Lappeenrannan teknillinen yliopisto

School of Business and Management

Software Development Skills

Dea Shega, 0577950

LEARNING DIARY, MOBILE ANDROID DEVELOPMENT MODULE

**LEARNING DIARY**

31.3.2020  
I reviewed the general information of the course and understood that the main focus of the course is to develop my skills as a software developer, while creating projects which showcase my skills. I chose the mobile android module because it is a type of task I have not yet explored. I have tried setting up my environment and it worked successfully. I watched the video about setting up the Git repository and completed it. I need to check more videos about using the Git repository tomorrow.

1.1.2020

I checked videos about using Git repository and learned how to use it. Since I chose the module of Mobile Android Development, the goal is to familiarize myself also with Android Studio in order to learn basic functionality with buttons and views. I searched the web for content regarding how to install Android Studio and some beginner tutorials. I also watched the first part of the videos that were uploaded in Moodle in order to understand the requirements better. The first video seemed easy, because it is a task that I also landed when programming in other environments in Java. The difficult part was getting used to Android Studio, though.

2.4.2020

Today I started planning out the mobile app. Before planning the app, I finished watching the part 2 and part 3 of the videos, which I found very interesting, especially with the lists. The videos gave me the idea of creating a flower shop program, through which clients could calculate the cost of a bouquet with 4 types of flowers. In addition to using parts of the video with lists and objects, I wanted to include a screen in it, in order so the client can see the outline of the flower shop before accessing lists of flowers and calculating the cost of bouquets. I decide to create it with a class called SplashScreen, which also included intents. In that class I created the variable Splashtime, in order so I could specify, for how long the screen was going to be viewable to the user. Through using also, a handler, the intent and the method, I connected then the Spashscreen class with the MainActivity class. It took some time to be created, and some extra videos of how to create with Android Studio.

3.4.2020

Today I went ahead creating ListView using the MainActivity Class. I created 4 (four) items for the flowers ( roses, tulips, lilies and sunflowers). At the layout I also specified the general design for the elements of my ListView, ImageView ( photo of the flowers), TextView ( name of the flower) and another TextView ( for the price). In order to create the ListView, I found the video number 3 very helpful, as it gave you general directions.

4.4.2020

Today I found out about CheckBoxes, so as the clients could choose items (flowers). I added Checkboxes, so that the Client could choose if they wanted an item or not. I started thinking about how I was going to pass the data (if the client chose an item or not) to another class, in order so the calculation could be done. I googled different Android Studio usage videos about the problem.

5.4.2020

In order to pass data from one activity to another, I had to use an intent. The intent included MainActivity class (the class where the message was initially generated) and CheckoutActivity (the class where the message should go). With intent.putExtra I added what I wanted to pass to the other class. In this case, the price, with which I can call the intent in the other class with getStringExtra.

6.4.2020

Today I created the Buttons of the app. I learned from previous videos in the Module that button consists of text and an icon that communicates what action occurs when the user (the client) clicks or presses it. After research in google, I learned that there are various types of buttons in Android Studio, like CompoundButton, [ToggleButton](https://abhiandroid.com/ui/togglebutton/" \t "_self" \o "ToggleButton), [RadioButton](https://abhiandroid.com/ui/radiobutton/" \t "_self" \o "RadioButton) and with attributes like Id, gravity and text, textcolor, etc. with which they can be configured. After watching videos about its code implementation, I created the buttons in the app so as the clients can order their bouquet according to their preferences and calculate its final price.

7.4.2020

Today I engaged myself with the FrontEnd Developing while writing code. After researching in google, I added different types of layouts in the program as needed. At every layout I had obligatory its width and height. I set the view in match parent, in order so the component can be displayed as big as its parent, gravity centered and orientation vertical.

8.4.2020

I implemented “If statements” today, in order so I could calculate the final price of the bouquet. Through the checkboxes, the client can specify, if they want to include the extra flowers and their prices in the bouquet. If yes, the price would be added in final calculation. If not, the price would not be added. This part was easy in logic, as it is a task encountered in other programs I have developed. The difficulty was writing it in Android Studio, but I managed to get it through.

9.4.2020

Today I created an adapter class for the ListView. I encountered difficulties, as the adapter class connects UI components and data source that helps us to fill data in UI components. I researched about types of adapters and found out that there were BaseAdapters, ArrayAdapters, Custom ArrayAdapters, SimpleAdapters and Custom SimpleAdapters. I chose ArrayAdapters as I had to adapt a list of single items, such as CheckboxId, Price, etc.

Later I will upload the other required files required in the Git Repository. I found out that it was hard to produce individual web course works, as the classes are connected to one another. That is why I am going to upload the full project.