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Mobile Medical Information System Application

Matt Schweitzer - 1139402
Connor Jakes - 1133666
Simon Vergara - 1146596
Brendan Sim - 1139649
Jason Paolasini - 1162915
Khalilullah Rahin - 1048577

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1 Introduction

1.1 Purpose

The purpose of this document is to provide structural and behavioral diagrams to help stakeholders understand how the software shall work. This document provides visual models to help organize and explain how different sections of the system work together to form the overall application to aid in the development process.

The intended audience of this document are stakeholders and developers. Stakeholders are an important part in making design decisions and need to understand the system so that they may provide input towards the overall system. Developers can use the Statechart and Sequence diagrams to better understand behavioural aspects of the system. Detailed Class Diagrams provide a foundation for developing the structural aspects of the system.

1.2 System Description

This system is an application which shall be built to run on android OS smartphone devices. The purpose of this system is to provide an interactive and easy to manage system for a medical centre. It will allow for multi level security and user differentiation. It shall let patients access their own information, medical history and appointment schedule. It allows doctors and nurses to check up on patients remotely from their phone to see the patients' medical information, pictures of the patients' injuries/sickness, edit the patients' medical information as well as gives doctors to create prescriptions for a patients directly from their phone. Encryption will be used to secure data before placing it in storage. Patient, doctor and nurse information encryption will secure against fraudulent activity.

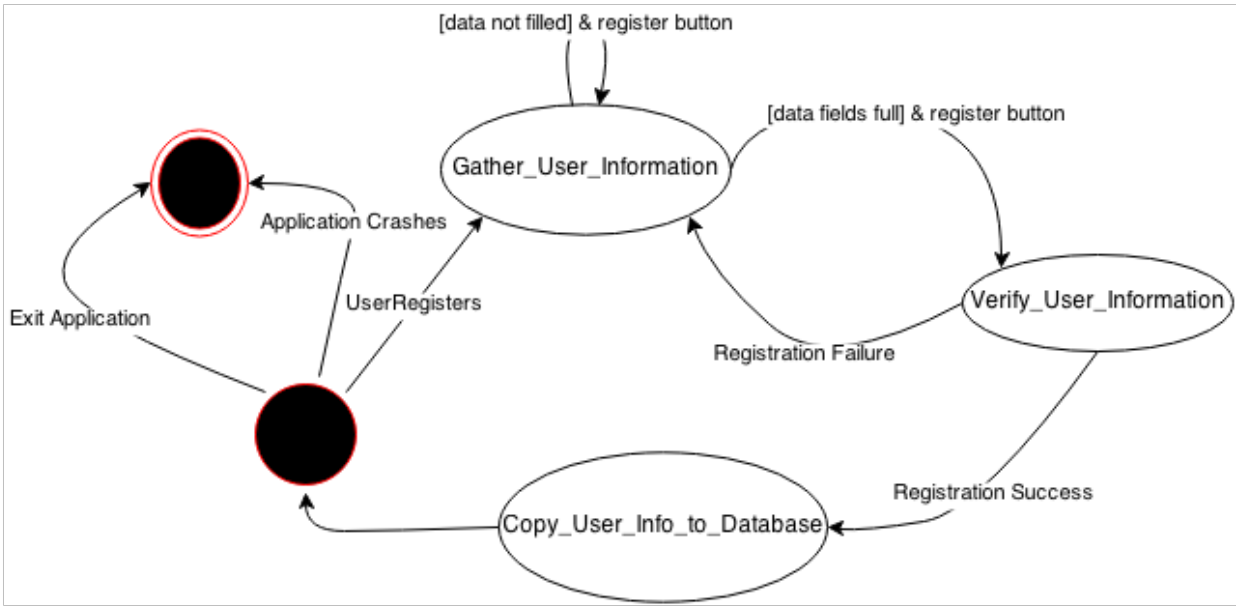
1.3 Overview

The remainder of this document contains Statecharts, Sequence Diagrams and a Detailed Class Diagram all designed to help stakeholders and developers better understand the application's process, layout, organization and structure. The diagrams provide a visual representation of the behaviour and structure of the system-to-be.

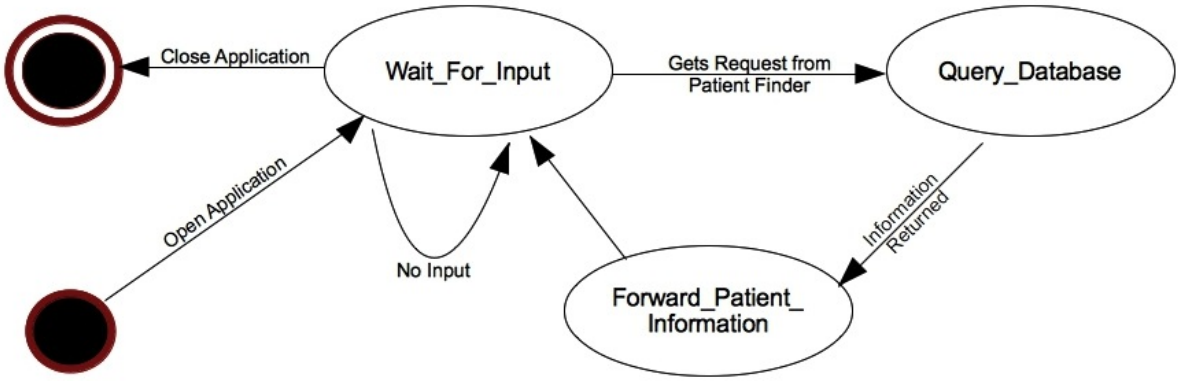
2. Statecharts for Controller Classes

For the following charts, values enclosed in square brackets are guards for the state transition

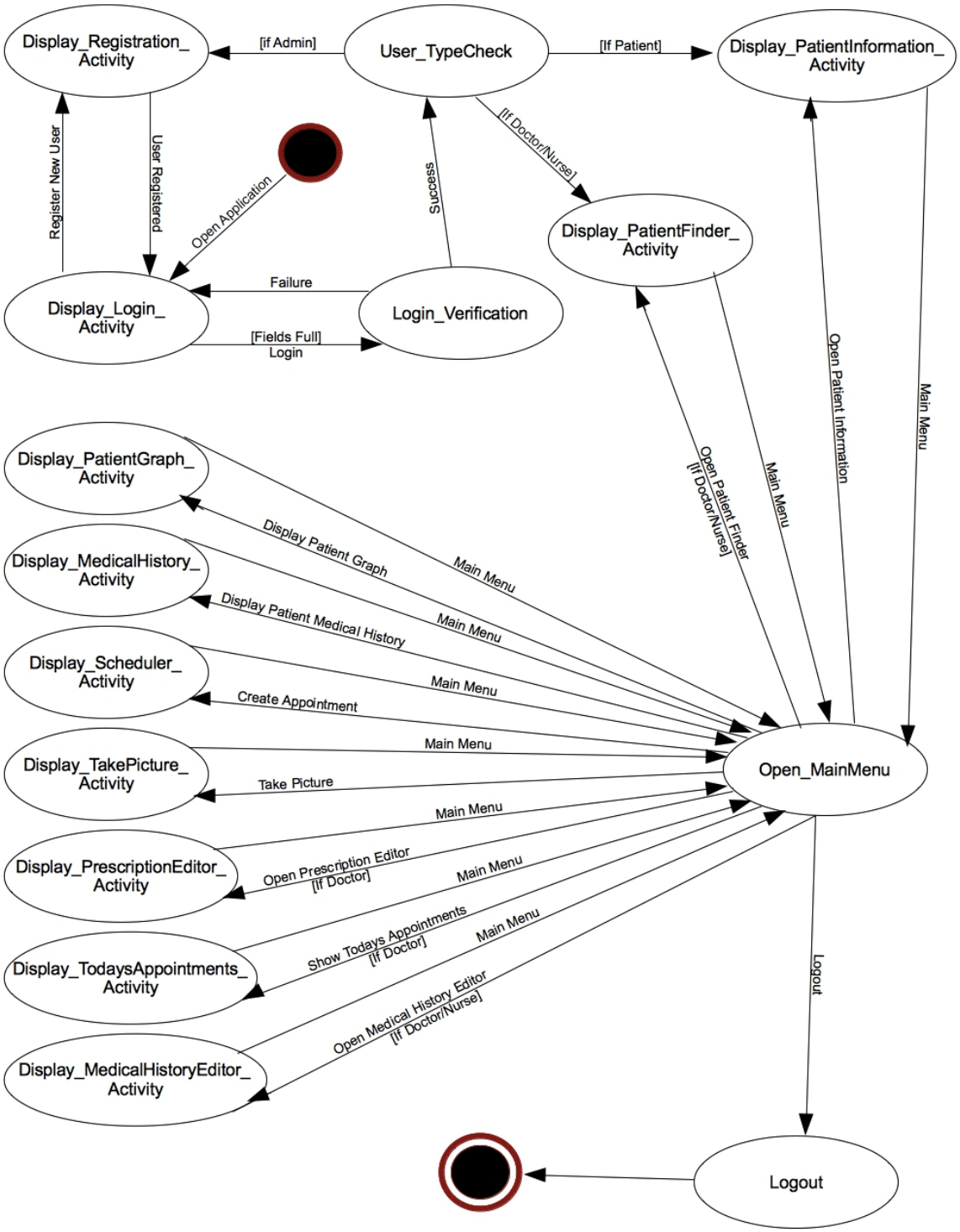
2.1 RegistrationController



2.2 PatientFinderController

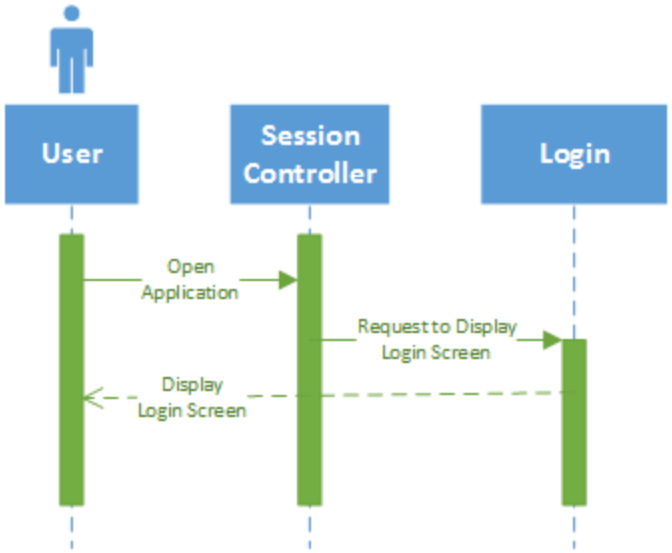


2.3 SessionController

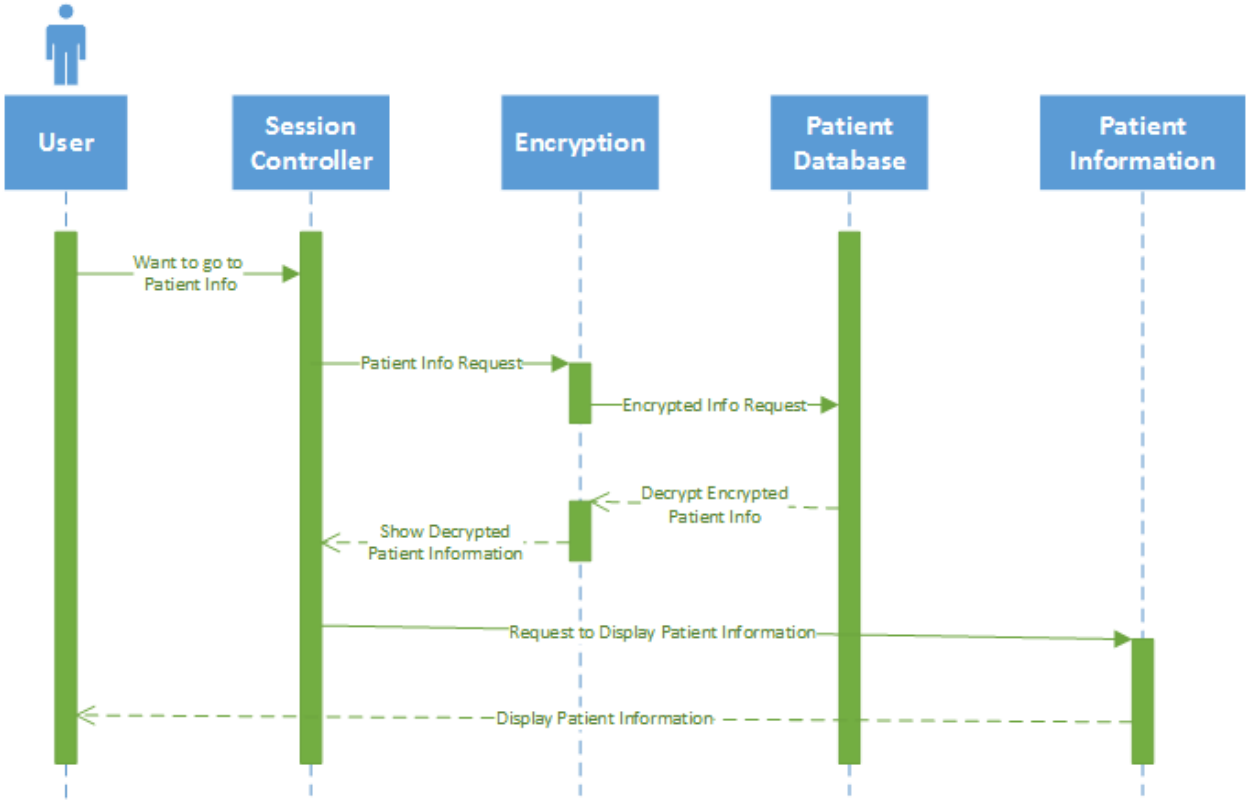


3 Sequence Diagrams

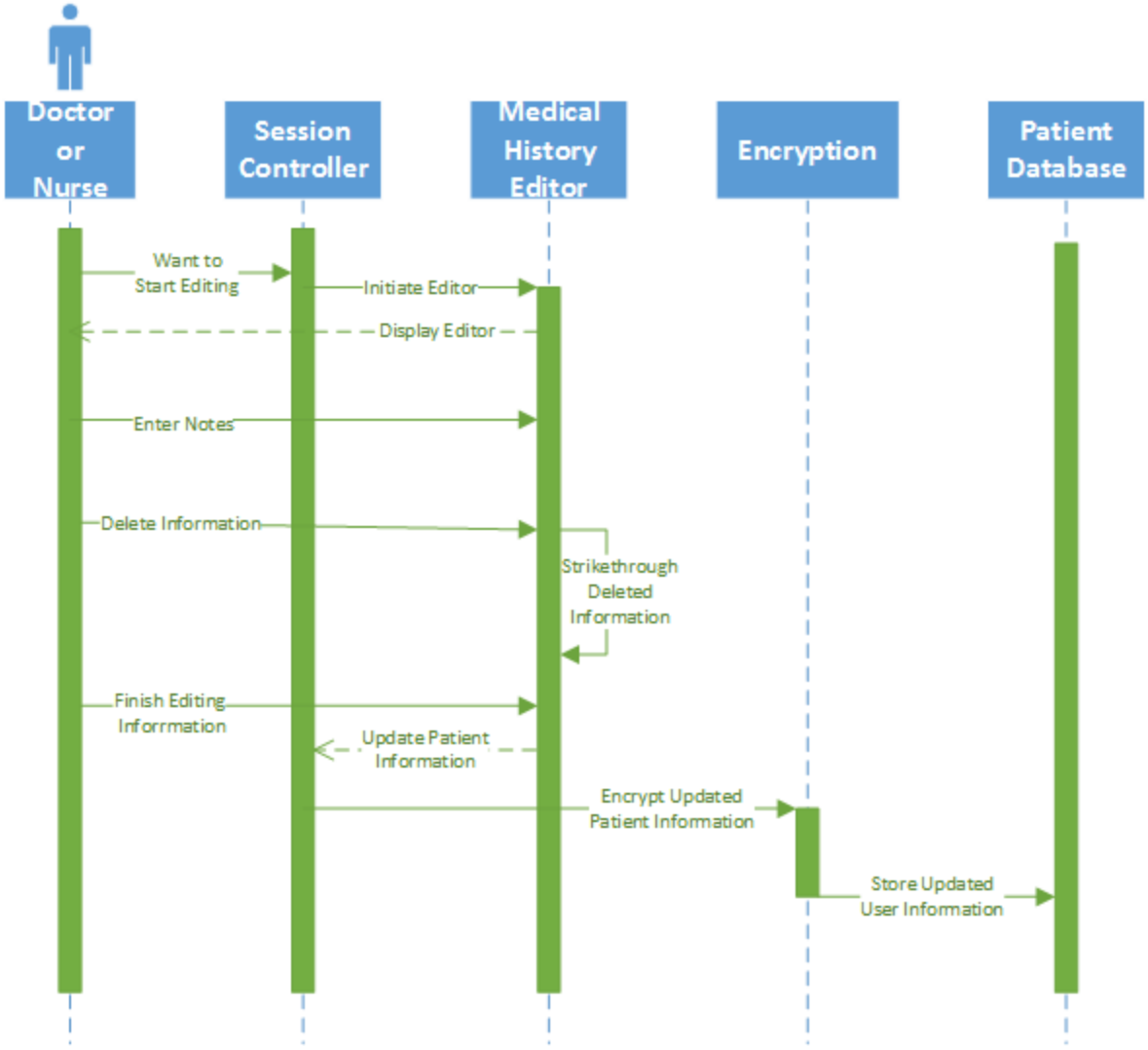
3.0 Open Application



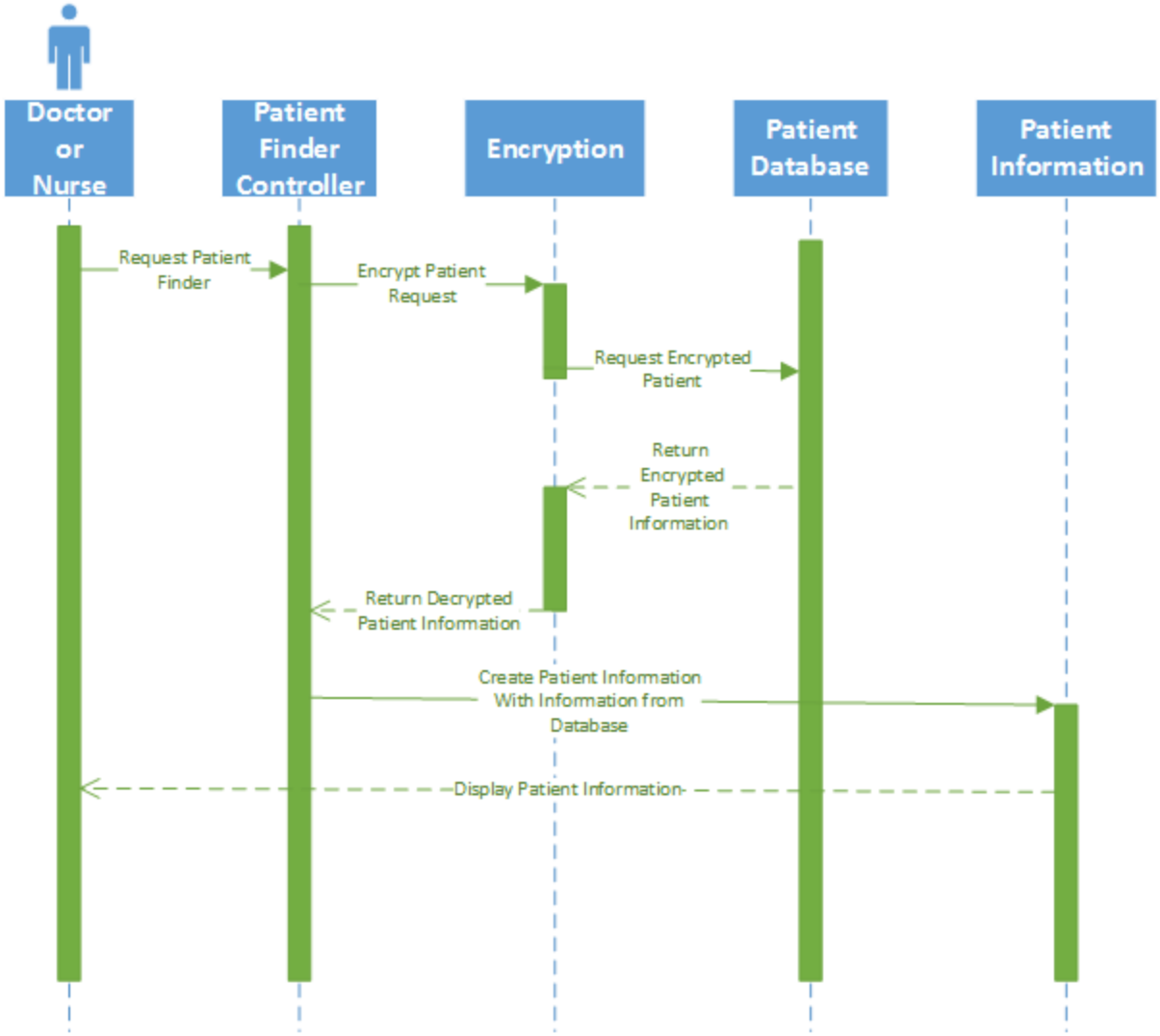
3.1 View Patient Information



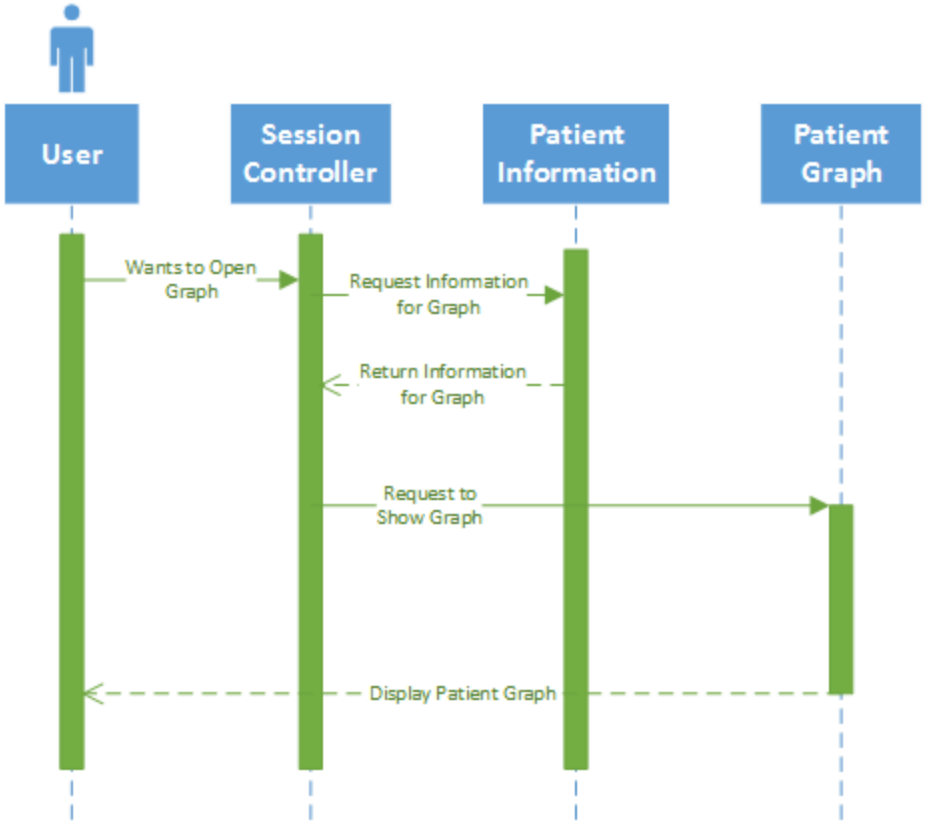
3.2 Edit Patient Information



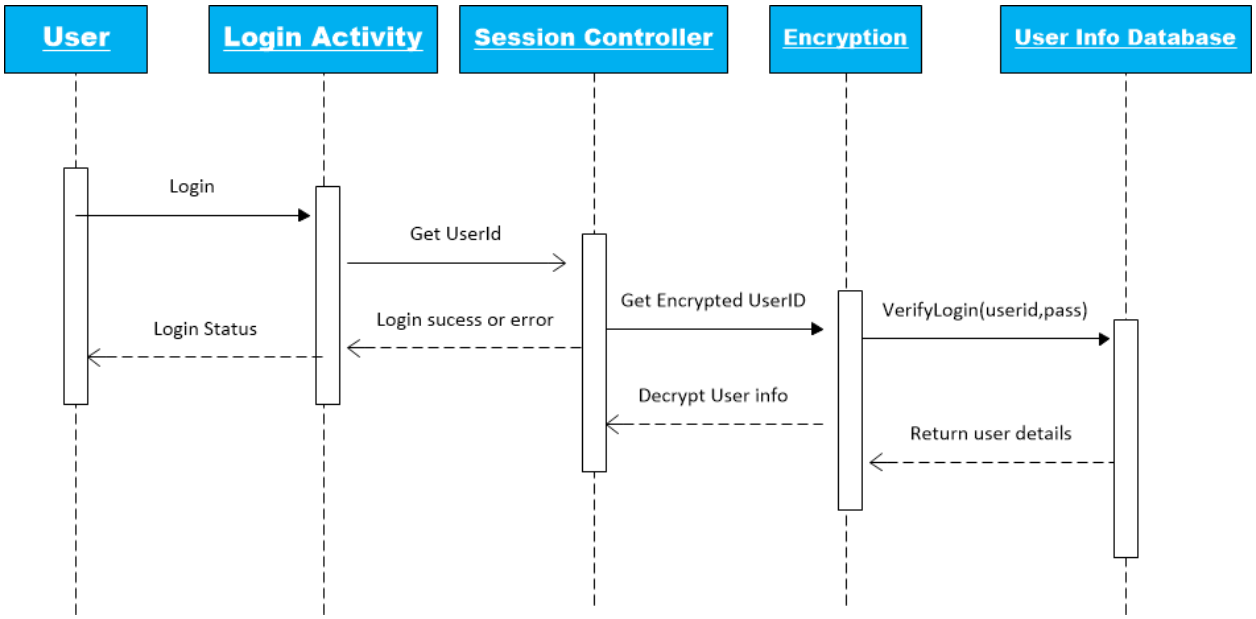
3.3 Patient Finder



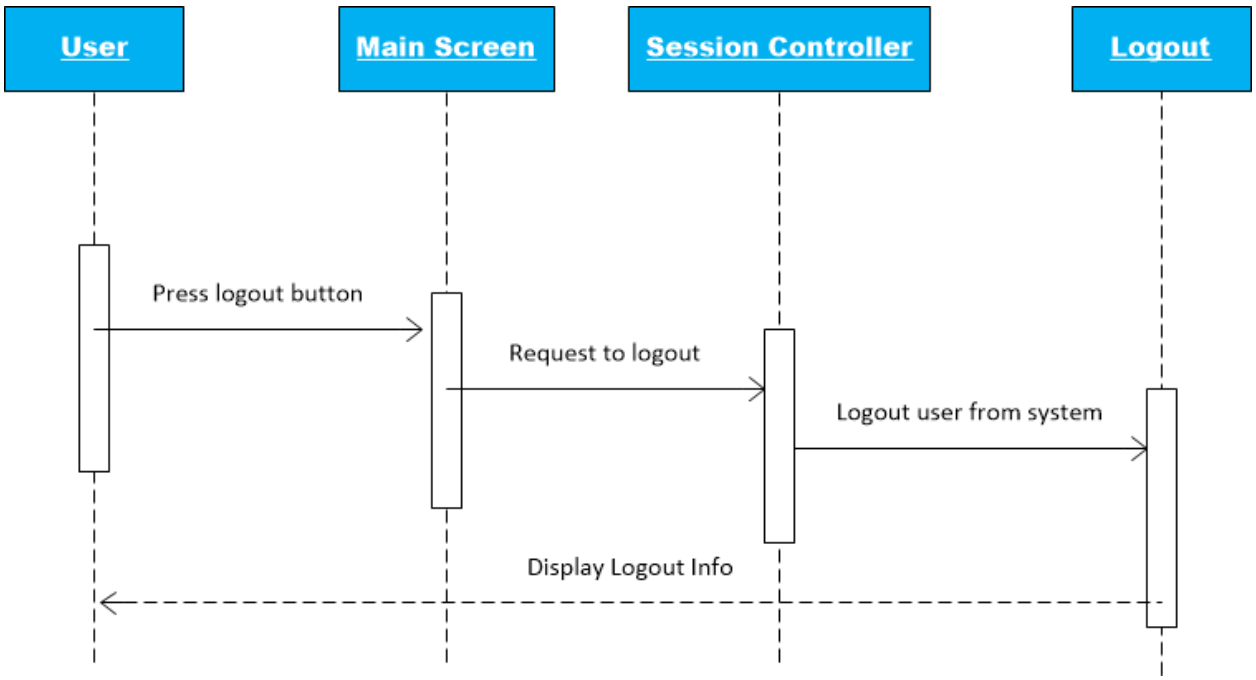
3.4 View Graph



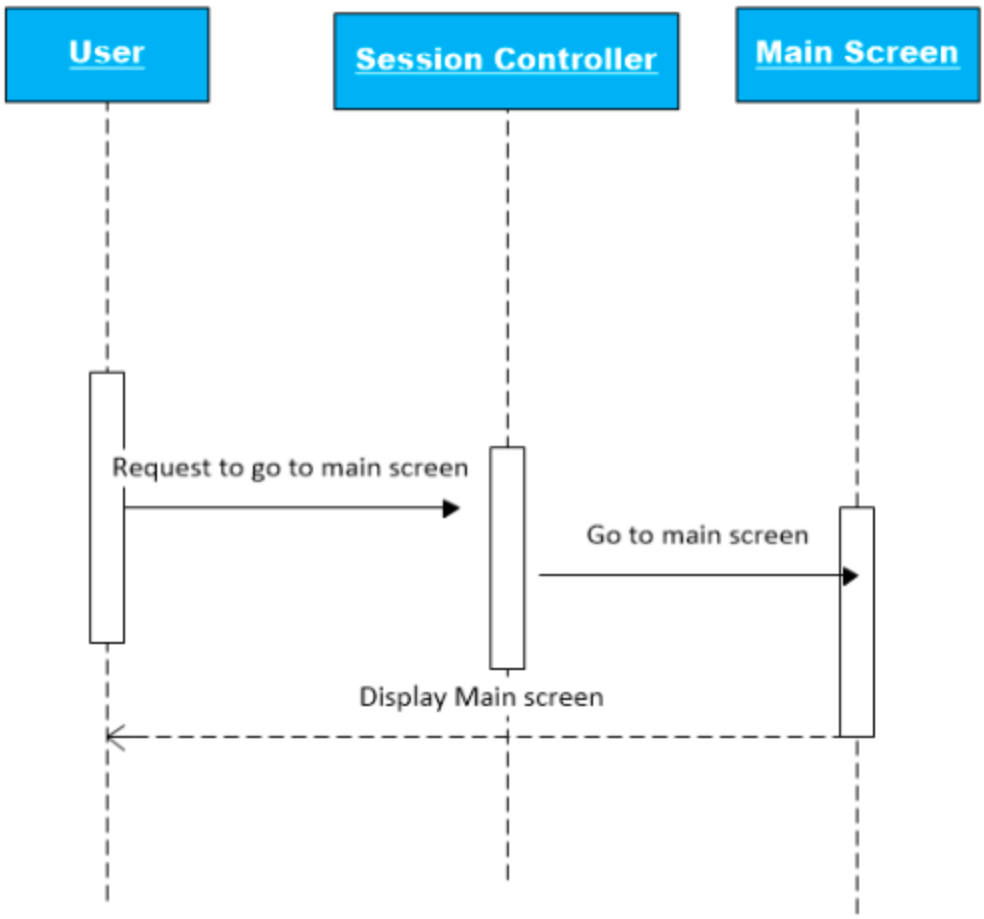
3.5 Login



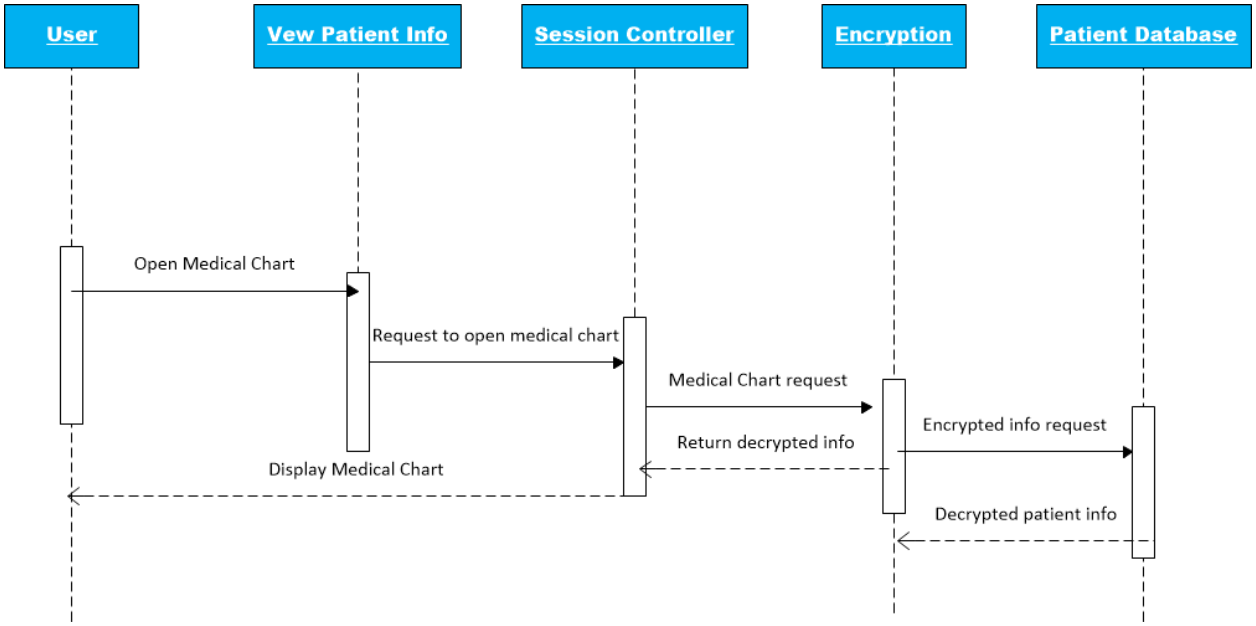
3.6 Logout



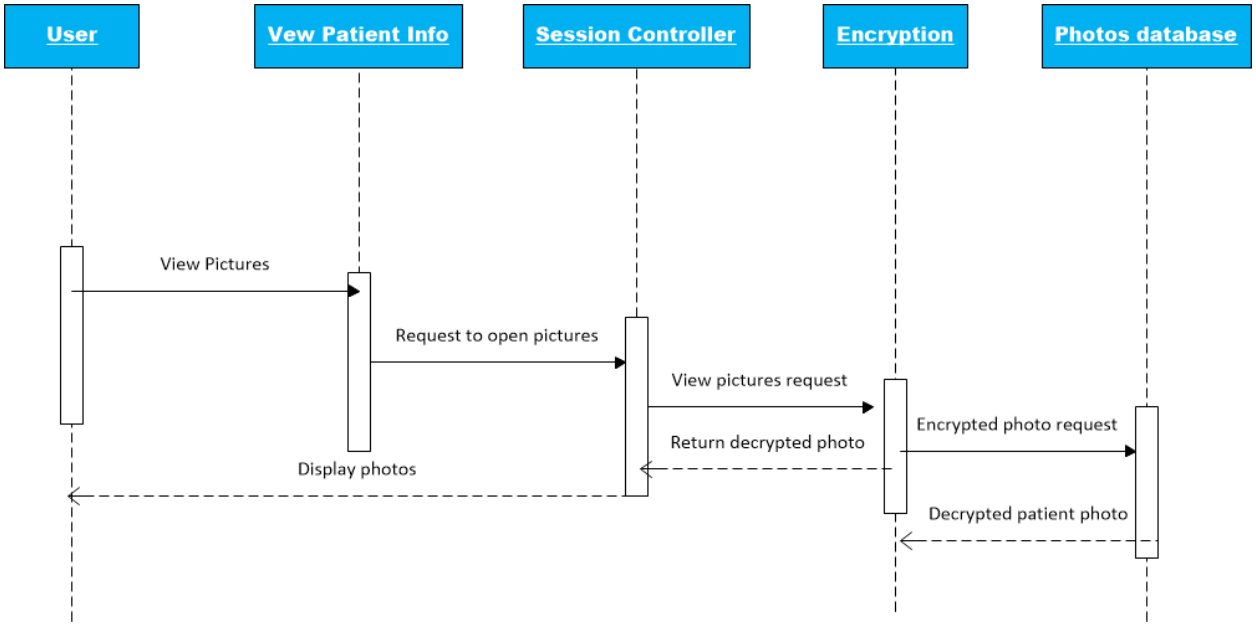
3.7 Open Main Screen



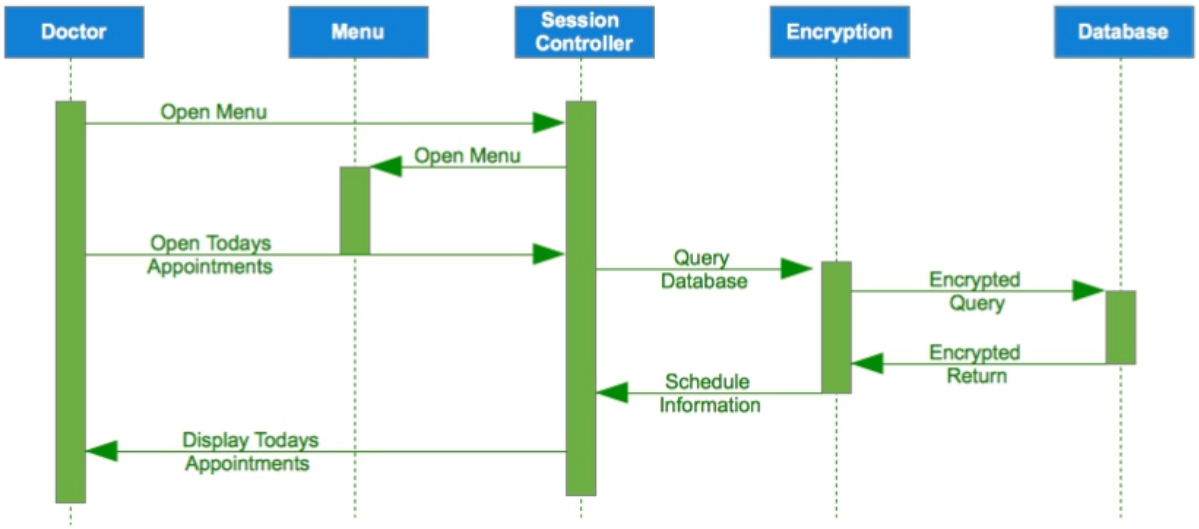
3.8 Open Medical Chart



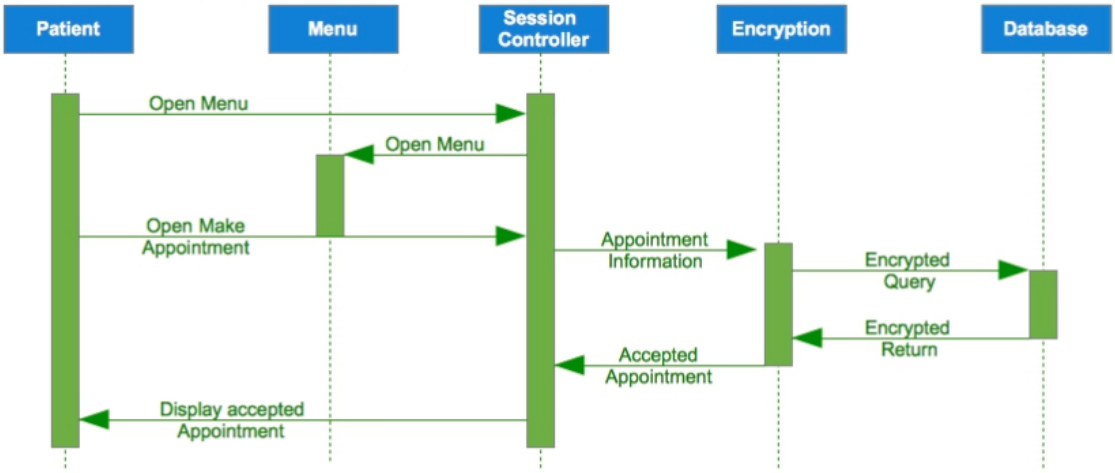
3.9 View Pictures



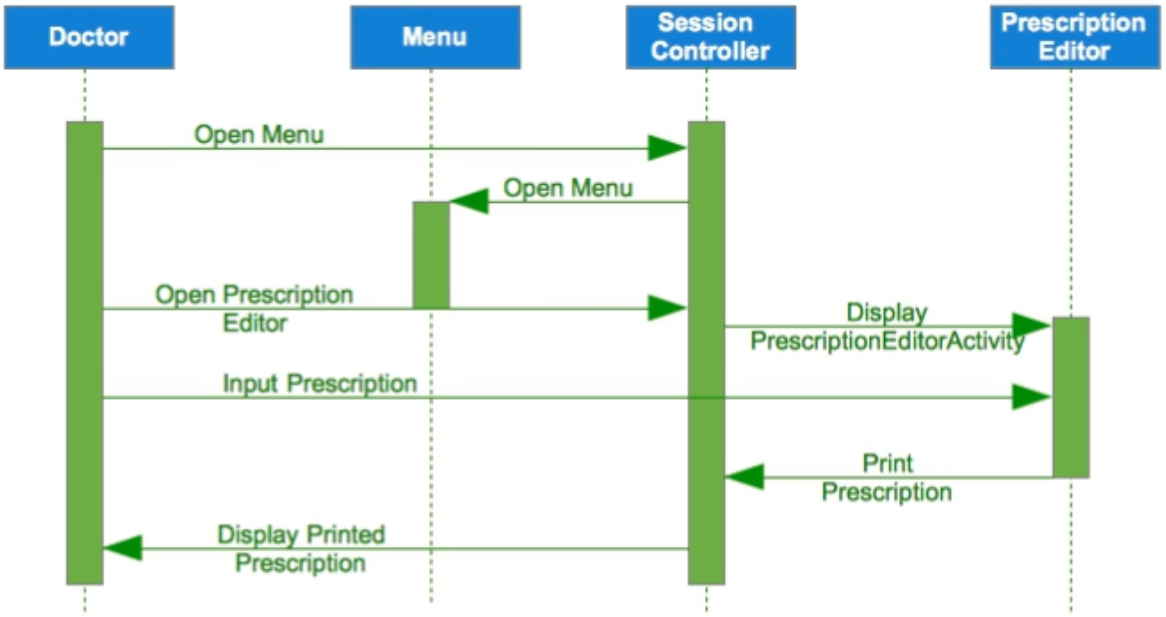
3.10 View Schedule



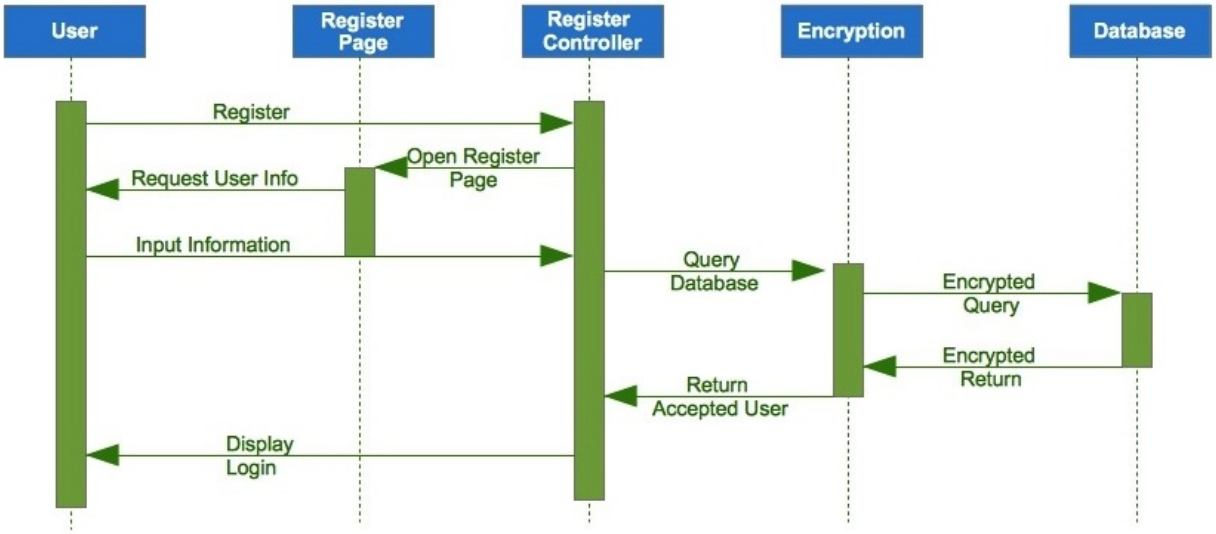
3.11 Make Appointment



3.12 Open Prescription Manager



3.13 Register User



4 Detailed Class Diagram

A. Division of Labour

During a two week period there were four full group meetings where everyone worked together in a collaborative document. Small divisions were made to the work order. The people in charge of Part 2 was Connor and Brendan, Part 3 was Simon & Khalil, and Part 4 was Jason & Matt. Part 1 was done in meeting.

Connor Jakes (Team Leader) _____

Jason Paolasini _____

Brendan Sim _____

Matthew Schweitzer _____

Simon Vergara _____

Khalilullah Rahin _____