Abigail Guzman

Due date: 12/19/2023

CIS344 FINAL PROJECT “Hospital’s Portal”

The hospital portal is a web-based application designed to manage patient information, appointments, and doctor records within a hospital setting.

First, we created the database, hospital\_portal, and then the tables.

We created the “patient” table which contains the following attributes: patient\_id, patient\_name, age, admission\_date and discharge\_date. The patient\_id is the primary key, and it has autoincrement.

A computer code with blue text

Description automatically generated

We had to create the “doctors” table after because when I tried the first time and created “appointments” first it was giving me errors, so I had to create “doctor” as my second table. It had the following attributes: doctor\_id, doctor\_name, specialization, where doctor\_id was the primary key, and it had autoincrement.

A close-up of a computer code

Description automatically generated

The “appointments” table is composed of attributes: appointment\_id, patient\_id, doctor\_id, appointment\_date, appointment\_time. With appointment\_id being the primary key with autoincrement, and two foreign keys, patient\_id and doctor\_id.

A computer screen shot of a program

Description automatically generated

After creating the tables, I then proceed to create some procedures and a view, and inserted some data into the tables.

A computer code with text

Description automatically generated with medium confidence

A screenshot of a computer code

Description automatically generated

A screenshot of a computer program

Description automatically generated

In the ScheduleAppointment procedure, you can add a patient id, doctor\_id, appointment date and appointment time, and it will show on the website when you click “view appointments”. The DischargePatient works so if you insert the patient id, if the patient does not have a discharge date it will add it, but if it does have a discharge date, it will update it.

File **portalDatabase**: establishes a connection to the MySQL database.

*Methods:*

addPatient: Inserts a new patient record into the patient’s table.

scheduleAppointment: Inserts a new appointment into the appointments table.

viewAppointments: Retrieves all appointments from the appointments table.

dischargePatient: Updates the discharge\_date of a patient in the patient’s table.

getAllPatients: Retrieves all patients from the patients’ table.

File **portalServer**: Extends BaseHTTPRequestHandler and includes an instance of the Database class.

*HTTP Methods:*

do\_POST: Handles POST requests for adding patients, scheduling appointments, and discharging patients.

do\_GET: Handles GET requests for displaying various pages, including the home page, forms, and record views.

*Helper Methods:*

display\_navigation\_links: Displays navigation links for easy access to different sections of the portal.

Methods for displaying various forms (display\_success\_page, display\_add\_patient\_form, display\_view\_appointments, display\_schedule\_appointment\_form).

Methods for displaying tables (display\_patient\_table, display\_doctors\_table).

*Functionality:*

Add Patient: Users can add new patient records with details such as name, age, admission date, and discharge date.

Schedule Appointment: Users can schedule appointments by providing patient ID, doctor ID, appointment date, and appointment time.

View Appointments: All scheduled appointments are displayed in a table, showing patient name, doctor name, date, and time.

Discharge Patient: Patients can be discharged by entering their ID, updating the discharge date in the database.

This is what the home looks like on the website:

A screenshot of a computer screen

Description automatically generated

Add patient:

A screenshot of a computer

Description automatically generated

Schedule Appointment

A screenshot of a computer

Description automatically generated

View Appointment:

A screenshot of a computer

Description automatically generated

Discharge Patient:

A screenshot of a medical application

Description automatically generated