

Lappeenrannan teknillinen yliopisto
School of Business and Management

Software Development Skills

Santeri Kainulainen, 0549687

LEARNING DIARY, MOBILE MODULE

LEARNING DIARY

15.5.2023

Today, I started the course and begun by checking through Course overview, General Course Information and Environment Setup tabs. I am already familiar with using version control, but I still checked through the basics again and installed the latest version of Git. I setup a Github repository, and tested pushing through Android Studio, and it worked perfectly. My goal in this course is to get better at developing software for Android, as I think my experiences with it were really fun but also very educating, and obviously it is also a relevant skill to have in future careers.

I quickly skimmed through the first exercise video, and it seems like I've already learned most of the things presented there from the previous Object-Oriented Programming course. Once I start coding the first exercise, I will watch the video more carefully to see if there is anything new.

16.5.2023

I watched the first video and followed alongside by creating the simple Android app that adds 2 numbers together. This was very rudimentary to me as I was already familiar with all of the views and buttons and code used on this, but I learned a little bit more about debugging in Android Studio like setting up breakpoints, checking the current values of variables to check for errors, step by step instructions to see what happens and what the project files actually contained (Such as the strings.xml, which contains global strings)

Since the first exercise was so quick I followed right away to the second one. In this video, I learned about what Intents and Activities exactly are, and a little bit about IntentServices and BroadcastReceivers. I already knew how to use intents to switch activities, so that was easy. Using the .putExtra method was completely new for me, and it seems like an interesting way to pass information from one class to another. It was also new to me to switch to an application outside of the project, and this also seems really useful to know for

certain apps that require a link to open in a browser for example. It seemed like the video and the example project didn't include any good example usages of intent services or broadcast receivers, even though the person in the video does mention it at the google part of the code. I understood the theory he explained at the start, but it doesn't seem like there were any good practical examples in the actual code so I was left in the dark about this. I will read about it more in the internet.

17.5.2023

I went ahead and watched the third video too and did the code alongside as I watched. On this app, we used ListView to display a list of fruits and some details alongside them. I had to switch out a lot of the used layouts (RelativeLayout didn't work), and from my understanding even ListView has been deprecated by the improved RecyclerView. ListView was also fairly familiar for me because it's very close to RecyclerView, but for example the method to set the OnClickListener for the specific item was new for me and brings up ideas I could use it with. I also understand better how the adapter actually functions, and that will really help me in the future if I need to make use of RecyclerView (Which I'm already planning to use in the project work).

I was confused by some of the things used in the third exercise. Namely the `scaleImg` method seemed really redundant to me, and it was extremely hard to understand the code with basic knowledge of Android Studio. I ended up copying most of the code while trying to understand as much of it as possible, but despite checking multiple times that the code was correct, it didn't work at all to scale the image as the way it was supposed to. I ended up just using `constraintView` settings to scale it which took me about 5 seconds, and left me confused on why he spent time on that method. Maybe it wasn't as easy on the older version of Android Studio. I can still see some uses for this if I need a more customized scaling of images. It does seem like this course could be updated with newer videos to be more relevant, like in the object-oriented programming course.

18.5.2023

Today, I came up with the project idea, which is to build a small app that allows you to randomly generate a Dungeons and Dragons character with the click of a button. This generator would give the character a random name (based on my own algorithm), random stats (emulating a real dice roll) and even have some fun images that I will draw. Then after generating the character, you can display all your characters in a RecyclerView list.