**SRS for**

**Conference Room Booking Application**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to define the requirements for the development of a conference room booking system that adheres to specific rates and rules.

**1.2 Scope**

The system will allow users to book conference rooms based on hourly, daily, and weekly rates, with provisions for overtime charges and cancellation policies.

**1.3 Definitions, Acronyms, and Abbreviations**

* **SRS**: Software Requirements Specification
* **Hourly Rate**: Cost per hour for booking a conference room
* **Daily Rate**: Cost for booking a conference room exceeding 8 hours in a day
* **Weekly Rate**: Cost for booking a conference room exceeding 3 days in duration

**2. Business Description**

**2.1 Business Objectives**

The conference room booking system aims to:

* Increase revenue by efficiently managing room bookings at competitive rates.
* Improve customer satisfaction through transparent pricing and flexible booking options.
* Streamline administrative tasks related to room availability and billing.

**2.2 Stakeholders**

* **Admins**: Manage room availability, rates, and oversee system functionality.
* **Users**: Book conference rooms based on their specific needs and budget constraints.

**2.3 Business Risks**

* Potential revenue loss due to cancellations or no-shows.
* Competitive pressure from other service providers offering similar facilities.

**3. Functional Description**

**3.1 Room Booking**

* **Description**: Allows users to view available rooms, select date/time, and confirm bookings.
* **Features**:
  + Room selection based on size (small, medium, large, executive).
  + Date and time selection.
  + Confirmation of booking details before finalizing.

**3.2 Rate Calculation**

* **Description**: Automatically calculates charges based on selected booking duration.
* **Features**:
  + Hourly rates for short-duration bookings.
  + Daily rates for bookings exceeding 8 hours in a day.
  + Weekly rates for extended bookings exceeding 3 days.

**Rates:**

* **Hourly Rates**:
  + Small Room: $100 per hour
  + Medium Room: $150 per hour
  + Large Room: $200 per hour
  + Executive Room: $300 per hour
* **Daily Rates** (for bookings exceeding 8 hours in a day):
  + Small Room: $800
  + Medium Room: $1200
  + Large Room: $1600
  + Executive Room: $2400
* **Weekly Rates** (for bookings exceeding 3 days in duration):
  + Small Room: $5600
  + Medium Room: $8400
  + Large Room: $11200
  + Executive Room: $16800

**3.3 Overtime Charges**

* **Description**: Automatically applies additional charges for bookings exceeding the confirmed duration.
* **Features**:
  + Overtime rate at 1.5 times the regular hourly rate.

**3.4 Cancellation Policy**

* **Description**: Specifies rules and charges related to cancellations.
* **Features**:
  + 50% cancellation fee for cancellations made less than 24 hours before the booking start time.

**4. Functional Validation**

**4.1 Room Booking**

* **Validation**: Ensure that users cannot book rooms that are already reserved for the selected date and time.
* **Expected Outcome**: System displays an error message if the room is unavailable.

**4.2 Rate Calculation**

* **Validation**: Verify that the system accurately calculates charges based on the selected duration (hourly, daily, weekly).
* **Expected Outcome**: Rates displayed and charged align with the selected booking duration.

**4.3 Overtime Charges**

* **Validation**: Test the application of overtime charges for bookings that exceed the confirmed duration.
* **Expected Outcome**: Overtime charges are applied correctly at 1.5 times the regular hourly rate.

**4.4 Cancellation Policy**

* **Validation**: Ensure that cancellation fees are correctly calculated and applied based on the time of cancellation.
* **Expected Outcome**: Users attempting to cancel within 24 hours of the booking time are informed of the 50% cancellation fee.

**5. Data Validations**

**5.1 Room Availability**

* **Validation**: Ensure that room availability data is accurate and updated in real-time.
* **Expected Outcome**: Users can only book rooms that are currently available for the selected date and time.

**5.2 Booking Date and Time**

* **Validation**: Validate that users select a valid date and time for their booking.
* **Expected Outcome**: Users cannot select past dates or times that conflict with existing bookings.

**5.3 Billing Information**

* **Validation**: Verify that billing information is securely stored and processed.
* **Expected Outcome**: Payment details are encrypted and comply with data protection regulations.

**6. External Interface Requirements**

**6.1 User Interfaces**

* **Booking Interface**: Allows users to select date, time, and room type.
* **Admin Interface**: Manages room availability, rates, and bookings.

**6.2 Hardware Interfaces**

* Compatible with standard PCs, tablets, and smartphones.

**6.3 Software Interfaces**

* Utilizes web browsers (Chrome, Firefox, Safari) and server-side database (MySQL, PostgreSQL).

**7. Non-Functional Requirements**

**7.1 Performance Requirements**

* Response time for booking confirmation should be under 5 seconds.
* System availability of 99.9% uptime annually.

**7.2 Security Requirements**

* User authentication and authorization for booking management.
* Data encryption for sensitive information (payment details).

**7.3 Legal and Compliance Requirements**

* Compliance with data protection regulations (e.g., GDPR, CCPA).

**8. Other Requirements**

**8.1 Documentation Requirements**

* User manual for system usage.
* Technical documentation for system administrators.

**8.2 Constraints**

* Budget constraints for development and maintenance.