

Implementation

Design decisions

Our activities, our model and what we call controllers(presenter) is an interpretation of the model-view-presenter pattern.

Refactoring has been done to improve code structure. At first the profile activities were two separate classes, but this was refactored due to the fact that they both contain a lot of functionality that is virtually the same. The new solution was to have them both extend an abstract class containing this functionality, and then have the specific functionality in their respective class.

We restructured our classes with chat functionality, the similar functionality in BusChatActivity and DuoChatActivity was moved to abstract class ChatActivity and the similar functionality in BusChatController and DuoChatController was moved to abstract class ChatController.

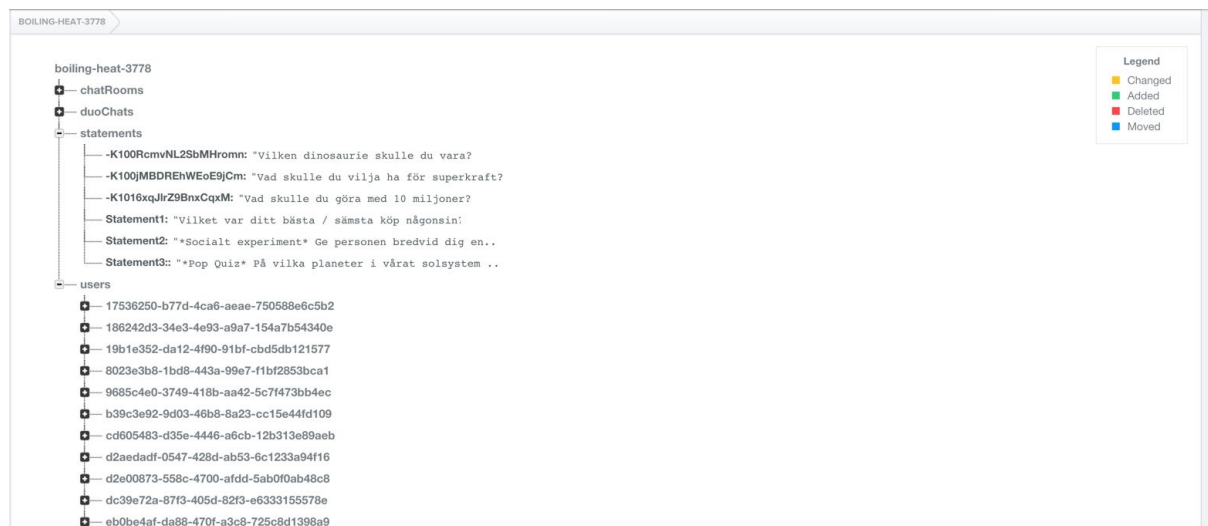
All activities that are shown while logged has some similar code, most importantly an action bar that shows the next bus stop and has a menu for logging out. We created an abstract class BusBarActivity and let all activities that should have this bar extend that class. The current context (from current activity) is stored in the model. Model is an observer of StopUpdater, that updates the next bus stop continuously. When model registers a change in next bus stop, it sets the title of the action bar of the current context to the next bus stop.

Firestore

The applications external communication is handled via FireBase, which is both a database and server, it handles:

- User registration
- User authentication
- Chatrooms, with messages
- Private chat rooms
- Statements
- User data, such as Karma, Age, Username.

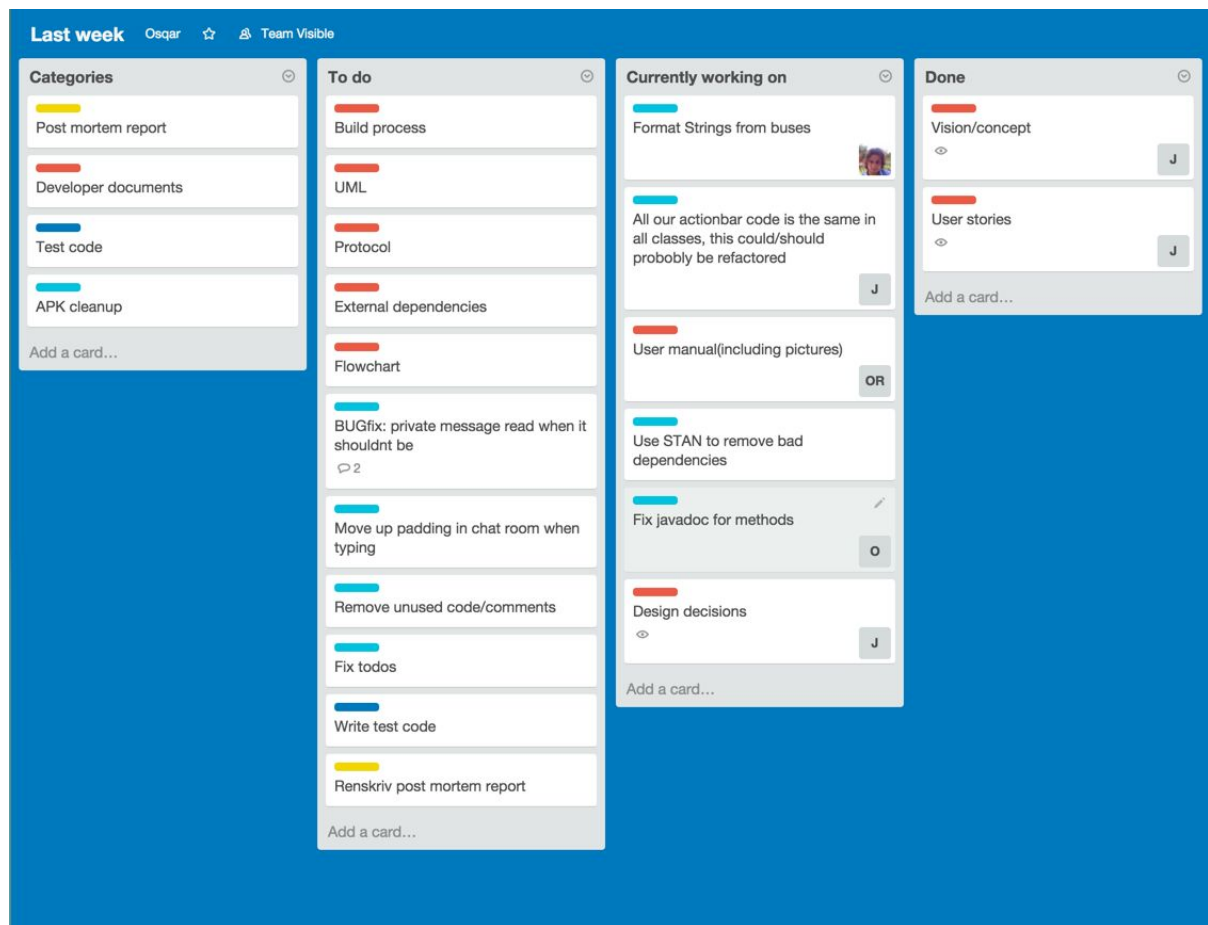
FireBase-structure:



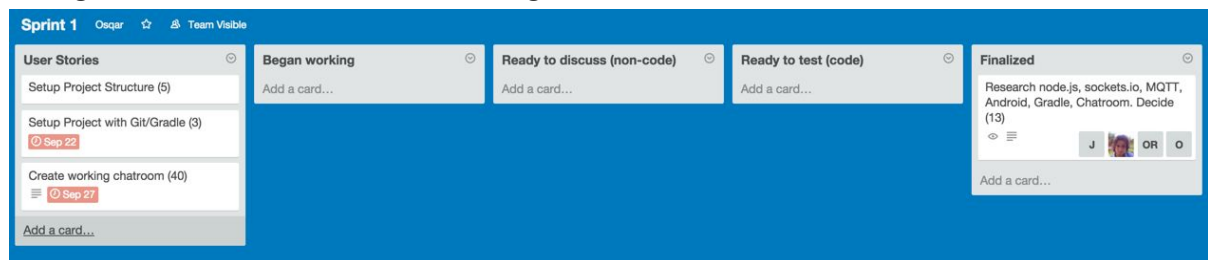
Trello

In order to maintain a good project structure and to keep everyone up-to-date on what was currently being worked on and what needed to be done we used Trello which we've written a lot about in the Post-Mortem report, but we are adding some print screens below to give an overview of the trello during development.

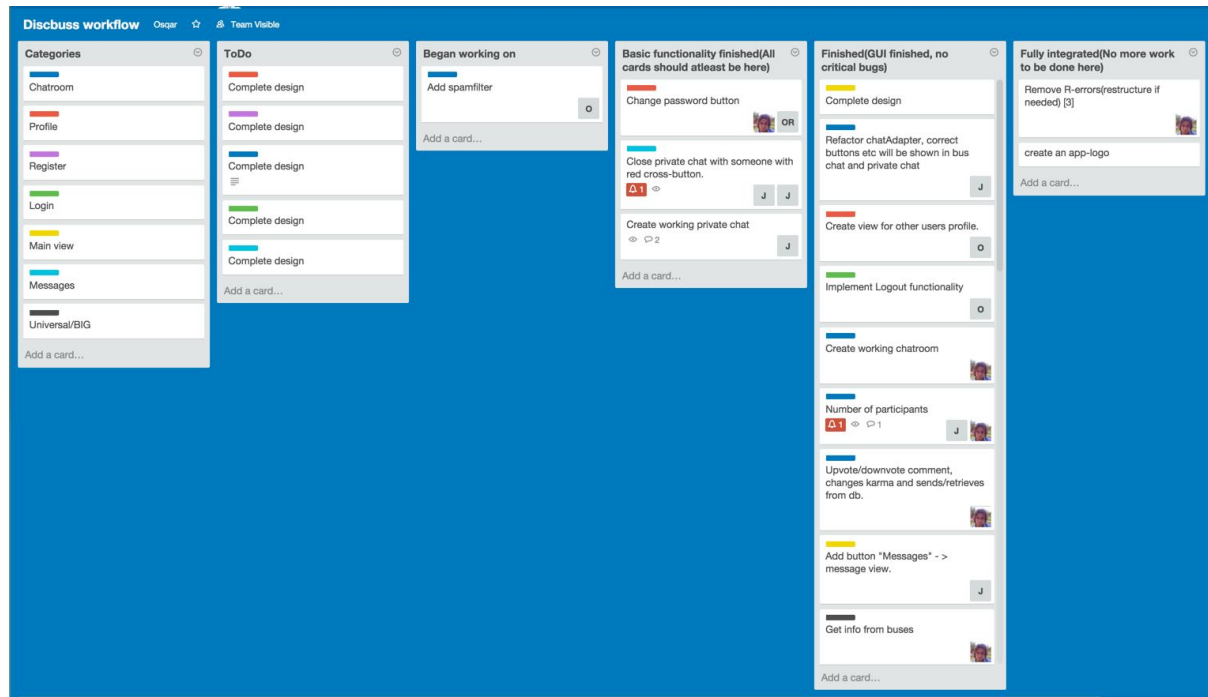
Last weeks trello print:



Below we can see a great example of how ambitious our goals were getting started and how unused we were to the scrum way of working as well as showing how badly configured our trello-board was to begin with:



Compare the above board to the one below which is properly color-coded and gives great detail and information:



We also have a JavaScript that enables sending a new statement to the chatroom if no message has been sent the last 30 seconds.