A Project Report on

Digital Hospital Management System

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Computers Science and Engineering

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Introduction

The Hospital management is intended to Automate the hospital activities such as admitting a new patient, giving id to the patients, maintaining the details of all the patients that are admitted in the hospital. This also helps the doctors by providing information such as total patient available each block, list of patients that belong to a particular category of disease (Trauma, burns, emergency , surgery , etc.).

Motivation

Hospital Management System stores every information electronically and in an organized and systematic way which leads to effective results. It enhances the overall performance of the doctors . The software is designed in such a way that it modernizes the hospital management system and help the doctors to make the best use of hospital Automation System.

Project Objective

The project aims to create an alterable database to increase efficiency of Hospital Management system. This project aims to connect the doctors to the patients. Even so, this system has the following advantages and disadvantages:

Advantages of Online Hospital Management System are:

1.It is user-friendly software.

2.It is cost-effective and easy to install.

3.It increases the efficiency.

Disadvantages of Online Hospital Management System are:

1.The data stored is prone to cyber hacks.

2.Complicated to operate.

3.Online Systems require high-speed internet connectivity.

Methodology/ Planning of work:

In order to tackle the problem, the work is divided into following phases:

1.Reconnaissance:This phase will help to identify the problem and ideate the project.

2.Planning:This phase will create an ER Diagram, Relational Schema and SQL Queries to generate tables for the database.

3.Site Launch: Creation and Launching of website.

Facilities required for proposed work:

1.MySQL

2.HTML

3.CSS

4.JavaScript5.Bootstrap

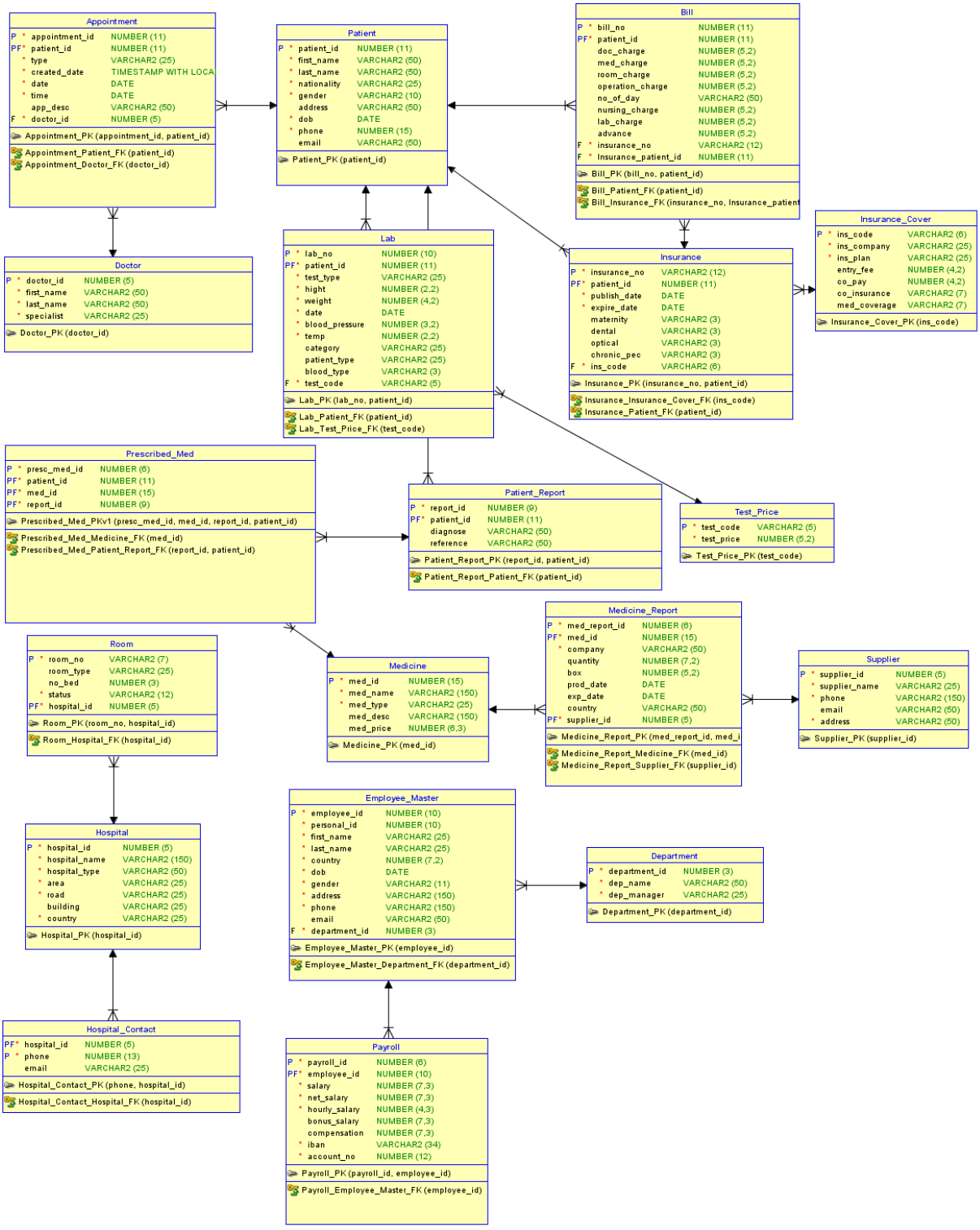
Hospital Management System (SQL Commands)

```
CREATE SEQUENCE seq_patient_id

MINVALUE 10000001

START WITH 10000001

MAXVALUE 19999999

CACHE 10;

CREATE OR REPLACE TRIGGER tr_patient BEFORE INSERT ON patient
FOR EACH ROW BEGIN

SELECT
LPAD(RTRIM(RTRIM(TO_CHAR(seq_patient_id.NEXTVAL))),10,'0') INTO :NEW.patient_id FROM
DUAL;
END;
```

```
INSERT INTO PATIENT(first_name, last_name, nationality, gender, address, dob, phone, email)

VALUES('Manipal', 'Singh', 'India', 'male', 'A999 - R191 - V700', '22-oct-95', 22698817,
'Manipal@hotmail.com');
CREATE OR REPLACE PROCEDURE AddPatient(

    first_name IN VARCHAR2 ,

    last_name IN VARCHAR2,

    nationality IN VARCHAR2,

    gender IN VARCHAR2,

    address IN VARCHAR2,

    dob IN DATE,

    phone IN NUMBER,

    email IN VARCHAR2
```

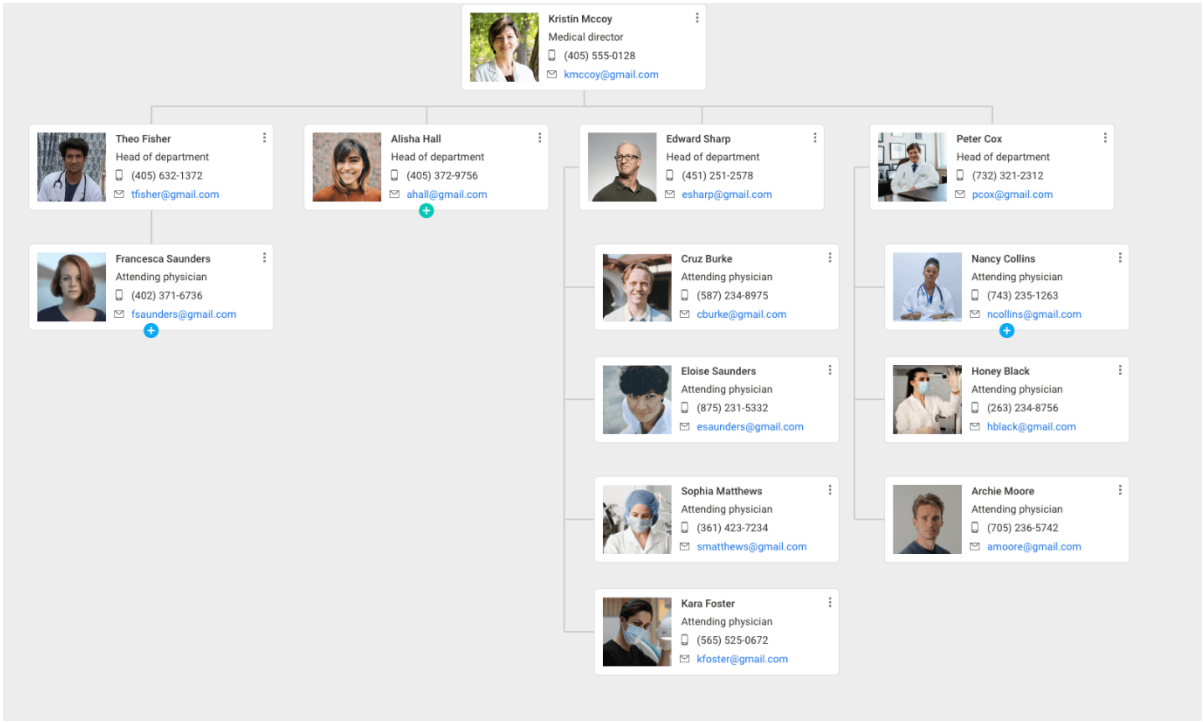
```
) AS

BEGIN

    INSERT INTO patient(first_name, last_name, nationality, gender, address, dob, phone, email)

    VALUES (first_name, last_name, nationality, gender, address, dob, phone, email);

    COMMIT;

    END;

    /
EXECUTE AddPatient('lebron', 'james', 'usa', 'male', 'A999 - R192 - V207', '30-dec-84', 88542021,
'lebron@gmail.com');

SELECT MIN(SALARY) FROM PAYROLL;
SELECT MAX(SALARY) FROM PAYROLL;
SELECT employee_id, salary

FROM payroll p1

WHERE 3-1 = (SELECT COUNT(DISTINCT salary) FROM payroll p2

WHERE p2.salary > p1.salary);
SELECT em.employee_id, first_name || ' ' || last_name AS full_name, salary

FROM employee_master em

JOIN payroll p ON em.employee_id = p.employee_id;
```

Relational Schema:

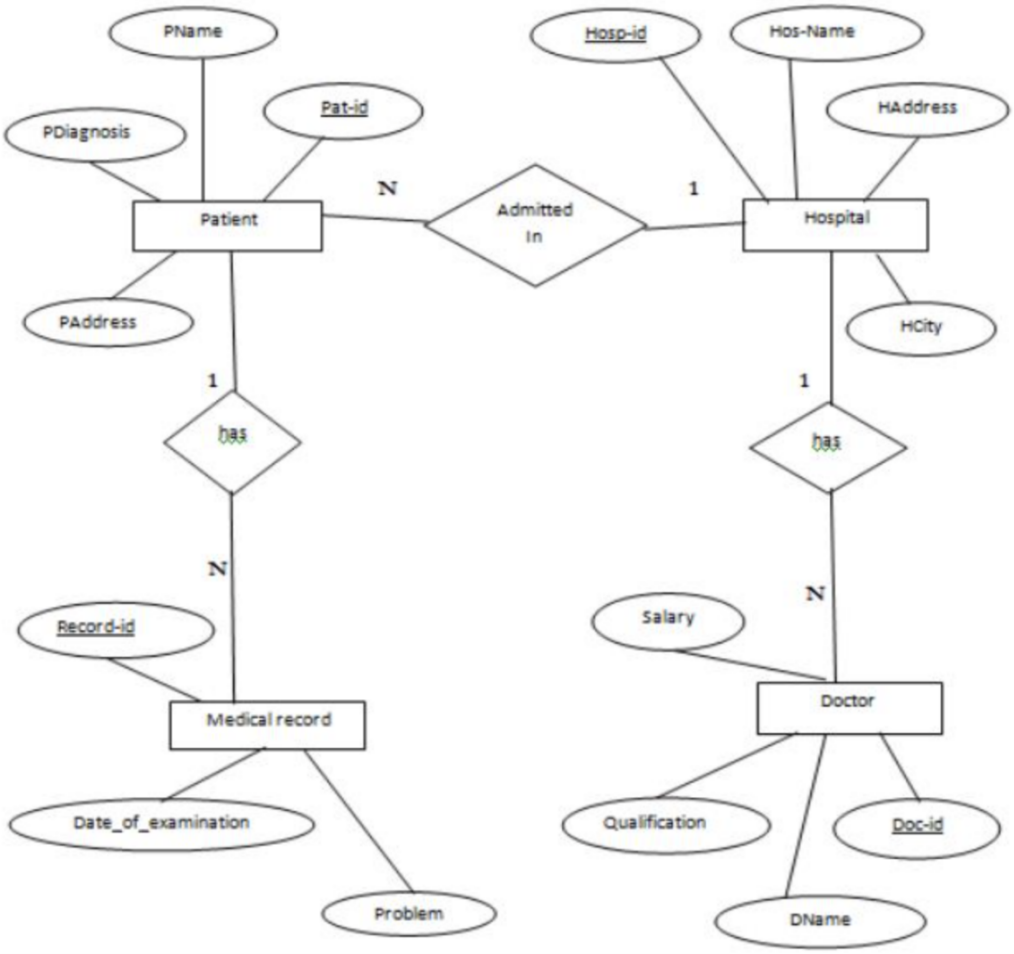


Website Look:

List of available doctors along with their contact information:



Entity Relationship Diagram:



CONCLUSION:

The database will help keep track of all the transactions that take place. It will also be holding information of all the patients and disease in order to maintain a history and contact points.

I would like to thank Dr. Rishi Gupta for his teachings which have helped me to make this project.

Bibliography/References

Database System Concepts by Abraham Silberschatz, Henry F. Korth, S. Sudarshan

GeekforGeeks

DBMS by Alexandra Ford