

Lappeenrannan teknillinen yliopisto
School of Business and Management

Software Development Skills

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LEARNING DIARY, MOBILE DEVELOPMENT MODULE

LEARNING DIARY

5.7.2022

I started to familiarize myself with the course. I started by reading all the course info and trying to setup my version control environment to android studios. I choice android studios because I was already familiar with it from the java course, so I already had android studios installed so I didn't need any help there and I chose to use GitHub as my version control as it is very easy to use with android studios. Goal of the course for me is to learn more about mobile development and I choice this over backend and frontend because I think mobile development is much more interesting and it gives good options for me to work with as smartphones are most used computer in the world.

7.7.2022

I watched the first tutorial and did my first application of the course. Task in the tutorial was quite easy as we had made almost similar app in previous java course. Tutorial video was good reminder of how android studio worked and the debugging part of very useful for me.

I made my second commit after finishing the first app and didn't have any problems there.

11.7.2022

I watched the second tutorial and made the application which was shown on video. This time there was some new things for me like Intents. I had problems with Github but after little bit of googling I got it to work like I wanted. I also noticed that the if statement which was on video wasn't working and after testing realized that the part `Intent.resolveActivity(getPackageManager)` was returning null. After googling I found out that in API 29 and lower the if statement works as is but starting from API 30 you need to request permission to access anything outside of the app. So in order to get it work I needed `to` and `<permission`
`android:name="android.permission.QUERY_ALL_PACKAGES" />` and `<queries>`

<intent> <action android:name="android.intent.action.MAIN"/> </intent> </queries> to AndroidManifest.xml. I think biggest thing I learned from this tutorial was use of intent and how to make different layouts. from what I understood I figured that Intent is mostly used when wanting to launch activities.

17.7.2022

Today I watched the last tutorial and made the application from the video. This tutorial was very helpful because I'm doing OOP course at the same time and the listview and other things in the tutorial will be useful in that project too. I have used the listview before but after this tutorial I really understood how to use it and how to make most out of it. Before when I used it, I didn't know how to make it with Onclick and change the views. Also learning how to use images is good and how to make sure they are not too big is important.

18.7.2022

Started doing my project work and decided I would make shopping list application where you can add every grocery yourself. I had pretty good idea how to make it work before starting to do it. First, I started to make my MainActivity and made class where I store my grocery list information. I also made class which controls everything happening in background like adding things to grocery list and getting information about it. I wanted to focus more on UI components and how my app would look on this project. I have made couple applications but they always look bad so I thought it would be good thing to focus on this project.

I decided to use ListView as my method to showcase the grocery list. I ended up using the BaseAdapter class to make my ListView view and I had problems when I tried to use ArrayLists as variables in that. After a while I realized my mistake and found out that I can convert my ArrayLists to Arrays with toArray method. After this it was quite easy to finish my work until I run into a problem where between Activities arraylist where my grocerylist objects were stored was emptied and I couldn't get the information when I was in the other activity. After googling for a while and looking through stackoverflow I figured out that I only needed to make my object arraylist static so it wouldn't be empty in the other activity.

Static makes it so my arraylist is shared through all instances of that class. After this my project was almost done and I only made method to clear the shopping list and start making it again.

19.7.2022

I started to make my UI look better and research how to do that. I found out how to make gradient background for my buttons. I chose to make my app have color theme and added some small things like clearing all text fields after submitting something to the grocery list. I also learned how to make my list view look better but I couldn't implement it without changing major things in my code so I didn't include it in this project, but it will be useful later. I think biggest thing I learned in this course was the version control and some good concepts to help me make better applications with Android Studio.

