Assignment 2

Due date: March 07, 2019

Part 1: Implement Minor 1 Question Paper in MySQL

Implement Q1 and Q3 of Minor 1 in MySQL. Create the database and populate the tables (relations) with random values which obeys the constraints. You are also required to normalize the relations to its highest normalization form in both the questions. You also draw the ER diagram for both the questions and implement all the queries.

Part 2: Hospital Management system at IIT Jammu

In this part, you are required to develop and deploy a software for hospital management system for IIT Jammu. The software should include the following modules.

Patients Module:

- Patient registration
- Patient Information retrieval
- Add, delete, edit information

Doctors and staff module:

- Department wise doctor information
- Consultant, intern, nurses
- Emergency alert for the doctor on duty
- Set appointments with any doctor after confirming his availability.
- Add, delete, edit information

Infrastructure Module:

- Ward Information
  - Current bed status
  - Vacant bed status
  - Ward wise bed status
  - Admission/discharge reports
  - Bed Occupancy Report
- Lab Information System
- Stock Information Update
- Ambulance management
- Add, delete, edit information

- Operation theatre usage

Financial Module:

- Department wise fund allocation
- Department wise expenditure
- Department wise income
- Salaries
- Add, delete, edit information

In addition to the above modules, you can come up with your own modules which you feel critical.

Develop a design document which consists of various entities with attributes, their relations and constraints. All the relations in the database should be normalized to highest normalization form. Implement all the design components in MySQL database. You can use Python as a front end for the software. It should be noted that the developed software will be compatible with network systems.