

School of Computing and Mathematics

PRCO303SL

Final Stage Computing Project

BSc (Hons) Software Engineering

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# The Hospital Management System

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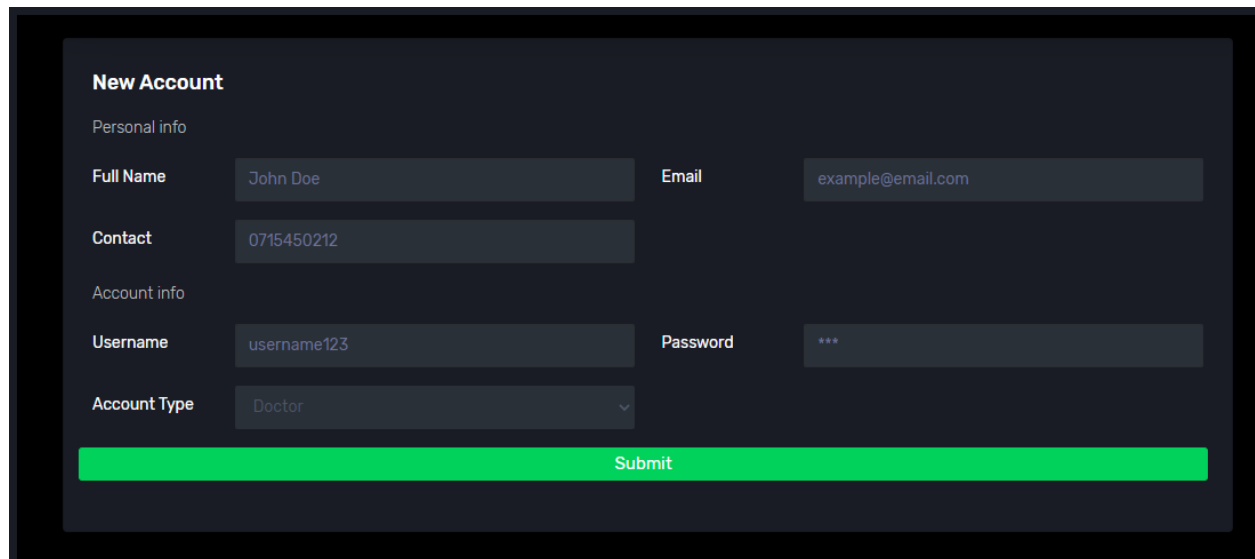
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## Tasks Undertaken and Outcomes

As of right now I have finished the entire web application and have implemented all of its functionalities correctly. All the records are being stored in the database correctly. More than a decade ago, role change was identified by the World Health Organization (WHO), As "a rational re-distribution of tasks among teams of health workers". "The WHO, however, goes on to describe this, saying that "specific duties are transferred from highly qualified health workers to health workers with less qualifications, where possible, in order to make more effective use of the HRH [human resources for health] accessible. It implies that the most suitable person is either the one who is already doing it or one with less abilities and, again inferred, who is less costly.

# Products Produced and Product Quality



The image shows a 'New Account' form with two sections: 'Personal info' and 'Account info'. The 'Personal info' section includes fields for 'Full Name' (John Doe), 'Email' (example@email.com), and 'Contact' (0715450212). The 'Account info' section includes fields for 'Username' (username123), 'Password' (masked with \*\*\*), and 'Account Type' (a dropdown menu set to 'Doctor'). A large green 'Submit' button is at the bottom.

**New Account**

Personal info

Full Name: John Doe      Email: example@email.com

Contact: 0715450212

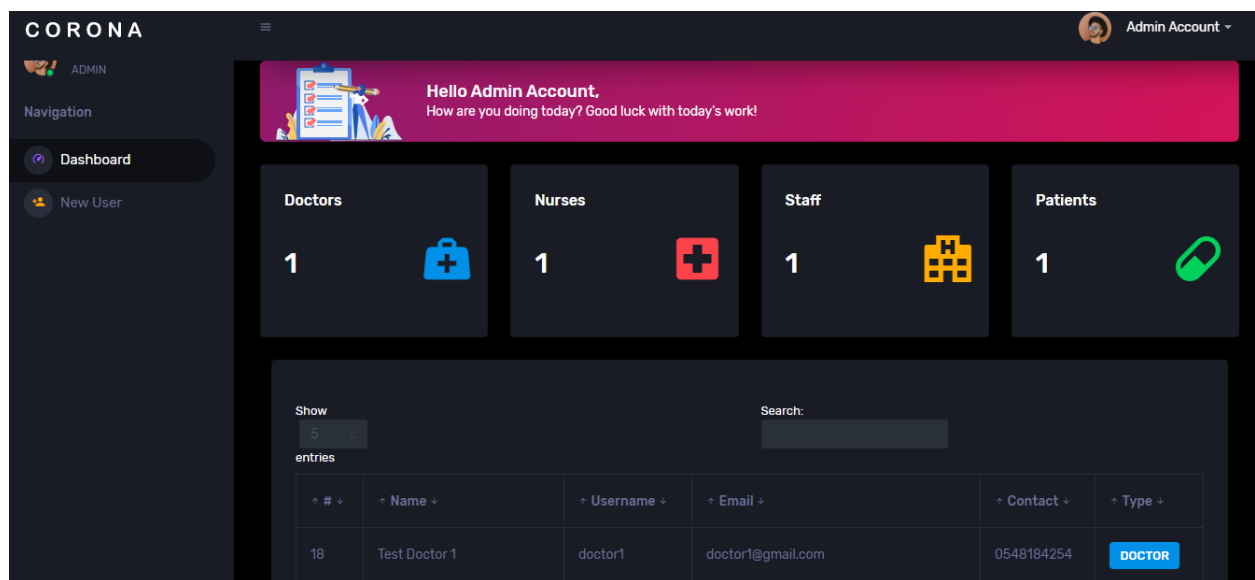
Account info

Username: username123      Password: \*\*\*

Account Type: Doctor

Submit

Figure 1 - Add new users (Admin Dashboard)



The image shows the 'CORONA' Admin Dashboard. The top navigation bar includes the 'CORONA' logo, a hamburger menu, and a user profile 'Admin Account'. The left sidebar has a 'Navigation' menu with 'Dashboard' (selected) and 'New User'. The main content area features a pink greeting banner, four summary cards for 'Doctors', 'Nurses', 'Staff', and 'Patients' (each with a count of 1 and an icon), and a table of all users. The table has columns for '#', 'Name', 'Username', 'Email', 'Contact', and 'Type'. A search bar and a 'Show 5 entries' dropdown are above the table.

**CORONA**      Admin Account

ADMIN

Navigation

- Dashboard
- New User

Hello Admin Account,  
How are you doing today? Good luck with today's work!

**Doctors** 1

**Nurses** 1

**Staff** 1

**Patients** 1

Show 5 entries      Search:

#	Name	Username	Email	Contact	Type
18	Test Doctor 1	doctor1	doctor1@gmail.com	0548184254	DOCTOR

Figure 2 - All users (Admin Dashboard)

The screenshot displays the CORONA web application interface for a patient account. The top navigation bar includes the CORONA logo, a menu icon, and the user profile 'Test Patient 1'. The left sidebar contains navigation links for 'Appointments' (New, Ongoing, Payable, Pending, Rejected, Completed) and 'Lab Tests' (New, Pending). The main content area is titled 'Appointments / New' and features a 'New Appointment' form. The form includes a 'Doctor' dropdown menu set to 'Test Doctor 1' and a 'Description' text area with the placeholder 'Start typing...'. A prominent red 'Submit' button is located at the bottom of the form.

Figure 3 - New appointment - (Patient account)

The screenshot displays the CORONA web application interface for a patient account, specifically the 'New Lab Test' form. The top navigation bar and left sidebar are consistent with the previous screenshot. The main content area is titled 'Lab Tests / New' and features a 'New Lab Test' form. The form includes a 'Lab Test info' section with a 'Details' text area (placeholder: 'Start typing...'). Below this is a 'Card info' section with a 'Name on card' field (value: 'John Doe') and a 'Card' section containing a 'Card number' field and a 'MM / YY CVC' field. A red warning message states: 'You will be charged an amount of Rs. 7000/- for this lab test. \*'. A prominent red 'Submit' button is located at the bottom of the form.

Figure 4 - New lab test request (Patient account)

These are some of the screenshots from the web application. All these features are working properly. And the web application has been developed to meet the initially identified client requirements and it meets the necessary standards identified.

## Risks that have Materialized

Initial risk list	
Risk	Management strategy
Schedule overrun	This is my first project where I have implemented the web application to work with Stripe API for payments. This was a huge risk from the beginning as I didn't have any previous experience with the Stripe API.
Difficulty learning/using the development technologies	Therefore, I went through a number of tutorials and read the entire documentation on how to integrate Stripe with a PHP web application.
Requirements breakdown (i.e., the stakeholders cannot agree on the requirements)	It was always my goal to finish the entire web application before the first interim report submission, and I managed to achieve this. However, the Stripe tutorials took more time than I initially anticipated. Therefore, I had to speed up the work flow in order to get it done.
Technology failure	There were some minor incompatibility issues with the MySQL and PHP versions I was using. Therefore, I had to change some of the versions via the WAMPP server.

## Schedule

Stage	Deadline	Products/Deliverables/Outcome
1. Initiation	5/11	PID
2. Investigation and requirements	12/11	Analysis of existing business processes Requirements document Evaluation of possible development technologies
3. High level design	15/11	Design documents (Architecture, DB schema, GUI style guide)
4. Increment1	11/12	Hospital management side of the website

5. Increment2	14/12	Patient's account in the web application
6. Increment3	16/1	Mobile application for the patient
7. System testing	12/3	Final system testing deployment
8. User testing	15/3	User experience testing
9. Assemble and complete final report	31/3	PRCO303 Report

At the moment I am on schedule and everything is going smoothly.

## Resources

- Boot Strap
- Wamp or Xampp Control Panel Server
- Google Chrome Web browser
- PHP Storm(Visual Studio Code)



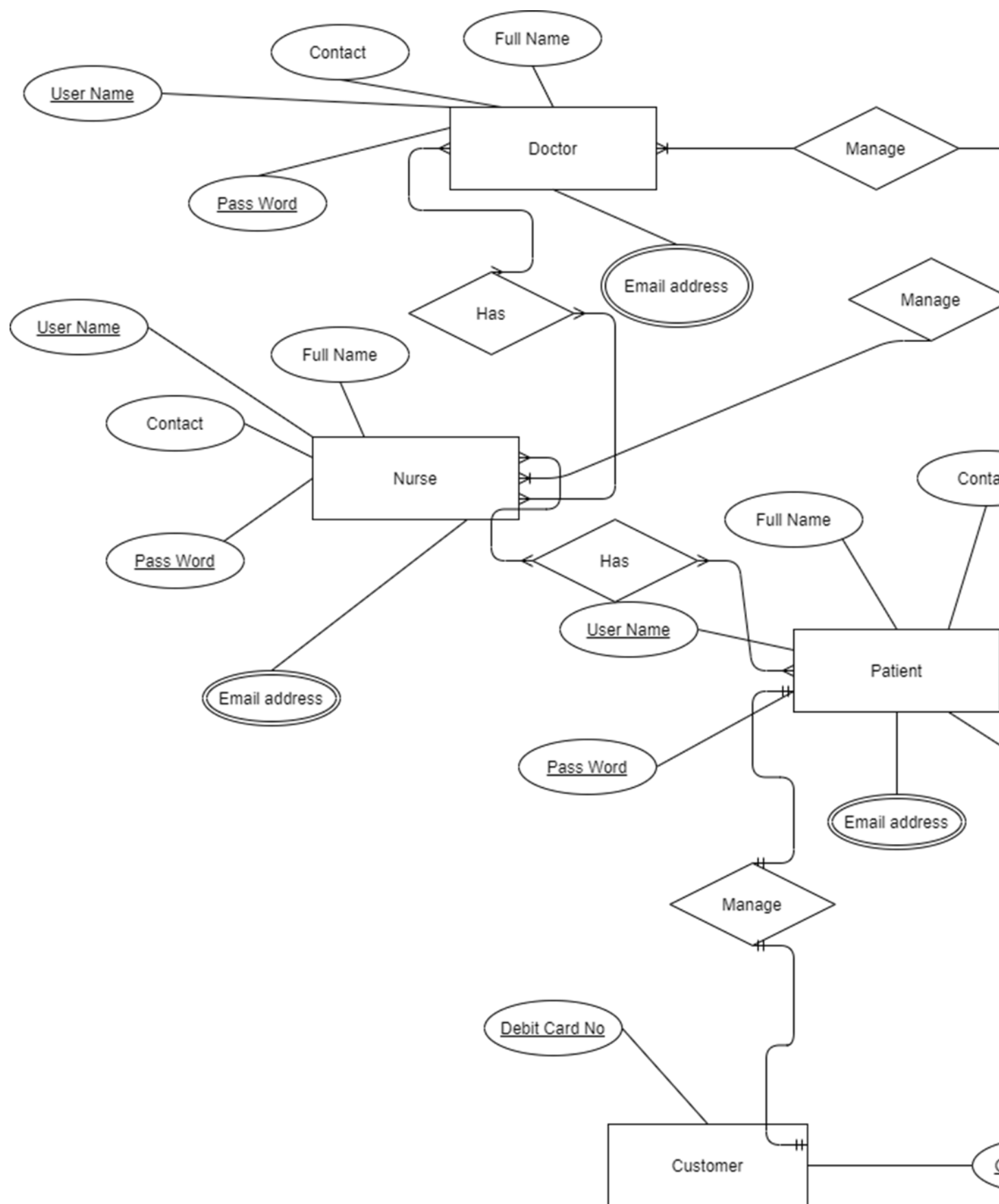
Doctor

Check Patient's r

Send a appoint  
Accept the app

Make the





## Student Learning Undertaken & required

As mentioned earlier, this is my first project with the Stripe API. Therefore, I went through quite a lot of tutorials to familiarize myself with the API. And I also read the documentation. This was very helpful in getting to know how the API works and I was able to implement Stripe's 'Charges' API into my application. And for development I used both Visual Studio Code as well as PHP Storm. And since I am new to PHP Storm, I had to go through some tutorials to really familiarize myself with the IDE. Patient-centered treatment, holistic practice and value-for-money emphasis mean that there is a greater need to ensure that health managers or staff have the expertise and skills to strengthen and improve patient services. Analysis shows that there is a scarcity of information and a significant ability among clinicians and managers or staff is the barrier to improving healthcare quality. Instead of services like books, mentoring, fellowships or other learning tools, the emphasis was on accredited education and continuing training through courses and workshops. Much has been written about techniques to improve the protection of patients and there have been courses explicitly built with this in mind. This scan was not specifically based on safety measures, but on a safety initiative. Number of curricula for quality enhancement or efforts as a primary goal to increase quality in healthcare use protection. Some training that most healthcare adverse events are the product of the combined effects of human mistakes and errors in organizational and administrative processes should be taken so that variation can be minimized. The drawback of these kinds of follow-up surveys is that they provide little knowledge of the value applied to the function of the learner by the online approach or how they used what they learned to strengthen health services. The courses were common among coordinators of quality, managers or staff of healthcare.