COSC 345 Beta Report

Pain Tracker App

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Git Repo: https://github.com/Daanikus/PainTracker

Build instructions:

Developed/Built on Android Studio 3.0.
Dependencies should be automatically acquired. For reference, we are targeting SDK v27 and have been testing with the Nexus 5 emulator.

Progress Summary

During our alpha phase we successfully implemented all the core functionality around adding and visualising records. Since then we have redesigned the interface for a more cohesive look and feel, and implemented a basic PDF export feature.

Several secondary features have been pushed back or cut. The Google Drive integrated backup that we initially hoped to include had to be cut due to lack of online export support for the Room library at present. The idea of implementing more modular records (so that the fields for each entry can be customised according to the user's needs) has been deemphasised to allow us to prioritise features like visualisation and data output which are more manageable with consistently-formatted data.

Organisation and Process

During our beta phase we've continued having regular group meetings in order to keep everyone in the loop with progress and development. Coming into the new semester meant progress was initially slow, mostly consisting of Dan working to implement the PDF export. However, as this beta deadline has approached, the pace has naturally picked up.

Having conflicting schedules has meant that it's been difficult to get everyone together in the lab for any significant stretch, which has inhibited the flow. Fortunately, we've kept in close communication through our Facebook chat, which has, for the most part, kept all members up to speed.

Engineering Challenges

The biggest hurdle for us has been the vastness of Android application development. Not only have we been required to learn how to develop for the Android platform, but we have encountered new areas of software engineering such as UI design and architectural patterns.

Communication has proven to be the most important aspect of the project so far, as teamwork is the key to the success of any project. Although proceedings may have not progressed at the desired pace, the learning outcomes have been invaluable.

As a group, we have learned a lot about the complexity of developing applications during this project. We have learned the importance and convenience of version control and how it can be extended to incorporate tools for continuous integration and deployment.

It has also taught us that, despite the power and utility of version control, there is still a large human organisational factor involved.

Strategy for Final Release

Heading towards our final release in about six weeks' time, our plan is to polish up the features present in our beta, improve the user interface, and test the day-to-day usability of the app (for ourselves, but also with the help of some of our friends who live with chronic pain). Depending on how things progress, we may elect to include one or two of our stretch features from our initial proposal (such as adding one-time events to the chart, or weather integration), but the stability of our final product is our top priority.