing and order summary before checkout.
    - Downloadable/printable e-tickets.
    - Email/SMS notifications for confirmation.
- **User Dashboard:**

    - View booking history.
    - Manage saved preferences.
    - Update personal details.

### 3.2 Admin Features

- **Manage Listings:**
    - Add, edit, and delete events or transport schedules.
    - Update pricing, seat availability, and schedules.
- **Booking and User Management:**
    - View user bookings and transactions.
    - Process refunds and cancellations.
- **Promotions and Discounts:**
    - Add special offers and discount codes.
- **Reports & Analytics:**
    - Generate reports on ticket sales and user activity.

## 4. Non-Functional Requirements

### 4.1 Performance Requirements

- The system should handle multiple concurrent users without lag.
- Pages should load within **2 seconds** under normal traffic conditions.

### 4.2 Security Requirements

- Secure user data with **encryption (SSL/TLS).**
- Implement **two-factor authentication** for user login.
- Payment transactions must comply with **PCI-DSS standards.**

### 4.3 Usability Requirements

- Intuitive and **mobile-friendly** design.
- Support for **multiple languages** for global accessibility.

### 4.4 Reliability & Availability

- The system should have **99.9% uptime**.
- Automated **backup system** to prevent data loss.

### 4.5 Scalability

- The system should be scalable to accommodate increased users and transactions.
- Integration with **APIs for real-time ticket availability** (e.g., airline or railway databases).

# 5. Conclusion

This ticket reservation system is designed to provide an efficient, secure, and user-friendly experience for booking tickets. By implementing both functional and non-functional requirements effectively, the system aims to meet user expectations and ensure smooth operation for administrators and service providers.