Lappeenrannan teknillinen yliopisto School of Business and Management

Sofware Development Skills

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LEARNING DIARY, MOBILE MODULE

LEARNING DIARY

27.07.2023

I kicked off the course by scrolling through the Moodle page and setting up the environment. I started with VS Code as instructed in the environment tab on Moodle. However, it turned out that VS Code wasn't actually necessary for this course. Moving on, I set up the environment for Android Studio. I'm actually quite pleased that this course utilizes Android Studio, as my prior experience with it was limited to a few instances during my bachelor's studies. Consequently, it is still quite unfamiliar to me. Setting up the environment was really easy as the wizards provided by Android Studio were quite efficient. Git and version control overall were already really familiar to me.

09.07.2023

Today, I completed both Part 1 and Part 2 of the exercise projects. They were quite simple, but they served as good reminders for the syntax I needed. In my bachelor's studies, I already covered all the topics from these parts in the "Olio-ohjelmointi" course. Working with Android Studio has been pleasant so far. Since Java is part of my workplace's stack, it feels very familiar to me. I also found the Android documentation to be well-written and helpful. Overall, I'm feeling confident with my progress.

One surprise was that each exercise video had its own project, and I initially thought they would be part of the same project. As a result, my initial commits from Part 1 won't be included in the final repository. To avoid any further confusion with Git, I've decided to create a new repository once I complete all the exercise projects.

During the projects, I noticed that Android Studio uses default themes without the Action bar at the top. This was different from what I saw in the exercise videos, so I manually added the Action Bars for Part 1 and Part 2. However, while writing this diary, I looked up how to change the default theme to include an Action Bar, and I plan to use that theme for Part 3 and the final project.

Today, I finished the final part of the exercise projects, which introduced some new features to me. The concept of "Adapter" was completely new to me, and the tutorial video didn't explain it well. However, I took the initiative to Google and understand it better on my own. The completion of all the exercise projects went without any problems. I did notice that the ListView component used in the course is considered legacy nowadays. It worked fine for me, but I believe the course materials should be updated to match the current state of Android development tools. There have been quite a lot of changes.

I created a public git repository called SDS-Mobile-Coursework. It contains two folders: Course Work and Course Project. In the Course Work, you'll find the completed exercise projects named Part 1, Part 2, and Part 3. The Course Project folder will soon include the project I'll be working on.

24.07

Today, I began working on my course project, which is a simple todo application for Android. The main features of the app include adding todos through a dialog and viewing their details in a separate view. Although the concept is straightforward, it encompasses all the essential elements of Android development.

To get started, I created a list view and implemented a dialog for adding todos. At this point, I haven't added any other functionalities yet. I learned about the ArrayAdapter, which was a useful tool for populating and managing the list view. Since todos are separate objects in my implementation, I couldn't use the ItemAdapter from the exercise projects, but the ArrayAdapter does the job perfectly.

25.07

Today, I completed my course project, building on what I started yesterday. I created a new view to show the details of each todo, allowing users to mark them as complete with a button. The app dynamically updates the todos, providing a smooth user experience. To manage the todos, I created a singleton class that I accessed from various activities.

The project may be simple in terms of design and functionality, but it has fulfilled its purpose for me. As I already have a permanent position in the field, I don't need this project for job applications. My main goal was to re-immerse myself in Android development, and I'm satisfied that I've achieved that objective. The project covers various aspects of Android development, and I now feel confident that I could work as an Android developer if required. Overall, I consider the project sufficient, and it showcases my abilities in different sub-areas of Android development enough. Of course, I could make it better, but I do not see any benefits in it.

I also recorded a video to showcase how the project works and I added compiling instructions to the readme.