

Building project in Android Studio

The project has not been updated to work with newer android standards (AndroidX). The Gradle module builds but the app module will not function without refactoring to AndroidX. Unsure how/if this effects testing.

Unable to create an Android Virtual Machine on VirtualBox/Ubuntu. Have tried to adjust settings in windows to allow Intel VT-x and AMD-V but this caused the Ubuntu system to crash.

Current Progress Summary

Initial Selection

The team initially considered three projects: Nightscout, Spatiotemporal Epidemiological Modeler (STEM), and Glucosio. Nightscout is an application that allows a user to monitor their own blood glucose levels, but the project had not been worked on in quite some time. STEM is a tool designed for helping scientists and public health officials create and use spatial and temporal models of emerging infectious diseases. While this project is active it is built in Eclipse, is extremely large, very complicated, and initial attempts to build it in Eclipse ended in failure. Glucosio, similar to Nightscout, allows the user to monitor type 1 and type 2 diabetes via an android application and it had active updates within the past two years. It was more active than Nightscout and far less complicated than STEM and therefore was the project the team selected.

Building Glucosio in Android Studio

Our initial attempts to build test the project so far have had mixed results. The project has been idle for roughly 2 years and therefore there may be problems with the more up to date versions of Gradle. Additionally, Android Studio is new to the team and as when learning any new IDE, learning a new interface takes time. We have had issues with using Virtual Box as well. The tools needed to build Glucosio have been larger than expected, and caused us to have issues with the allotted hard disk space on the virtual device. Expanding the size of the hard disk space can be challenging. The team sought clarification from Dr. Bowring about the testing process and he suggested becoming more familiar with JUnit to create tests for our project. He also shed light on using the Android Studio built-in-terminal for running the program and scripts in the future.

Next Steps

Moving forward, our plan is to become more familiar with JUnit and Android Studio then work to identify the methods we'd like to test. Also, the team will focus on creating a script for the driver that will be able to interact with the project. We hope to be able to run the program in the Android Virtual Device Emulator, although not necessary to the project.