

DataBase Management System Mini Project

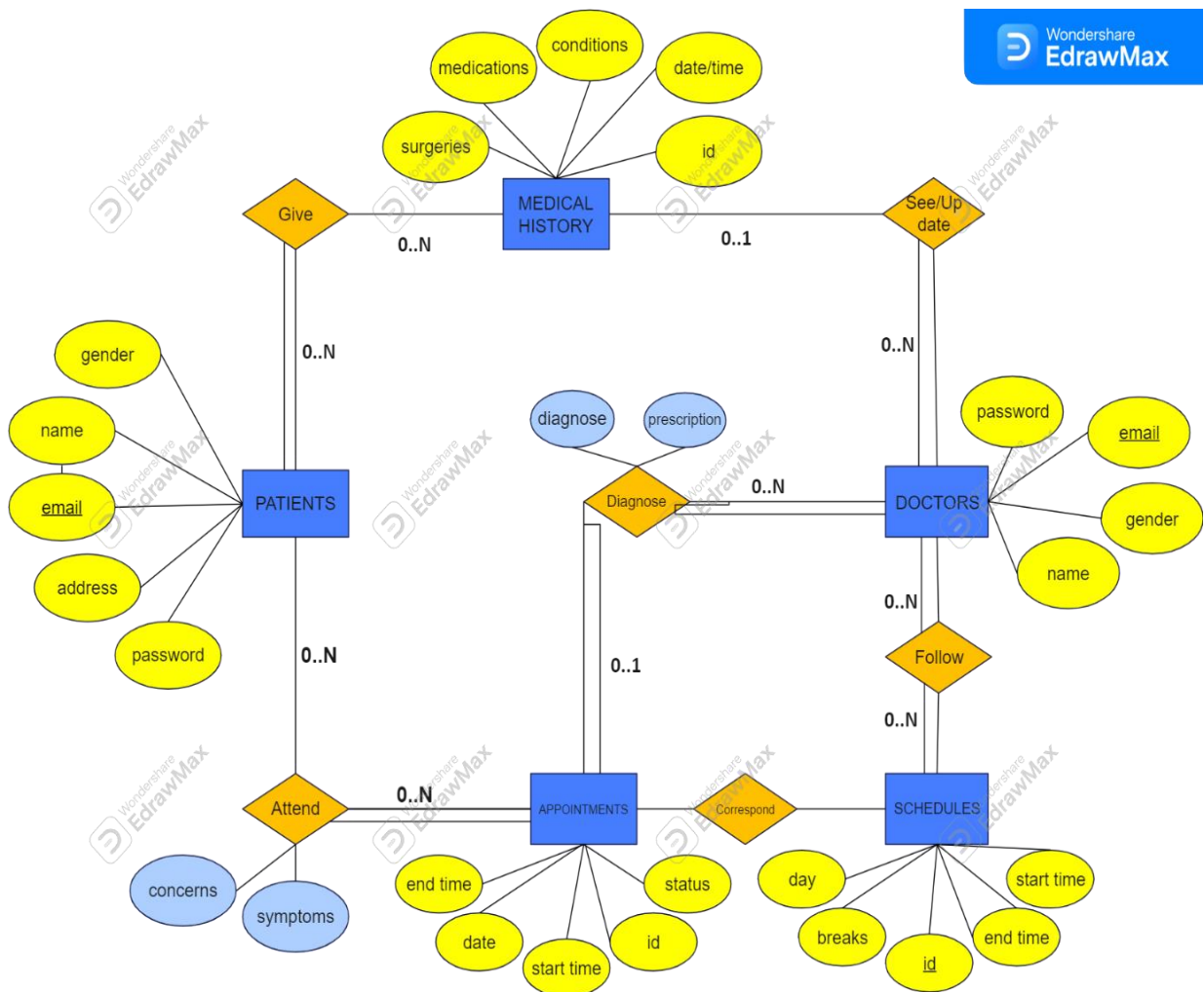
Hospital Management System

Team:

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E-R Diagram:



User Requirements Specifications:

Problem Statement:

To develop a Hospital management to effectively manage tasks such as booking appointments, keeping medical history and managing patient records.

Project Overview:

Hospitals have to deal with a lot of data everyday which is difficult to manage without a system. Hence we decided to build a DBMS with a frontend that helps/allows patients to book appointments and doctors/administrators to access patient data.

Functional Requirements:

1. Patients and Doctors should have separate logins.
2. Doctors can see previous medical history of a patient and a patient can give his/her medical history.
3. Patients can book appointments only if the doctor is free.
4. Patients can view/update/cancel already booked appointments if necessary.
5. Doctors diagnose, give prescriptions and they can also modify prescriptions.

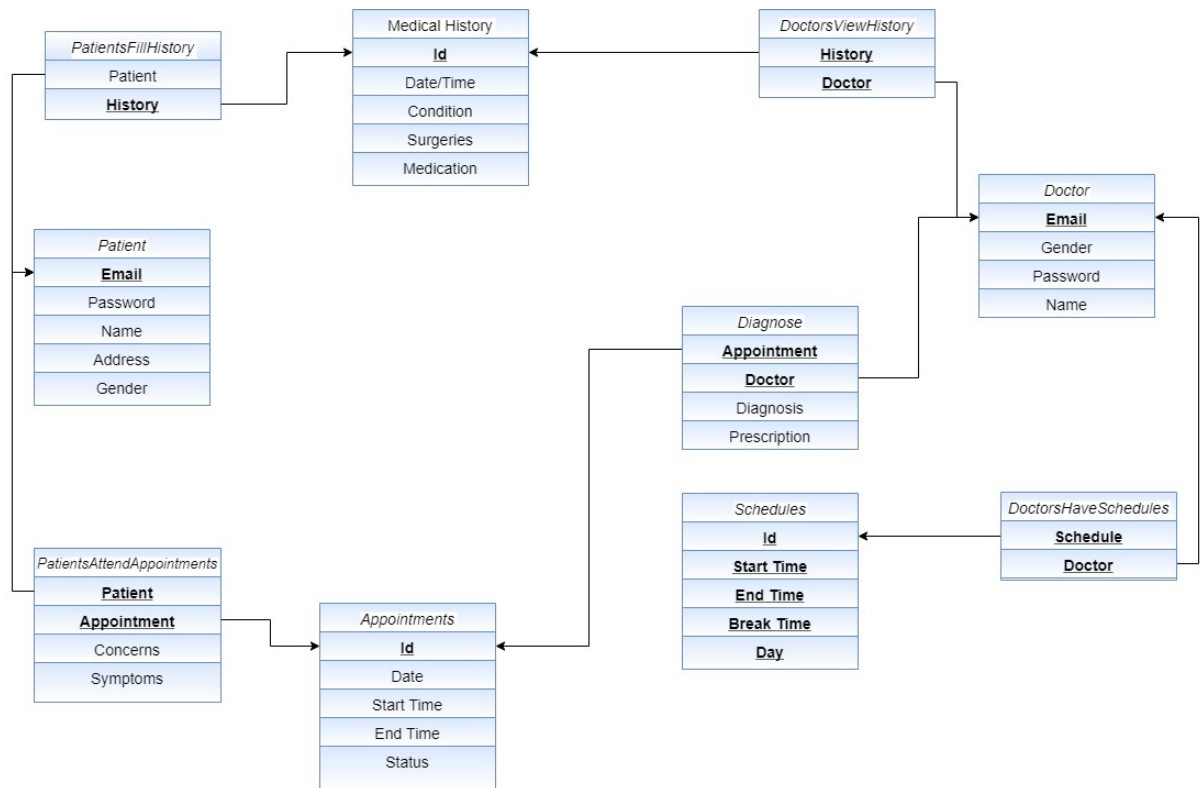
Technical Requirements:

Front end - Streamlit

Back end – MySQL Connector

Database - MySQL

Relational Schema:



Queries execution screenshot of output:

Triggers(code snippet):

```
mysql> use hms;
Database changed
mysql> show triggers;
+-----+-----+-----+-----+-----+-----+-----+-----+
| Trigger | Event | Table | Statement | Timing | Created | sql_mode |
+-----+-----+-----+-----+-----+-----+-----+-----+
| UpdateAppointmentStatus | UPDATE | appointment | BEGIN
IF NEW.status <> OLD.status AND NEW.status = 'Done' THEN
IF NEW.endtime < NOW() THEN
UPDATE Appointment SET status = 'Cancelled' WHERE id = NEW.id;
END IF;
END IF;
END | AFTER | 2023-11-19 10:08:17.27 | ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION | root@localhost | utf8mb4 | utf8mb4_0900_ai_ci | utf8mb4_0900_ai_ci |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.05 sec)

mysql> |
```

Procedures(code snippet):

```
mysql> SHOW CREATE PROCEDURE GetDoctorAppointments;
+-----+-----+-----+-----+-----+-----+-----+-----+
| Procedure | sql_mode | Create Procedure |
+-----+-----+-----+-----+-----+-----+-----+-----+
| GetDoctorAppointments | ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION | CREATE DEFINER='root'@'localhost' PROCEDURE `GetDoctorAppointments` (IN doctor_email VARCHAR(50))
BEGIN
SELECT A.id, A.date, A.starttime, A.endtime, A.status
FROM Appointment A
JOIN Diagnose D ON A.id = D.appt
WHERE D.doctor = doctor_email;
END | utf8mb4 | utf8mb4_0900_ai_ci | utf8mb4_0900_ai_ci |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Doctor Functionalities:

The screenshot shows a web browser window with the URL 'localhost:8501'. The page title is 'Doctor Management System'. Below the title, there is a 'Select an option:' section with two radio buttons: 'Login' (selected) and 'Register'. Below this is the 'Doctor Login' section with a stethoscope icon. It contains input fields for 'Email' (filled with 'hathalye7@gmail.com') and 'Password' (filled with '*****'). A 'Login' button is below the password field. At the bottom, it says 'Welcome, Doctor' with a prayer hands emoji. The Windows taskbar is visible at the bottom with a temperature of 27°C and the date 23-11-2023.

Doctor Management System

Select an option:

☒ Login

☐ Register

Doctor Login

Email

hathalye7@gmail.com

Password

Login

Welcome, Doctor

The screenshot shows the same web browser window after a successful login. The 'Email' and 'Password' fields are still visible. Below the 'Login' button, it says 'Welcome, Doctor' with a prayer hands emoji. Below this, it says 'Hello, Hrishikesh Athalye!'. There is a 'Select an option:' section with three radio buttons: 'View Appointments' (selected), 'View Patient Profiles', and 'Diagnose and Prescribe'. Below this is the 'Appointments' section, which says 'No appointments available.' The Windows taskbar is visible at the bottom with a temperature of 27°C and the date 23-11-2023.

hathalye7@gmail.com

Password

Login

Welcome, Doctor

Hello, Hrishikesh Athalye!

Select an option:

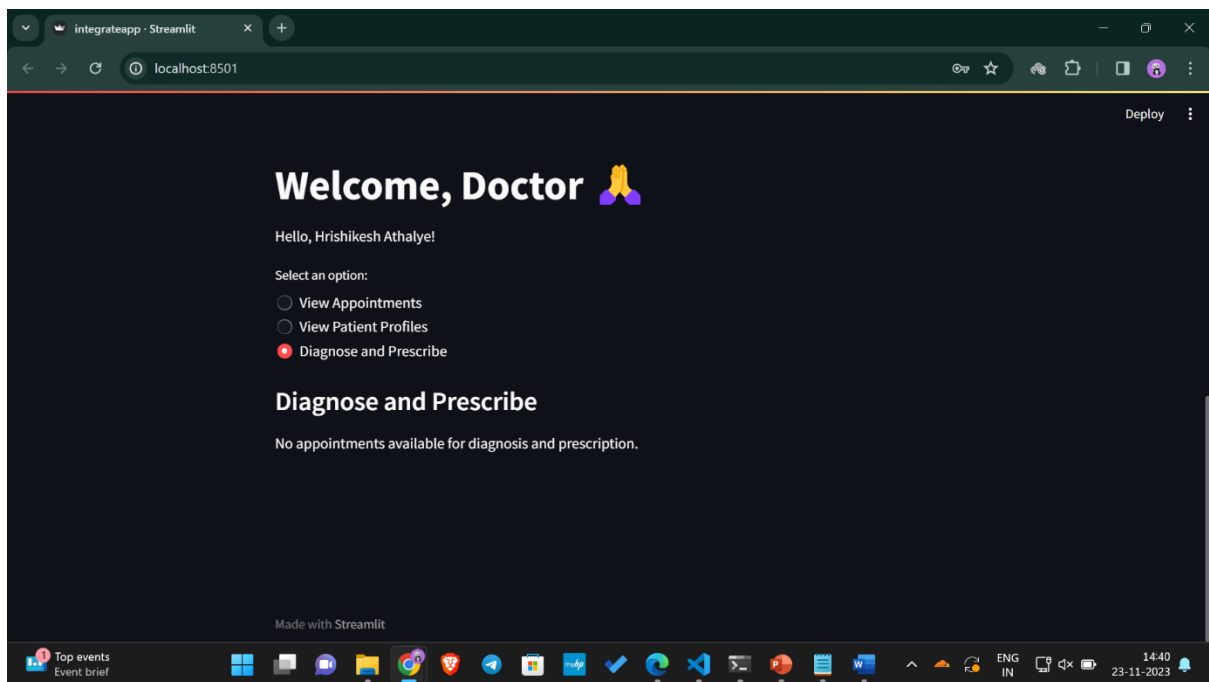
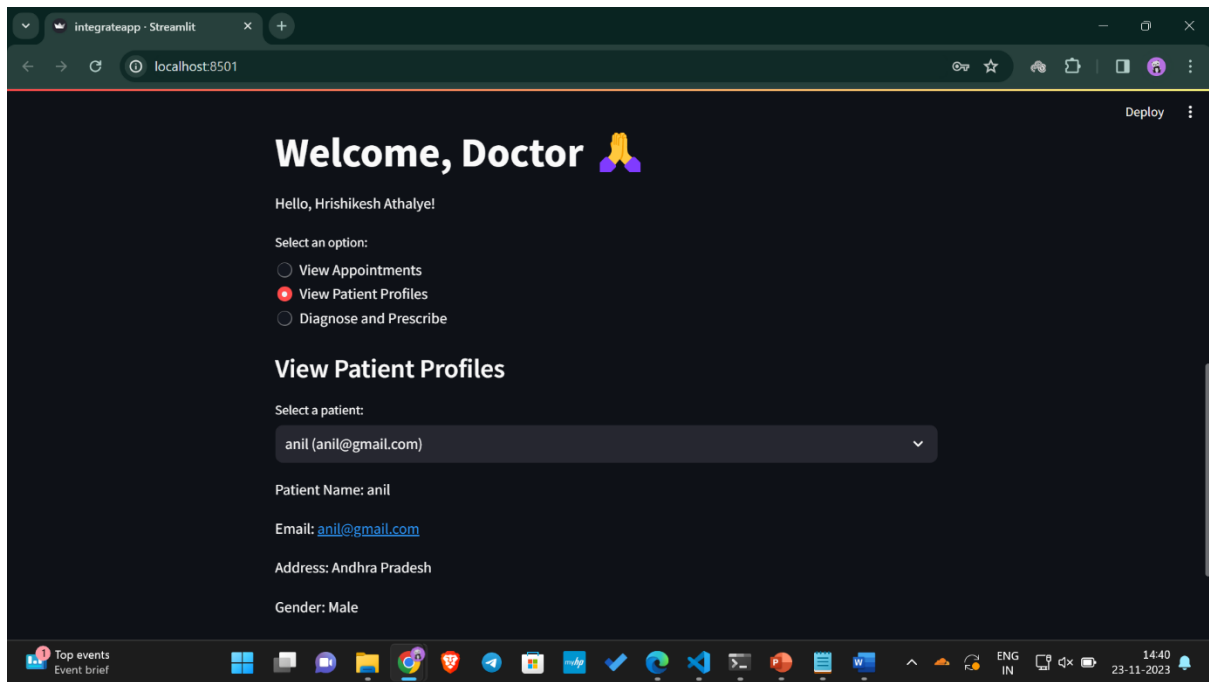
☒ View Appointments

☐ View Patient Profiles

☐ Diagnose and Prescribe

Appointments

No appointments available.



Patient Functionalities:

integrateapp - Streamlit

localhost:8501

Deploy

Doctor Management System

Select an option:

☒ Login


☐ Register

Doctor Login

Email

hathalye7@gmail.com

Password

***** 

Login

Welcome, Doctor

27°C Mostly cloudy

14:39 23-11-2023

integrateapp - Streamlit

localhost:8501

Deploy

Patient Management System

Select an option:

☒ Login


☐ Register

Patient Login/Signup

Email

rakesh@gmail.com

Password

***** 

Login

Welcome

Top events Event brief

14:40 23-11-2023

