**Hospital Management System – Usage Scenario**

**Actors**

1. **Authority (Super Admin)** – Manages the entire system and all users.
2. **Doctor** – Manages their schedules, appointments, and patient tests.
3. **Lab Assistant / Nurse** – Handles medical tests assigned by doctors.
4. **Patient** – Books and manages appointments, views available doctors and schedules.

**Use Case Scenarios**

**1. Registration**

* **Actors:** Patient, Doctors, Lab Assistant / Nurse
* **Description:** Patient must registration to access the system using their information. For Doctors, Lab Assistants / Nurse Admin will verify and approve their registration.
* **Normal Flow:**
  1. User enters Name, Username, Email & Password
  2. System verifies credentials for duplicate Email or Password and a valid Email
  3. If valid, the user is redirected to login page.

**2. Login/Logout**

* **Actors:** All users (Authority, Doctor, Lab Assistant, Patient)
* **Description:** All users must log in to access the system using their credentials and can log out after use.
* **Normal Flow:**
  1. User enters username and password.
  2. System verifies credentials.
  3. If valid, the user is redirected to their dashboard.
  4. User can log out anytime.

**3. Manage Users (CRUD)**

* **Actor:** Authority
* **Description:** The Authority can create, read, update, or delete user accounts (Doctors, Lab Assistants, Patients).
* **Normal Flow:**
  1. Authority selects “Manage Users” from the dashboard.
  2. Can add new users, edit existing user details, or delete users.
  3. Changes are saved in the database.

**4. View Doctors and Schedules**

* **Actor:** Patient
* **Description:** Patient can view a list of available doctors with their schedules.
* **Normal Flow:**
  1. Patient logs in and navigates to “Doctors List.”
  2. System displays doctors’ names, specialties, and available times.

**5. Book Appointment**

* **Actor:** Patient
* **Description:** Patient can book an appointment with a doctor.
* **Normal Flow:**
  1. Patient selects a doctor and available time slot.
  2. System confirms booking and stores it in the database.

**6. Cancel Appointment**

* **Actor:** Patient & Doctor
* **Description:** Patient & Doctor both can cancel an existing appointment.
* **Normal Flow:**
  1. Patient selects “My Appointments.”
  2. Chooses an appointment to cancel.
  3. System removes it from the schedule.

**7. View Schedule**

* **Actor:** Doctor
* **Description:** Doctor can view their upcoming appointments and schedules.
* **Normal Flow:**
  1. Doctor logs in.
  2. Selects “My Schedule” from the dashboard.
  3. System shows all upcoming appointments.

**8. Add Test**

* **Actor:** Doctor
* **Description:** Doctor can request medical tests for a patient.
* **Normal Flow:**
  1. Doctor selects patient’s record.
  2. Adds required test details.
  3. System sends the request to Lab Assistant.

**9. Check Test Report**

* **Actor:** Doctor
* **Description:** Doctor can view completed test results.
* **Normal Flow:**
  1. Doctor selects a patient’s profile.
  2. Opens “Test Reports” section.
  3. System displays completed test details.

**10. View Tests Assigned**

* **Actor:** Lab Assistant
* **Description:** Lab Assistant can view all test requests from doctors.
* **Normal Flow:**
  1. Lab Assistant logs in.
  2. Selects “Assigned Tests.”
  3. System displays pending tests.

**11. Update Test Status**

* **Actor:** Lab Assistant
* **Description:** Lab Assistant updates the status of tests (Pending, In Progress, Completed).
* **Normal Flow:**
  1. Lab Assistant opens a test record.
  2. Updates status and uploads report if applicable.
  3. System saves changes.