

**M23B13/94**

**KIVUNA**

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## **Smart Healthcare Management System (SHMS)**

### **Overview:**

The Smart Healthcare Management System (SHMS) is designed to improve communication between patients and healthcare providers. The system helps manage important tasks like scheduling doctor appointments, storing patient information, offering video consultations, handling billing, and sending reminders to patients about their medications. This system makes healthcare more accessible and efficient for everyone involved.

### **People or Systems Using SHMS**

#### **1. Patients**

The patient interacts with the system to book appointments, check their medical records, and pay bills

#### **2. Doctor**

The doctor uses the system to access patient records, conduct telemedicine consultations, and manage appointments.

#### **3. Admin**

The admin manages the overall system, such as overseeing patient registration and resolving system issues.

#### **4. System**

The system itself performs actions like storing information, sending reminders, and handling payments.

### **Main Use Cases**

#### **1. Register/Login**

Patients and doctor can create an account or log in to the system to access their personal information and medical data.

#### **2. Book Appointment**

Patients can schedule appointments with doctors by selecting available time slots. The system then updates the doctor's schedule.

### **3. Telemedicine Consultation**

Patients can consult with doctors via video calls or chat through the system, making healthcare more accessible.

### **4. View/Edit Patient Records**

Doctors can view and update patients' medical records to ensure that they have the most accurate information for treatment.

### **5. Generate Bill/Pay Online**

After a consultation or treatment, the system generates a bill, and patients can pay directly through the system.

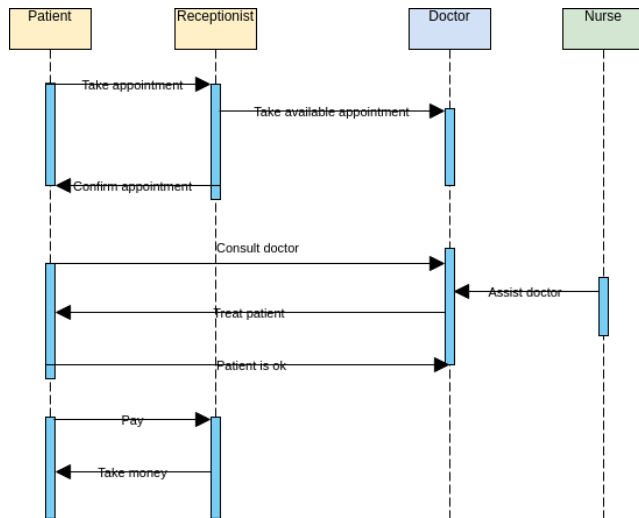
### **6. Medication Reminder**

The system sends patients reminders to take their prescribed medications, ensuring they don't miss any doses.

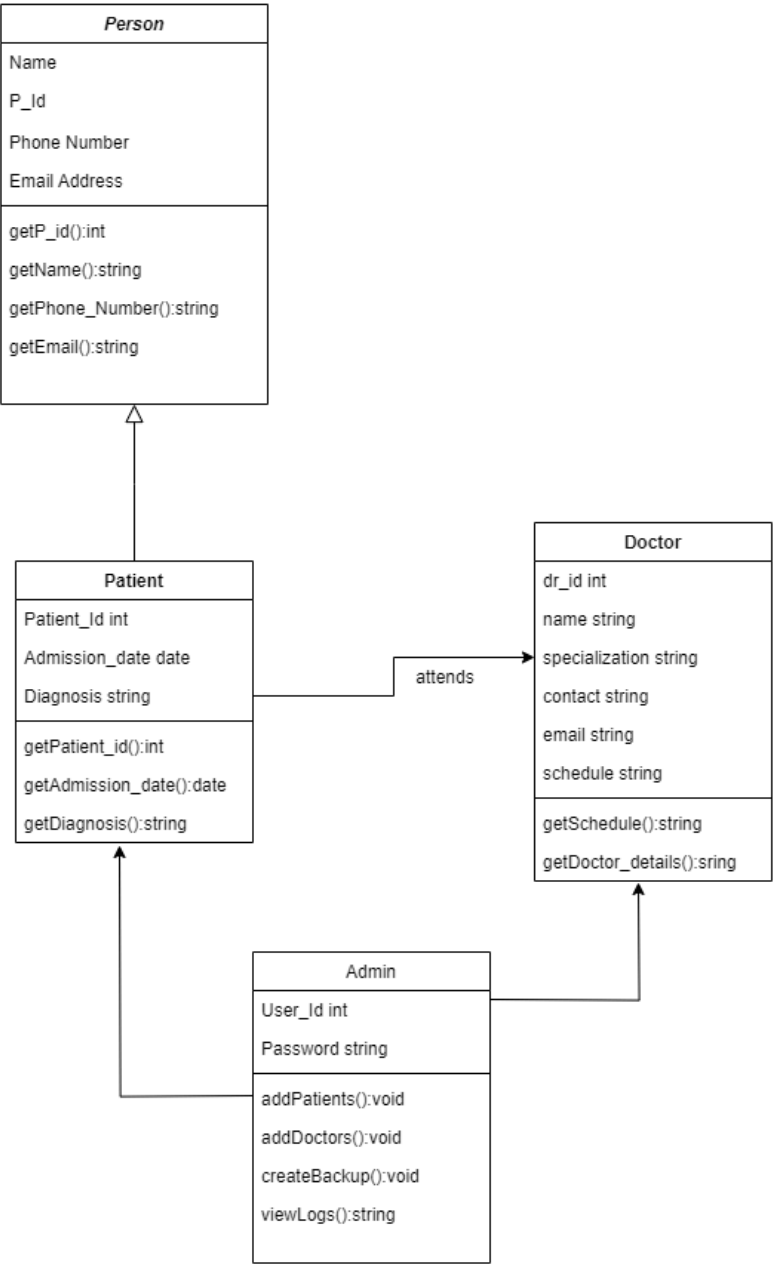
### **How It Works.**

Imagine a patient wants to book an appointment for a telemedicine consultation. They log into the system, choose an available time slot, and book the appointment. On the day of the appointment, they log in again and have a video call with the doctor. After the consultation, the system generates a bill, which the patient can pay online. The system also sends daily reminders to the patient to take their medication on time.

## A sequence diagram.



A Class Diagram



## A Use Case Diagram

