# cs4111-Project

Group - 45 Nihar Maheshwari - nm3223 Aayush Kumar Verma - av2955

#### **Postgres Connection Settings**

• "user": "nm3223",

• "passphrase": "369638"

• "db-server": "34.73.36.248/project1"

## Project Web URL

• URL : http://34.74.94.208:8111/

#### Parts Implemented

Application Scope : A hospital management system to manage the day to day operations for a small-scale hospital. Bits implemented:

- Admin Page: This page is responsible for Displaying the Current Departments
  and Units (Rooms and Beds) available in the hospital. This view additionally
  allows a receptionist / admin staff to create new Doctors / Nurses as part of
  on-boarding new employees. Additionally, the view also allows time-booking of
  rooms for patients.
- Doctors View page: This page allows multi-feature search over the current doctors over at the hospital. This includes searching for doctors who have consulted recently (complex query), view sensitive information pertaining to doctors (access control), sort and search by name, identifiers and email TRY OUT: Blank Search (Without any params for doctors to see all data. Filter by providing search criteria)
- Nurses View Page: This page also allows a multi-feature search over the current set of nurses over at the hospital. This includes complex searches such as nurses who are busy (complex query again), view sensitive information for nurses (access control), sort and search. TRY OUT: Blank Search (Without any params for nurses to see all data. Filter by providing search criteria)
- Appointments: This is the central piece and the core of the management system. This page allows a user to search / book / and update appointments. An appointment maintains patient, doctor, nurse, accounting and medicine prescription data and hence is one of the sections that includes the most joins. TRY OUT: Blank Search (Without any params for appointments to see all data. Filter by providing search criteria)
- Medicines: This section maintains an inventory of the medicines in the hospital pharmacy. This sections here implement an event based TRIGGER to decrement stock based on the medicines purchased by patients.
- Patients : A page to manage and view patients registered in the hospital. This allows creation of new patients and view information for existing patients.

# Parts not implemented Per Part-1

 $\bullet$  None Specific. All aspects of ER are covered.

### **Interesting Pages**

• (Appointments + Medicine) : Appointments are the central theme of the application. Hence a lot of SQL queries to find / book / update appointments are present. An appointment is associated to doctors, patients, billing and

medicines and hence a single vsual update involves updates to several tables at once. For instance, updating an appointment with a medicine auto decreases the medicine quantity from the pharmacy (A code based implementation of something similar to triggers)

- (Doctor / Nurse View Pages): This shows information pertaining to doctors and nurses. This includes infformation such as which doctor or nurse is busy in a surgery or appointment which includes nested queries (EXISTS) for fetching. Further, we make attempts to initially show only non-sensitive information (e.g, salary is hidden) and provide sensitive information upon request.
- (Admin Pages) : Pages for Onboarding New Doctors and Nurses. Lot of data pertaining to employee is collected and transformed here.