**Doctor Appointment Booking Management System**

**Problem Statement:**

Current methods for managing doctor appointments are inefficient, leading to patient dissatisfaction and poor time utilization for doctors. Key issues include:

1. Doctor Availability Management
2. Communication Gaps
3. Medical Record Management:

**Users:**

1. Patients
2. Doctors
3. Receptionist
4. Admins

**Functionalities:**

1. **Authentication**
   1. All Users (patients, doctor, Receptionist, Admin) must authenticate themselves the at login page
2. **Manage Users**
   1. Create new User
      1. Patient can create his new account
      2. Admin will create new accounts for doctors, receptionist
   2. Delete User
      1. Patient can delete their own account
      2. Admin can delete account of doctor and receptionist and patient
3. **Manage User-id and Password**
   1. Read User-id
      1. User can read his own id
      2. Admin can read user id of any user-id
      3. Admin can also perform getAllUserId
      4. Receptionist can read patient id (who has booked appointment)
   2. Update user-id and password
      1. Users can change their user id and password
      2. Admin can change password of any user
4. **Profile/Account**
   1. Read User Profile
      1. Admin can read all user’s profile
      2. Receptionist can read patient’s profile and doctor's profile
      3. Doctor can read patient’s profile (who’s doctor he/she is) and other doctor's profile
      4. Patient can read all doctor's profile
   2. Update Profile
      1. Each User can update their own profile only
      2. Admin can also update any user’s profile
5. **Manage Prescription**
   1. Create prescription
      1. Doctor can write prescription for his patient (only one time)
   2. Read Prescription
      1. Patient can read their prescription history
      2. doctor can read the prescription and also their patient’s medical history
6. **Manage Appointment**
   1. Create new Appointment
      1. Patient can book an appointment
      2. Receptionist can also book appointments
      3. Admin can also book appointments
   2. Read Booked Appointment
      1. Patient can read his own booked appointment
      2. Receptionist can read appointments (which were scheduled in past and also future)
      3. Doctors can check only their appointments
   3. Update Appointment
      1. Patient can change his appointment’s date or slot
      2. Receptionist can also update appointment’s date and slot
      3. Doctor can also update appointment’s date and slot
      4. Admin can also update appointment’s date and slot
   4. Delete/ Cancel Appointment
      1. Patient can cancel his appointment
      2. Receptionist can also cancel appointment’s date and slot
      3. Doctor can also cancel appointment’s date and slot
      4. Admin can also cancel appointment’s date and slot
7. **Manage Review**
   1. Create Review
      1. Patient can create review for those doctors whom he has visited (in past)
   2. Read review
      1. All user can read review of doctors
   3. Update review
      1. Patients can update review, which are written by them only
   4. Delete review
      1. Patient can delete review, which are written by them only
8. **Reminders**
   1. Create reminder
      1. Receptionist can make reminder to the patient about their appointment
   2. Read reminder
      1. Patient can read their reminders