University of Science and Technology of Southern Philippines

PatientConnect:
User-Friendly Scheduling and Record
Management

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An Object Oriented Programming Project

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I. Background of the Study

The PatientConnecet system, developed by a group of students from USTP- Claveria, addresses the growing need for efficient and user-friendly healthcare management tools. The system aims to simplify the way patients and healthcare providers handle medical records and appointments, promoting better patient care and efficient resource management.

Traditional healthcare systems often struggle with lots of paperwork and making appointments is hard. PatientConnect is designed to solve these problems by offering a single place for people to book appointments and manage their medical information.

II. Objectives

The study aims to achieve the following objectives:

➢ Develop a secure and user-friendly platform for managing medical records and appointments.

➢ Streamline appointment booking and management processes.

➢ Promote better patient care and resource utilization.

➢ Ensure privacy and security of patient data.

III. Scope and Delimitation of the Study

The scope of this study focuses on the development and implementation of the PatientConnect system, encompassing the following key features:

➢ **Appointment Booking:** Online appointment booking with preferred date slot selection.

➢ **User Registration and Login:** Account creating for patients and doctors.

➢ **Centralized Medical Records:** Secure storage and access to patient health data.

➢ **Patient Portal:** User-friendly platform for viewing records.

IV. Flowchart
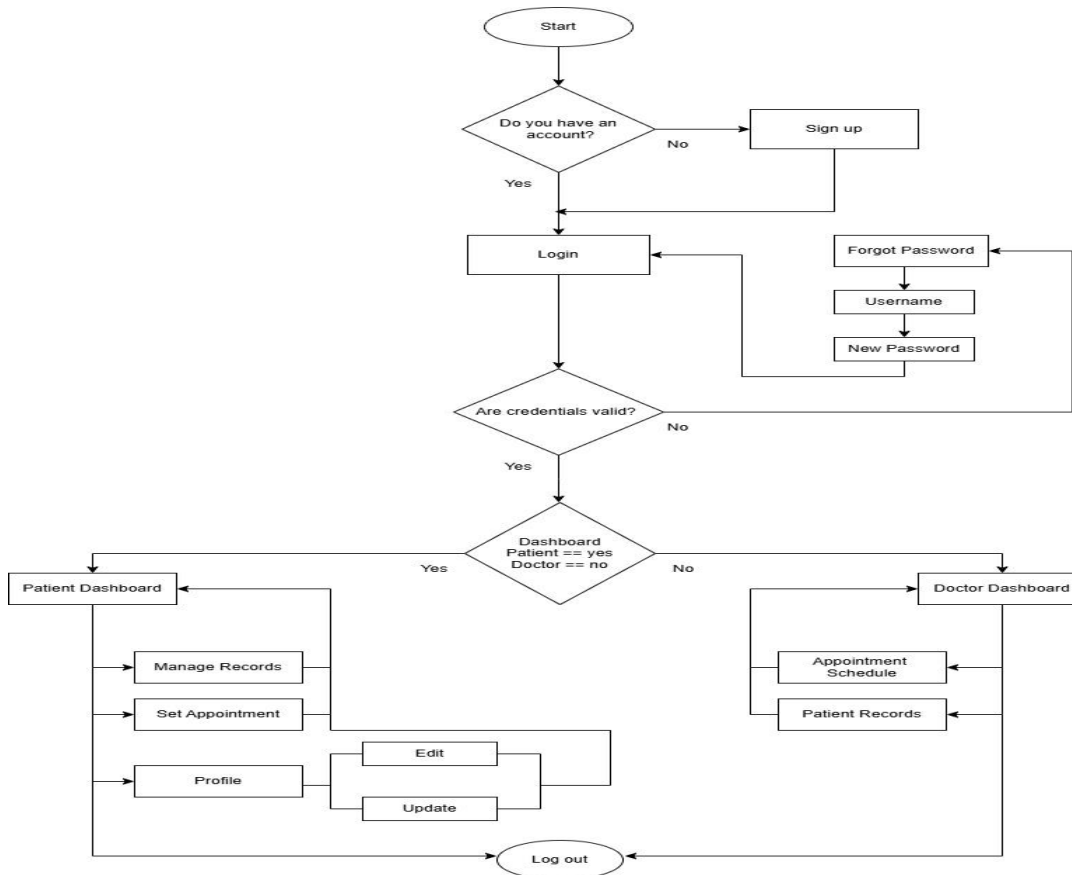
The flowchart shows how users interact with a system for managing patient and doctor information.

- **Start:** The process begins with checking if the user has an account.
- **Login/Sign Up:** Existing users log in, while new users sign up.
- **Forgot Password:** Users can reset their passwords if forgotten.
- **Credentials Check:** The system verifies the login credentials.
- **Dashboard Selection:** Based on their role (patient or doctor), users are directed to the appropriate dashboard.
- **Patient Dashboard:** Patients can manage records, schedule appointments, and update their profiles.
- **Doctor Dashboard:** Doctors can manage appointments and access patient records.
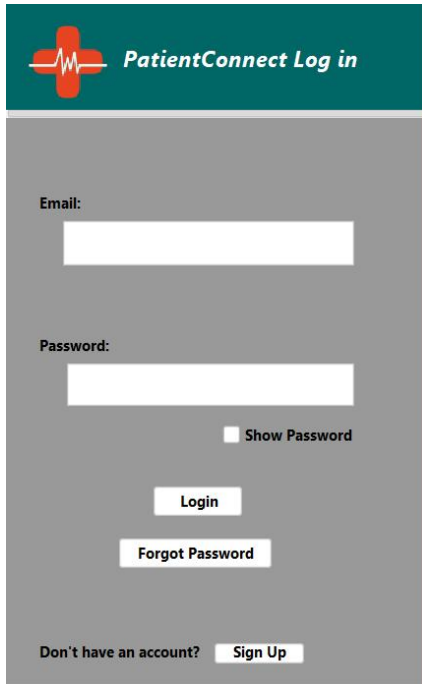- **Log Out:** Users can exit the system at any time.

V. Gantt Chart

Description	September		October		November		December	
Planning	■							
Research	■	■	■					
Design Process		■	■	■	■	■		
Development			■	■	■	■	■	■
Database Implementation					■	■	■	■
Testing							■	■

The Gantt chart shows how we built our system. It's like a roadmap that tells us when each part of the project happened. We started in September by planning everything out. We also did some research from September to October to make sure we had all the information we needed. Then, we started designing the system in late September and kept working on it until late November. At the same time, we began building the system itself in October and finished in December. While we were building the system, we also started setting up the database in October. This is important because it stores all the information the system needs. Finally, in the first week of December, we made sure everything worked correctly and tested the system. The Gantt chart helps us see how all these different parts of the project fit together and how everyone worked together to make the system a reality.
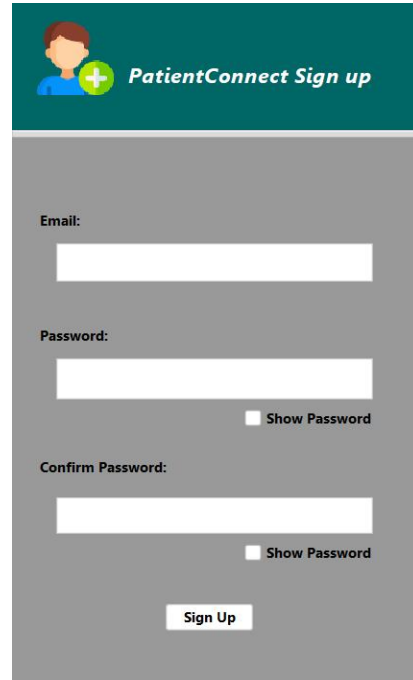
VI. System Design

Figure 1

The login page is simple with clear fields for email and password, a "show password" option, and convenient links for changing passwords and it is easy for patients and doctors to access their dashboard.
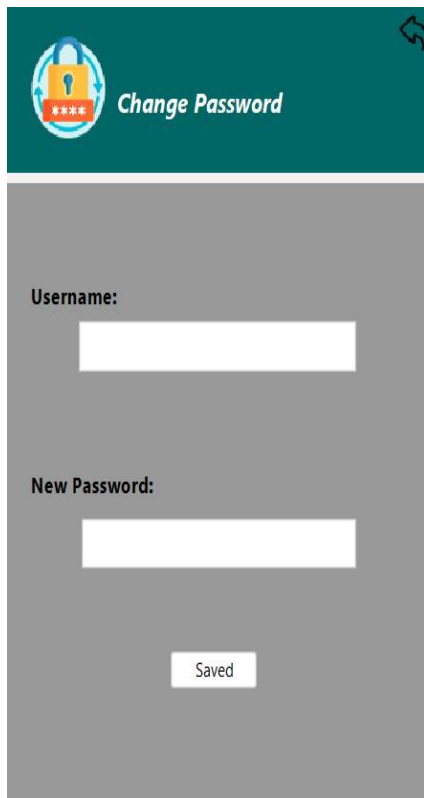
Figure 2

Sign up page is designed with clear fields for email, password, and password confirmation. The "show password" allows users to see the creating a new account quick and easy.
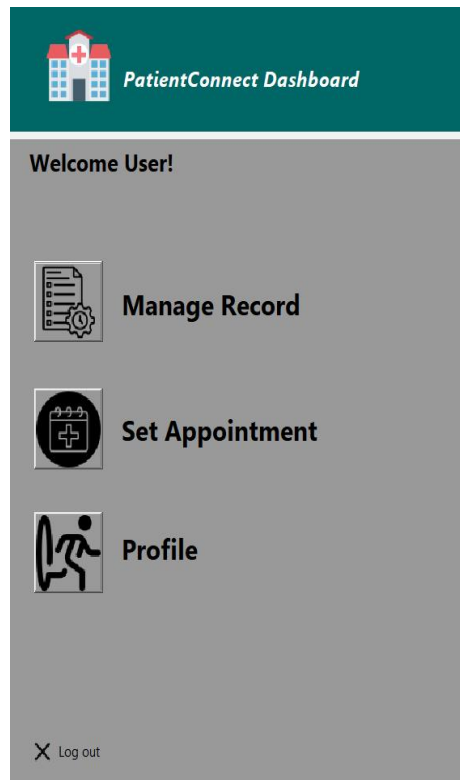
Figure 3

The change password interface is simple. Users can enter their username and create a new password, ensuring their account information remains protected. The "Saved" button confirms the password update, clearly indicating successful completion.
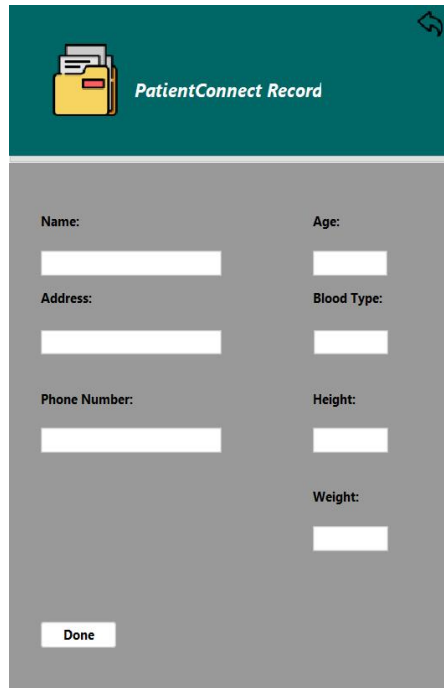
Figure 4

PatientConnect's dashboard offers easy access to manage records, schedule appointments, and view their profile, with a clear layout and a prominent "Log out" button.

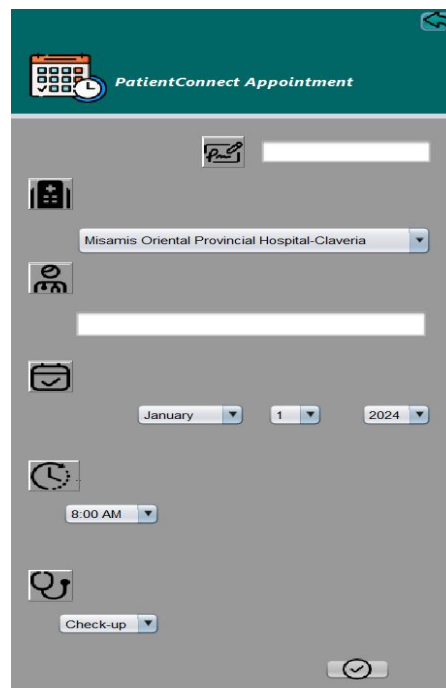**Figure 5**

This interface designed is easy to use and efficient for entering patient information. The interface features clear fields for essential details like name, age, address, phone number, blood type, height, and weight. This allows healthcare professionals to quickly and accurately record patient data.

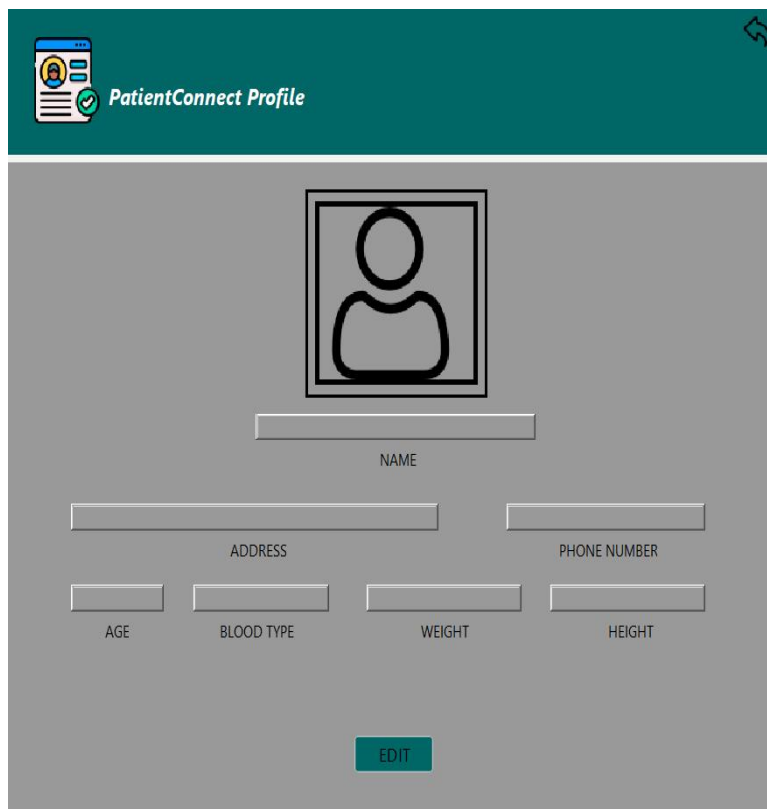**Figure 6**

Appointment is designed to be user-friendly and efficient. It allows patients to schedule appointments with their preferred doctors at their chosen hospitals, all within the PatientConnect Platform. This interface is simple with clear drop-down menus for selecting the hospital, doctors, date, time, and purpose.

Figure 7

This interface is designed for patients to access their information and they can edit and update.

Figure 8

Figure 9

The PatientConnect system's appointment view helps doctors see what appointments patients have. It shows things like which hospital, which doctor, the date (month, day, and year), the time, and why the patient has the appointment. This makes it easy for healthcare workers to check their schedules and see who they're meeting with.
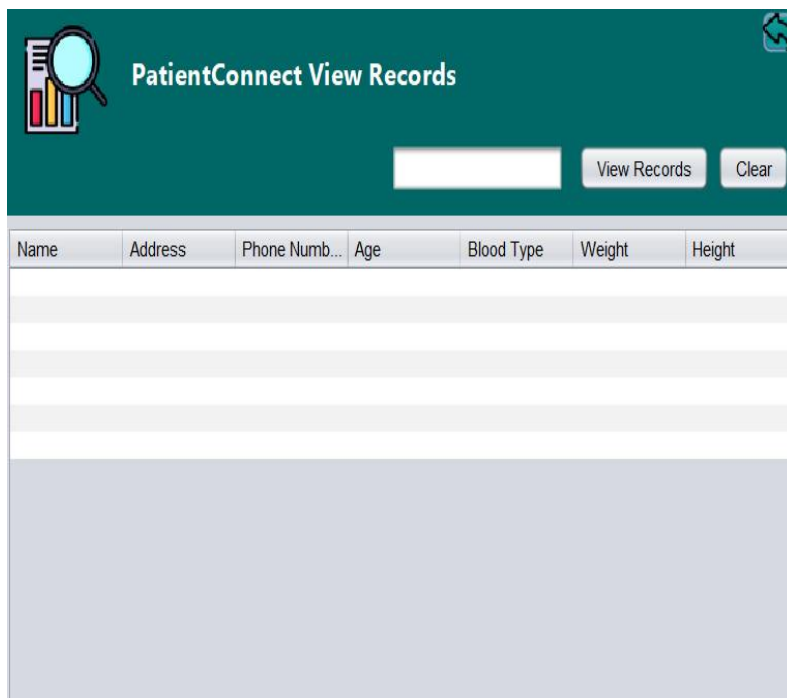

DoctorConnect's dashboard gives doctors a single location to retrieve patient details and manage their schedules. The design is easy to use and straightforward, with distinct icons for "Appointment Schedule" and "Patient Records." This makes it possible for physicians to find the information they require quickly, speeding up workflow and increasing productivity.

Figure 10

The PatientsConnect View Doctor Records system, designed to provide Healthcare professionals with patient access, includes fields for name, address, phone number, age, blood type, height, and weight.

7

VII. Conclusion

The PatientConnect system holds significant potential to transform the healthcare experience by providing a user-friendly and efficient platform for managing medical records and appointments. The system's features including secure data management, intuitive interfaces, appointment scheduling with notifications, and a centralized patient portal, are designed to enhance patient satisfaction and operational efficiency.

By ensuring seamless access to healthcare information, promoting better care coordination, and enhancing the overall quality of patient care, PatientConnect has the potential to become an invaluable tool for modern healthcare system.

VIII. Recommendation

➢ Reminders: Implement automated reminders for appointments to reduce no-shows.

➢ Personalized Experience: Implement features that personalize the user experience based on user preferences and needs. For example, allow users to customize their dashboards and notifications.

➢ Accessibility: Consider users with disabilities and make the system accessible to a wider range of users.