** Jupiter Hospital Appointment Booking System**

**BRD – Business Requirements Document:**

**1. The Current Business Problem:**

The Jupiter Healthcare Appointment System currently enables users to register/login, browse doctors, book appointments, and make payments. However, despite these basic features, the system still lacks several critical functionalities, resulting in:

* A **high number of patient no-shows**, leading to wasted doctor time and operational inefficiencies
* **Overbooking and double booking of time slots**, causing confusion and delays in consultations
* **Manual communication and scheduling**, which is time-consuming
* **Inadequate tracking of patient visit data**, limiting the doctor’s ability to offer personalized care
* **Absence of a billing and feedback mechanism**, affecting transparency and continuous service improvement
* **Delayed or missed bill payments by patients**, leading to revenue leakage and follow-up workload

These gaps significantly reduce overall efficiency for doctors and administrators, while also contributing to a **poor and frustrating experience for patients**.

**2. The Proposed Solution:**

We propose enhancing the current healthcare Appointment booking system by adding new features and flows to improve scheduling, engagement, and operational visibility. This will offer:

* ₹100 **refundable appointment deposit** to reduce no-shows
* Slot-based booking with **real-time availability**
* **SMS reminders (2 hours before the appointment time)** + auto-cancellation if the patient doesn’t confirm
* **Admin/Doctor dashboard** showing complete patient details
* **PDF bills** auto-generated post-visit
* **Doctor rating and feedback** collection post-treatment
* Incentives: **10% discount** on online payments and **1 free check-up**

These enhancements will improve efficiency, accountability, and patient experience while optimizing doctor scheduling.

**3. System Impacted:**

* Payment Gateway
* Notification (SMS/Call) System
* Billing Module

**4. Assumptions / Dependencies:**

* Payment gateway and SMS API are already integrated

**5. Business Requirements:**

**5.1 Doctor Rating Module**

**5.1.1** Ability for users to browse/search doctors by rating   
**5.1.2** Ability to Display doctor summary: name, fee, rating, availability

**5.1.3** Ability to display average rating on doctor profile

**5.2 Appointment Booking Module**

**5.2.1** Ability to show available time slots for selected doctor  
**5.2.2** Ability for patients to fill basic form (Name, Age, Gender, Issue, Phone, Address)  
**5.2.3** Ability to include a checkbox for ₹100 refundable deposit during booking an appointment

**5.3 Notification and Confirmation Module**

**5.3.1** Ability to SMS with YES/NO confirmation 2 hours before appointment  
**5.3.2** Ability to initiate call 1 hour before if no reply  
**5.3.3** Ability to auto-cancel appointment if call not answered

**5.4 Admin/Doctor Dashboard Module**

**5.4.1** Ability to View patient info  
**5.4.2** Ability to View payment status (Paid/Not Paid)  
**5.4.3** Ability to View patient issues

**5.5 Billing and Offers Module**

**5.5.1** Ability to apply 10% discount on online payments  
**5.5.2** Ability to allow 1 free check-up

**5.6** **Ratings & Bill Module**

**5.6.1** Ability to rate doctors (1–5)

**5.6.3** Ability to auto-generate downloadable bill as PDF