Lappeenrannan teknillinen yliopisto

Sofware Development Skills

MONTBLANC Emmanuel, 000740166

LEARNING DIARY, Software Development Skills: Mobile MODULE

**LEARNING DIARY**

14.4.2022

Checked the general information on the moodle page, downloaded android studio. Also did some research to remember the basics of GIT that I already used before for other projects and set up my repository.

I had to install java and java SDK that I haven’t use since changing computer 3 years ago.

Created my first project and familiaze myself with the IDE that is really similar to PyCharm that I use a lot.

20.4.2022

Followed the tutorial and understood how to add TextEdit, a button and a textview to an app.

Created a virtual device to be able to test the app. I add an error at first while launching the virtual device and after some research the problem was just that I didn’t have enough space on my disk.

Learned how to get access to the items in the app like a button or TextEdit and how to add an action to a button with a onClickListener.

Understood how to use the debugger to see the value of each variable and find precisely where is the error in the code.

Added the learning diary and this first android app to the GitHub.

02.05.2022

Understood the meaning of the core elements to android development.

I created my second app following the second tutorial, that is composed of two buttons: one to launch another activity and one to open a browser and go to an URL.

I am starting to get familiar with how to position widgets on the screen, find the widgets in the activity with findViewById and with how to connect buttons to actions.

I discovered how to use intent to launch other activities or app and pass information to those other activities. Also, I learned how to check that there is an app or activity that can answer the intent on the phone before executing it.

Finally, I added this second app to my GitHub.

03.05.2022

Discovered relative layout and listViews.

When constructing my relative layout, there was no arrows appearing allowing me to choose where to put my first textView that was then stuck to the top right corner, I couldn’t find in the parameters of the textView where to fix this, so I simply changed it in the xml file.

I struggled at first to understand what was a layoutinflater, but after some research I understood that it is simply a class to create a view element from a layout file.

Understood how to adapt items to a listView, as well as importing and scaling images.

I added this app with listViews to GitHub.

I saw that the listView were considered legacity and their usage were deprecated, so I looked up what is the replacement for it : RecyclerView.

I tried to implement the same app using recyclerView instead of ListView, by following simple RecyclerView examples (<https://stackoverflow.com/questions/40584424/simple-android-recyclerview-example>) and modifying it. I struggled a bit and realized that the problem was that I copy -pasted the activity to display the image, but doing so, the activity was not added to the manifest and caused errors. Once I got it fixed, I added this new app with recyclerViews to GitHub.

04.05.2020

I thought about an idea for my project. The idea would be do to a basic tic tac toe app. The first activity would consist of two button to chose if we want to play versus another player (localy) or vs a IA. After choosing, a second activity would load, and we would pass as extra what kind of game was chosen. This second activity would be the main part where we play the game. I saw that recyclerViews can also be used to make grids, so the idea would be to make a grid, and detect when someone click on a case. After clicking on a case, it would display an image of either a cross or a circle on the case clicked. When the game is over, there would be a last activity for a victory screen, announcing the winner.

05.05.2022

I started my project. In a first time I worked on the first activity.

Create the two buttons, that open another activity and pass an Int representing the game mode chosen. For the first activity I also wanted to display a cross and circle as logo to make the app looks better, and I spent a lot of time trying to set the size of the two images to a percentage of the width of the screen. I found that you can simply use layout\_constraintWidth\_percent in the xml file and set it to the percentage wanted. But to use this, I also needed to add to Gradle file a new dependency.

I also created the second activity, that contains for now only a textview displaying the chosen mode to check that the information was transmitted.