SMH

Project Description

Members

Syed Khizer Ali 20L-1371
Fatima Tahir 20L-1275
Naima Nuzhat 20L-1274

1. Title

SMH

2. Description

The project is from our Software Construction and Development course that we are currently working on. The project is named SMH, it is a Java-based application that allows patients and doctors to set appointments, and handles schedules for nurses, doctors and staff. It handles the patient records that are updatable by doctors and viewable by nurses and doctors.

SMH is a hospital management system that is a desktop application that brings a connection between a nurse, doctor, and patient. They can interact with each other to make the long waiting period in the hospital as short as possible. Not only this, but our system also includes other employees such as janitors, technicians, and hospital security guards and manages their day-to-day work.

We devised a java desktop application where a nurse will enter the patient's details before the

appointment and forward those to the doctor. The doctor will review those details and discuss them with the patient. Then add his diagnosis to the application. Creating a digital record for both of them. The patient can also set an appointment with the doctor via this app.

3. Technology

1. Java swing
2. JavaFx

4. Motivation

We think that the hospital systems in Pakistan need an update to make the visits with less waiting time and hectic to a more peaceful and efficient manner. For this idea, we came up with this Management system. The doctors need a lot of information for the diagnosis and writing prescriptions from the patient such as medical history and symptoms, which can be a lengthy process. So we decided that instead of the doctor, a nurse should add this information before entering so that the visit is short and precise.

The hospital is a large workplace with a lot of employees. The management of their information, salaries, and leaves is a difficult task. So we decided to accommodate this problem into our app as well.

5. Software Requirements

Admin:
- Delete particular user
- View his profile
- Ban a user
- Manage leaves
- Manage salaries

Doctor:

- Check the patient's history
- View appointments
- Update profile
- Diagnosis for patient
- Update patient records
- Delete patient records

- Add patient
- View Salary
- View profile

Patient:

- View profile
- Update his profile
- Check prescriptions
- View medical history
- Download records
- View Doctors
- Get a doctor
- Leave doctor
- View appointment
- Update appointment
- Cancel appointment

Nurse:

- Add patient history
- Update patient profile
- View Salary
- View schedule
- Update schedule
- Request leave
- Update and view the profile

Staff:

- View schedule
- Update schedule
- View profile
- Update profile
- View Salary
- Request leaves

Non-Functional Requirements and Quality Assurance:

We are listing these nonfunctional requirements to ensure the quality of our application. We checked these requirements and ensured that it is working properly with the help of JUnit tests.

- Unit, UI, and API test automation framework requirements
- Modularity requirements
- Performance Requirements
- Security Requirements
- Reliability Requirements

- Documentation Requirements
- Process Requirements