Lappeenrannan teknillinen yliopisto

Tietotekniikka – Software Engineering

Software Development Skills

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LEARNING DIARY, Software Development Skills: Mobile 2022-23

13.6.2023

I started the course. I had already installed Android Studio and the other required components shown in the video, so I mostly skipped over that part. The video demonstrated creating a simple application for adding numbers together, and I followed along. I already have some experience with Java and Android studio from the OOP course, so there were not many new things to learn, but it was nice to refresh my memory on how Android Studio worked along with its emulator and debugger, as I mostly use VSCode.

21.6.2023

I started following the second tutorial. However, there were some problems with the Android SDK version, and after some struggling, I had to just downgrade the version to make the application work. I added some buttons and textViews and learned about intent, which is a requested action that the device tries to perform. With this new knowledge I added an intent to the second button to open a second activity within the app, and an intent to the second button to open Google outside of the app.

4.7.2023

I created a new project and followed the tutorial. Yet again there were some problems with versions as the tutorial uses an older version of Android Studio. After some fiddling around with versions I could start following the guide. I learned to create a list of items and give them attributes and show details when clicked on. I also learned how to scale images to fit on a mobile device.

21.7.2023

Started working on the course project. I decided to create a quiz app that has different topics like movies, tv, music etc. and shows the user their final score. For this I needed a Main Activity to show the different themes for the quiz, and a Quiz View for showing the questions and answer options for the selected theme. For navigating between views, I used Intents and the startActivity() method

that was shown earlier in the course. I also used the putExtra() method to pass the type of quiz selected to the Quiz Activity from the Main Menu Activity. As I got the prototype working, I thought the interface looked ugly, so I fiddled around with the xml layouts, and added some styling and colors to the app, and a Material Dark app theme.

25.7.2023

After I was happy with how the App looked, and the navigation was working correctly, I added some logic for how the actual quiz worked. The quiz questions would be selected depending on the category the user had chosen. As hard coding dozens of questions and answers to the Quiz Activity java file itself didn't feel reasonable, I added the values to the strings.xml file, and fetched them from there. As for now, there are quite a few questions, so sometimes duplicates pop up. After completing the quiz, a bottom sheet pops up with the final score and options to go back to the menu or try again. As the project description suggests adding a ListView, I added a separate Results View that show previously achieved scores.

Now, I only need to record the video of the project working and submit the project to Github. Overall, I though the course was successful, and I learned some new things. The hardest part for me was selecting a topic for the project, as the coding tasks were quite barebones, but they were useful for my project.