

# Reflections Project ShutApp

Working with the first Android-related programming project has been overall instructive. The coding within the group has worked well, due to the chosen software development method. This has enabled all members to have total awareness of what is being done and how far the project has come. Weekly sprint planning meetings and well updated product and sprint backlogs were key to making sure no work was being done twice.

The tools used during this project included Google Drive, yEd, PhotoShop, Skype, Netbeans, Eclipse with ADT, Robotium and Github. As expected there were some problems in the beginning with setting up a fully working environment due to lacking experience. But as the project continued the knowledge within the areas increased as expected, which resulted in fewer software problems.

The software development method used was Scrum, which fitted perfectly. Primarily because the whole Android area was quite new to the group, and there was a lot of learning during the process. Every sprint kicked off with a sprint planning meeting each Monday, and with an online shared Google Drive everyone started out from the same sprint and project backlogs, with weekly goals.

In the beginning of the project the focus factor of the work progress was a little lower, but as the project process went forward, it increased according to our plans. Overall the work as a team was productive.

One of the more difficult tasks in our project was sending messages between phones. We had some issues with delay and lost data which consumed quite some time to troubleshoot.

Testing started out with the standard android testing framework but later on changed to Robotium. When writing map activity test code we encountered some errors with security aspects of Google Maps API, so we had to settle with manual testing.

For testing and development we also added a web interface for the 3rd party server, where administrators can send messages, join/leave chat rooms or create new chat rooms.

Android programming compared to regular computer programming has clear guidelines and is overall more well thought out. It is easy to get an understanding of the functionalities, and we found Google developer guides and APIs very helpful during the development process.

Furthermore one goal we had with our app was that we wanted a clean and good looking GUI, which we feel that we clearly reached. In earlier projects there have been more focus on difficult logic and functionality.

In retrospect, when starting out a new project that includes totally new areas, there should be more time for research and testing. The lack of experience in Google Cloud Messaging (GCM) lead to a lot of time spent researching, and some time was actually wasted on a branch trying to implement a Gmail login functionality due to a misunderstanding of the overall GCM concept.

This also applies to some of the database functions featured in the android application and 3rd-party server.