DBS Project - Hospital Management System

Aryan Kapoor - 2020A7PS1689P

Debjit Kar - 2020A7PS0970P

Documentation :

System Requirement Specification :

Introduction -

The presented models gives the user an overview of how database systems are put to use in real life scenarios by taking a hospital as an example.

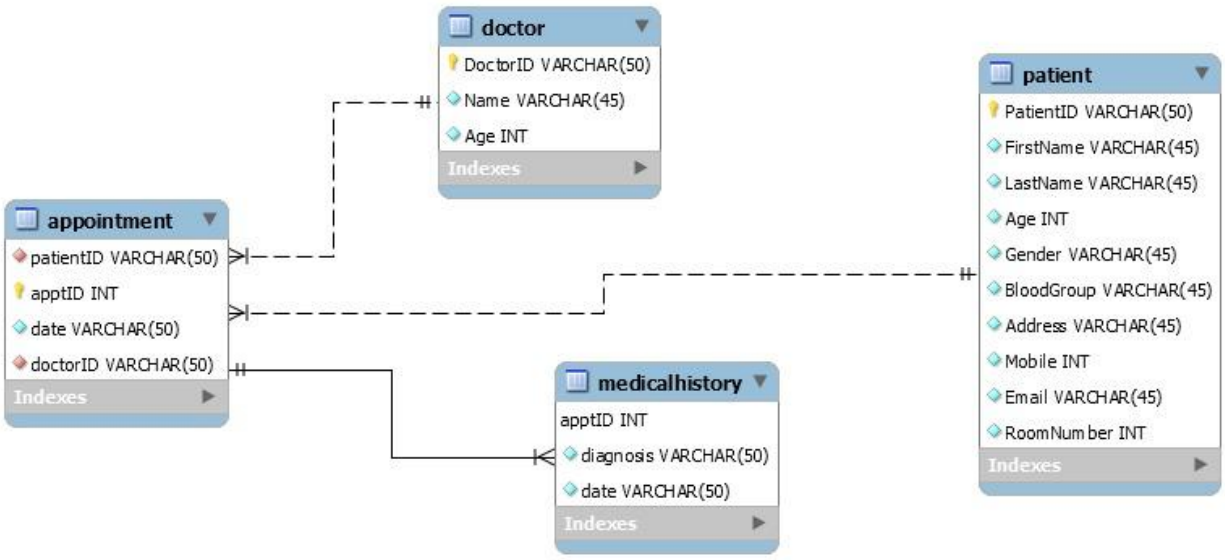
The model accounts for appointments between the patient and the doctor, the patient’s past medical history and

Functional Requirement -

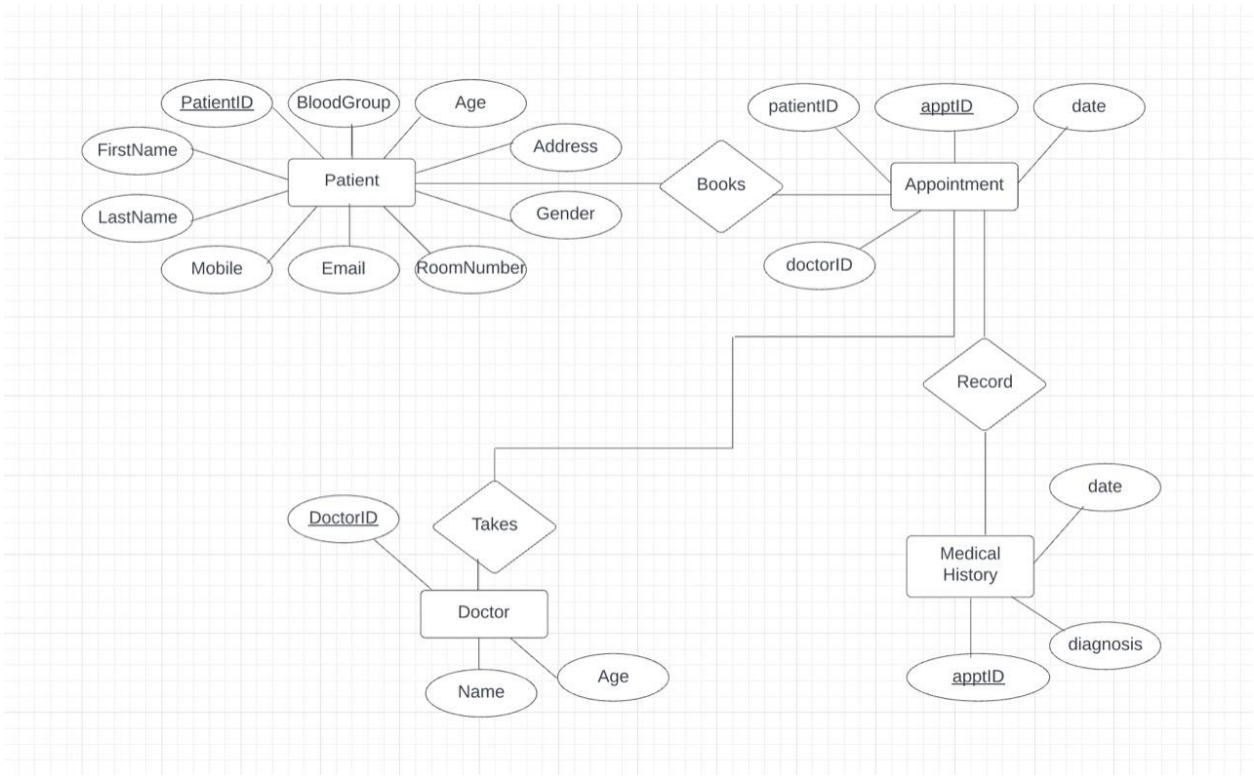
The model utilizes the tkinter package of Python and HTML to structure the front end of the system.
The code for the various components of the database has been executed and run on Microsoft Workbench.

System Modeling :

Schema :



Entity Relationship Diagram :



Data Normalization :

Functional Dependencies -

Patient :
{PatientID, FirstName, LastName, Mobile, Email, RoomNumber, Gender, Address, Age, BloodGroup}

Appointment :
{apptID, patientID, date, doctorID}

Medical History :
{apptID, date , diagnosis}

Doctor :
{doctorID, name, age}

On basis if the functional dependencies that exist in the table, we realize that the entire database has been normalized upto 3 NF.

Tables Utilized :

- Patient
- Doctor
- Appointment
- Medical History

  Relations between the tables -

  Books between tables **Patient and Appointment** to signify the patient's competency to book an appointment. The relation is a **1 : N** relation.

  Takes between tables **Doctor and Appointment** to signify the doctor's vacancy to take a consultation. The relation is a **1 : 1** relation.

  Record between tables **Appointment and Medical History** to demonstrate the pass record of a patient