# **DOCUMENTATION**

The project **e-Hospital Management System** includes registration of patients, storing their details into the system, and computerized billing in the pharmacy. It has the facility to give a unique id for every patient and stores the details of every patient automatically. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id.

The Hospital Management System can be entered using a username and password. It is accessible either by an **administrator** or a **patient** or a **doctor**.

**Problems:**

1. The information is very difficult to retrieve and to find information like- e.g. - To find out about the patient’s history, the user has to go through various registers. This results in in-convenience and wastage of time.
2. The information generated by various transactions takes time and efforts to be stored at right place.
3. Various changes to information like patient details or immunization details of child are difficult to make as paperwork is involved.
4. Manual calculations are error prone and take a lot of time this may result in incorrect information. For example, calculation of patient’s bill based on various treatments.
5. For doctors, they have to remember all the medicines available at the pharmacy, so it makes it easier for them to assign medicines to patients.

**Objective:**

1. Patient can use the application to register themselves and book and check their appointments according to the availability of the doctors.
2. Recording information about the Doctors and other Staffs by ADMIN.
3. Generating bills.
4. Recording information related to diagnosis given to patients.
5. Keeping information about various diseases and medicines available to cure them.

**MODULES:**

The entire project mainly consists of,

* Admin module
* User module (Patient)
* Doctor module
* Pharmacist module
* Order Medicines

**Admin module:**

* manage department of hospitals, user, doctor, nurse, pharmacist
* watch appointment of doctors
* watch transaction reports of patient payment
* Bed, ward, cabin status
* watch blood bank report
* watch medicine status of hospital stock
* watch operation report
* watch diagnosis report

**User module (Patient):**

* View appointment list and status with doctors
* View prescription details
* View medication from doctor
* View doctor list
* View operation history
* View admission history like bed, ward, ICU, etc.
* Manage own profile

**Doctor module:**

* Manage patient.
* account opening and updating
* Create, manage appointment with patient
* Create prescription for patient
* Provide medication for patients
* Issue for operation of patients and creates operation report
* Manage own profile

**Pharmacist module:**

* Maintain medicines.
* Keep records of hospitals stock medicines and status.
* Manage medicine categories.
* Watch prescription of patient.
* Provide medication to prescriptions.

**JPA Entities:**

* Doctor
* Patient
* Address
* Department
* Medicines
* UserDetails
* Appointments

**Relationships:**

Doctor ----> Patient ---- Many to many

Doctor ----> Department ---- Many to one

Doctor ----> Address ---- One to one

Patient ----> Medicine ---- One to many

Patient ----> Address ---- One to one

Doctor ----> Appointments ---- One to Many

Patient ----> Appointments ---- One to Many

**ER Diagram:**

