**User Stories / Use Cases Document**

**Project Title:** HealthHub

**Document Title:** User Stories / Use Cases

**Version:** 1.0

**Date:** [Current Date]

**1. Introduction**

**1.1 Purpose:** The purpose of this document is to describe the user stories and use cases for HealthHub, a comprehensive healthcare management system.

**1.2 Scope:** This document covers all functionalities of the system, including patient management, appointment scheduling, telemedicine, medical record handling, and administrative functions.

**2. User Stories**

**2.1 List of User Stories:**

**User Authentication:**

* **As a Patient, I want to register an account so that I can access HealthHub.**
* **As a Patient, I want to log in to my account so that I can manage my health information.**
* **As a Doctor, I want to log in to my account so that I can manage patient records.**
* **As an Admin, I want to log in to my account so that I can manage the system and users.**

**Patient Management:**

* **As a Patient, I want to update my personal information so that my records are accurate.**
* **As a Doctor, I want to view patient records so that I can provide better care.**
* **As a Doctor, I want to update patient medical history so that records are up-to-date.**

**Appointment Scheduling:**

* **As a Patient, I want to book an appointment with a doctor so that I can receive medical consultation.**
* **As a Patient, I want to receive reminders about my appointments so that I don't miss them.**
* **As a Doctor, I want to view my appointment schedule so that I can manage my time effectively.**
* **As an Admin, I want to resolve scheduling conflicts so that appointments run smoothly.**

**Telemedicine:**

* **As a Patient, I want to have a video consultation with a doctor so that I can receive care remotely.**
* **As a Doctor, I want to conduct video consultations so that I can provide care to remote patients.**
* **As a Doctor, I want to securely message my patients so that I can provide follow-up care.**

**Medical Records:**

* **As a Patient, I want to view my medical records so that I can keep track of my health history.**
* **As a Doctor, I want to upload medical reports so that patient records are comprehensive.**
* **As a Doctor, I want to generate and share prescriptions electronically so that patients can easily access them.**

**Admin Functions:**

* **As an Admin, I want to manage user accounts so that the system remains secure.**
* **As an Admin, I want to generate reports on system usage so that I can monitor performance.**
* **As an Admin, I want to customize system settings so that the system meets organizational needs.**

**3. Use Cases**

**3.1 Use Case Diagrams and Descriptions:**

**Use Case: User Registration**

* **Actors:** Patient, Doctor
* **Description:** Allows users to register by providing necessary details like email, password, and role.
* **Preconditions:** User must have an internet connection.
* **Postconditions:** User account is created, and the user is logged in.
* **Main Flow:**
  1. User navigates to the registration page.
  2. User fills in registration details.
  3. User submits the form.
  4. System creates a new user account.
  5. User is logged in and redirected to their dashboard.

**Use Case: Booking an Appointment**

* **Actors:** Patient
* **Description:** Allows patients to book an appointment with a doctor by selecting available time slots.
* **Preconditions:** User must be logged in.
* **Postconditions:** Appointment is created, and a confirmation is sent to the patient.
* **Main Flow:**
  1. Patient navigates to the appointment booking page.
  2. Patient selects a doctor and an available time slot.
  3. Patient confirms the appointment.
  4. System creates the appointment.
  5. Confirmation notification is sent to the patient.

**Use Case: Conducting Telemedicine Consultation**

* **Actors:** Doctor, Patient
* **Description:** Allows doctors to conduct video consultations with patients.
* **Preconditions:** Both users must be logged in and have the necessary hardware (camera, microphone).
* **Postconditions:** Consultation is completed, and the doctor can update the patient's medical records.
* **Main Flow:**
  1. Patient and doctor log in and navigate to the consultation page.
  2. System establishes a WebRTC connection.
  3. Video consultation takes place.
  4. Doctor updates the patient's medical records.
  5. Consultation is logged in the system.

**Use Case: Viewing Medical Records**

* **Actors:** Patient, Doctor
* **Description:** Allows users to view medical records.
* **Preconditions:** User must be logged in.
* **Postconditions:** Medical records are displayed.
* **Main Flow:**
  1. User navigates to the medical records page.
  2. User selects the desired record.
  3. System retrieves and displays the medical record.

**Use Case: Managing User Accounts**

* **Actors:** Admin
* **Description:** Allows admins to manage user accounts, including creation, update, and deletion.
* **Preconditions:** Admin must be logged in.
* **Postconditions:** User accounts are managed.
* **Main Flow:**
  1. Admin navigates to the user management page.
  2. Admin selects an action (create, update, delete).
  3. Admin performs the action.
  4. System updates the user accounts accordingly.