Lappeenrannan teknillinen yliopisto

School of Engineering Science

Sofware Development Skills

Vili Huusko, 0544718

LEARNING DIARY, MOBILE MODULE

LEARNING DIARY

25.04.2022

I have already completed one software development skills course, so the practice of the course was already familiar to me. Furthermore, I currently work as a TA on the Java course, which utilizes Android Studio heavily, so I don't expect to learn much from this course. However, I still know that there'll be some important pieces of knowledge for me to absorb.

I already had Android Studio installed on my computer, as well as an emulator, so the only set-up that I had to do was to create a new GitHub repository for this course.

27.04.2022

I started to work on the first module of the course. I'm expecting to complete all the modules today.

The first thing I learned was the auto-import settings. I haven't really touched the Android Studio editor settings and it was a nice option to know. I also learned about the various debugging tools, most importantly breakpoints.

The second module revolved around activities. It started off by showing the same things module 1 covered already. After the video covered how to send data to another Activity, I learned about the Intent.hasExtra() -method. Previously I always tried to do null checks. I also learned about handling a response from an Intent.

I learned a lot more in the third module. I learned how to make a custom ArrayAdapter for a ListView (I've previously only done RecyclerAdapters). I also learned how to scale images in Android Studio programmatically.

05.05.2022

I was on a train, and I had some spare time, so I decided to start working on the project. I decided to do a calculator app, that also shows a calculation history on a different page.

I thought about parsing the mathematical expression myself, and I did some tests, but I thought that it wasn't the point of this course and decided to use a third-party library. I settled with [mXparser](). I installed the package via Gradle and was done for the day.

08.05.2022

Today I continued the project. I did the UI for the calculator itself but did not program any functionality.

I travelled back to Lappeenranta via train and continued the project. I mainly did the calculator logic and I started working on the calculation history part of the program.

09.05.2022

Today I finished the calculation history part of the program.

17.05.2022

I fixed the layout and the colors of the application. Instead of hardcoded colors, I used the ones in the themes.xml. I also learned how to default a dark theme for the app.

After fixing the layout and colors, I recorded a demo video and wrapped up the course.