White Coat Clinic (Group 9)

EMR Platform Update Plan

Request for Proposal
Version 1.0

Document History

Version When Who What

Version	When	Who	What
0.9	2023-01-25	White Coat Clinic	Completed the initial draft.
1.0	2023-01-26	White Coat Clinic	Edited and revised to complete the final version.

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1.0 Product Overview

A number of improvements needs to be made to our current electronic medical record (EMR) system, with the following features being the most critical:

- The current user interface displays a large number of components on the screen.
- An excessive number of colours overwhelms the user visually.
- The system has unexploited high potential for automation.
- The system lacks efficiency in some aspects like speed and redundant functionalities.

The new system has to prioritize both the UI visual appeal and performance.

2.0 Project Objectives

This project focuses on improving patient experience through the development of an online portal. The portal aims to create new patient profiles, enhance the login user interface, and automate health record information. The functionalities to be added or enhanced will include:

- Creating new patient profiles.
- Enhance the Login page UI.
- Automated health record info updating.
- Displaying upcoming tests/appointments.
- Listing Schedule appointments.
- Displaying prescriptions information and highlighting potential conflicts.
- Supporting side notes functionalities.
- Listing medical and family history.
- Enhancing the patient health report functionality to support different formats for exporting.

3.0 Current System(s)

OSCAR is the current EMR system that White Coat Clinic (WWC) uses. OSCAR is a Java Web application first developed in 2001 for academic care clinics, and has since expanded into a widely used application within the healthcare industry.

OSCAR provides the following functionalities to WCC:

- Cumulative Patient Profile (CPP)
- Patient history
- Progress notes
- Forms
- Documents
- Consultations

However, OSCAR also has the following known issues:

- Cluttered, difficult-to-read interface
- Buttons that don't work or don't carry out the intended action
- Limited cloud functionality

While OSCAR provides all functionalities required by WCC to operate, it is quickly becoming outdated and unusable, which may endanger patient care.

4.0 Intended users of the system

In the client organization or outside

The primary intended users for the Electronic Health Record (EMR) system are as follows:

1. Patients
2. Doctors
3. Laboratories
4. Pharmacies

The EMR system will be primarily utilized by patients as they will be able to manage their appointments and personal information via the web application, using their login credentials. Personal information will include, but not limited to, name, health number, phone number, email address, and occupation. Additionally, patients will have access to view their health reports, including blood reports, eye exam reports, vaccination reports, and many more.

In addition, doctors will utilize the EMR system to promptly revise prescriptions and document crucial interactions with patients.

Similarly, laboratories will employ the EMR system to swiftly update lab reports and meticulously document the complete medical health history of patients, including their family medical history.

Likewise, pharmacies will take advantage of the EMR system to fulfill medications orders for patients based on the prescriptions provided by doctors.

5.0 Known interaction with systems within or outside the client

organization

Although medical clinics stand independently from other medical facilities, the information about the users is shared among the other health-oriented facilities. When patients visit a doctor at a clinic, the doctor will look at their chart which may have any current or old prescriptions, any lab test information, and past hospital visit information. In order for the doctor to give the most informed consult, these pieces of information are needed.

If the system integrates with pharmacies, laboratories, and hospitals using the patient's unique identifier, their PHN, the information that they contain about every patient can be automatically shared and updated within the EMR system even if the other three systems may be completely separate. In order to make the process easier for every person at the end of all of these four systems, the ideal approach would be to have them all integrated with each other or at least just the EMR system.

6.0 Known constraints to development

1. Patient privacy and data security: Ensuring the system meets all current privacy and security regulations for electronic health records, like HIPAA and HITECH, is a priority.

2. Cross-browser compatibility: The application must support multiple browsers, such as Chrome, Firefox, and Safari.

3. Scalability: The application must be scalable to handle increasing numbers of users and data.

4. Accessibility: The application must be accessible to all users, including those with disabilities.

5. Usability: The application must be intuitive, easy to use, and provide a positive user experience.

7.0 Project Schedule

The following section describes the project schedule. The project schedule is not complete because some milestones and class requirements have not been released yet.

ID	Task Name	Start Date	End Date	Duration	Assigned To	Percent Complete
1	Release RFP	2023-01-20	2023-01-27	7 days	White Coat Clinic	100%
2	RD 1.0	2023-01-27	2023-02-05	7 days	Dev Team	0%
3	Architecture	2023-01-27	2023-02-05	7 days	Dev Team	0%
4	UI Mockups	2023-01-27	2023-02-05	7 days	Dev Team	0%

8.0 Project team

Roles (basically what roles would be at a medical clinic?):
IT Lead - Abraham Rostampoor
Director - Omar Attia
Chief of Staff - Valeriya Savchenko
Administrator - Harsh Patel
Senior Registered Nurse - Katelyn Dhami

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9.0 Glossary of terms

Term	Definition
EMR	Electronic Medical Records
Cumulative Patient Profile	An overview of important information about a patient, including essential parts of their medical history. Meant to give a quick summary of the patient's overall health.