VECKA 4: Design, MVC

Meeting Agenda (Group: Alpha)

Date: 2020-09-23
Chair: Benjamin Sannholm
Participants: Mathias Drage, Benjamin Sannholm, Bashar Oumari, Pontus Nellgård, Sophia Pham

Objectives (5 min)

- Decide how accounts and courses should relate and function
- Navigation
- More mockup parts instead of full functionality (more horizontal? 🤔)
- Testing, what are our requirements (revised)
- GPS abstraction, where it should be integrated
- How we approach integrating the model parts of the application

Reports (15 min) from previous meeting

- Bashar has fixed the "filter course spinner" which shows just the broadcasts with the related course. Story #3.
- Benjamin has finished documenting story #14 and #4 with comments and in the design/domain model. So #14 and #4 are now done.
- Still problems with replacing the map with a new view/fragment for story #2 (Pontus).
- Sophia is still working on the user story #6 and is having problems with combining the current FragmentBroadcastInfoWindowBinding with other features.
- Mathias has continued working on the GPS abstraction and how to integrate it well with the rest of the code.

Discussion items and outcomes (35 min)

- Authentication methods (to begin with)
  - Facebook
  - Google
  - E-mail
- Registration/Settings
  - Should we have fixed course codes right now? - No
  - Should university be selectable in both registration and settings? Preferably yes. No university for now. Find by distance instead.
  - Should courses be selectable in both registration and filter menu? - Only in the filter menu.
- Account attributes
  - Firstname
  - Surname
  - University (only for display)
  - Photo (not relevant now)
- Navigation

- - What kind of Navigation should we use?
    - We chose to use Android's Navigation Graph: https://developer.android.com/guide/navigation/navigation-getting-started
  - What parts should be *Fragments* or *Activities* respectively?
    - Everything will be Fragments (screens, modals etc.)
      - MapScreenActivity → MapScreenFragment
      - activity_map_screen.xml → fragment_map_screen.xml
    - The MainActivity (needs to be created) will be the only Activity for the moment
      - MainActivity should setup Navigation Graph
      - At least display MapScreenFragment as the default screen
- Testing
  - Should everyone do their own testing?
    - Yes, for current code base as well.
  - How do we learn how to test?
    - Read workshop material on JUnit https://chalmers.instructure.com/courses/10412/assignments/21443
  - When should we do the testing?
    - We start out on testing together on Monday 28/9 so we can get a better understanding in case we get stuck.
    - We should do it continuously before each review (which is on Mondays). A story does not pass review if it is not reasonably tested.
  - Android/Regular Tests:
    - We will figure this out on Monday together.
- GPS integration
  - We discussed various ways to integrate it and how it updates the model.
  - Current plan is to have the current location of the user in the User class. Some controller class will be responsible for updating the position in the user class when it is needed. The User then notifies observers that the location has changed using the observer pattern. It is unclear how someone needing the position should notify that it needs to be updated and then be able to immediately read it from the User.
  - Mathias will try some of these ways and see how it works out.
- Model
  - We will let the model be decentralized without one single root class.
  - We are not sure who should "own" and instantiate different parts of the model.

Assignments (5 min)

- We will continue on this week's sprint and then we will assign new tasks during the next meeting on Monday 28/9.
- Bashar is researching Navigation Graph and will work with Pontus to allow for navigating to the screen for adding a broadcast.

Wrap up

- We did not have time to discuss "More mockup parts instead of full functionality" this meeting. We might discuss this next meeting.
- Next team meeting: 2020-09-28 Monday 13:15
- Next supervision meeting: 2020-09-30 Wednesday 13:15

Supervisor Felix's Comments:

1. Fokusera på att fixa navigeringen för att få en prototyp/mockup och hitta en balans mellan vertikalt arbete samt att få en bild på hur appen kommer att "kännas". Fixa skelettet så vi kan sätta ihop features.
2. Vi måste börja skriva tester. De måste inte vara jättestora utan de bör vara små tester, t.ex. för varje funktion/metod.
3. **Android**, vanliga **tester** (de som vi har skrivit, ligger i mappen **src/test/java**), och instrumental test ligger i **src/androidTest/java**, de är när vi vill använda saker från android system. Så Firebase + GPS -> instrumental test.
4. GUI är lite svårt att testa då får man bara reviewa visuellt.
5. Vi har gjort GPS till en aktivitet, vi borde göra om den till att den bara får en aktivitet.
6. Vi vill skapa **GPSen** + **OnPermission** i MainActivity/**MapScreenActivity**.
7. ServerGPS / MobilGPS bör kunna enas i ett interface.
8. Telefonen vet vart den befinner sig + vem som är inloggad.
9. Broadcasten är den enda som använder sig av "position".
10. Vi ska använda GPS klassen direkt där vi behöver den.
11. Bästa approachen: decentraliserad modell?