Lappeenrannan teknillinen yliopisto
School of Business and Management

Sofware Development Skills

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LEARNING DIARY, Mobile MODULE

LEARNING DIARY

06.11.2024

Checked out the course page, requirements and environment setup. Watched the first part (introduction) of the course video. I have already worked with Android Studio previously, although I haven't used it in a bit. So following along and making sure that the setup worked and I got used to the interface again was helpful. I also setup a github repository and pushed my first commit there. I did have some trouble with my existing virtual device, it failed to boot up even though it was downloaded previously. I ended up just removing it and downloading it again and it worked.

After that I followed along the video and made sure that I got some of the 'muscle memory' back with this environment, did a basic calculator, with the interface and the back end to work it. Overall, it was a pretty smooth and a familiar setup in the end. With everything done, I had gotten my environment, version control, repo setup and familiarized myself again with Android studio.

06.11.2024

Started working and following along the second part of the course video. Made a second activity and implemented the ability to transfer there and pass along whatever information I might need. No major problems here, was pretty easy to follow along the video + experience.

My biggest headache came with the part of trying to access outside of the application, so trying to access google for example. I followed along the video, but when I tried to press the button to go to google, nothing happened. So, I ended up searching around a bit, asked ChatGPT and Google. Ended up finding this stackoverflow discussion, and at the end there was a piece of code to add to the AndroidManifest.xml file, apparently to allow some permissions/avoid restrictions. So, after doing that, it works just fine.

So, now I had a Main activity page, that had two buttons, one to go to another activity page, and also pass on other information. The second button was to access google from the app (or any other valid url).

07.11.2024

Today, started by following along with the 3rd part of the video, but stopped as I got a small idea of my own to make. I wanted to make the main activity screen open up and have a calendar in the middle. It would automatically display the current date and, with that information, I would fetch a Wikipedia summary of some random event that happened on that day (any year). This summary would then be displayed and, because of the google button implemented yesterday, I could also provide the user the ability to access that events Wikipedia page, in case they were interested.

First, I figured out the layout for the TextViews and luckily, AndroidStudio has the CalendarView widget, ready to be used. After figuring out the layout, I implemented the fetching function and the ability to listen for the date change from the CalendarView, which could then be used to call a new fetch and provide the new date to that function. Had some trouble with the Json parsing, but managed to figure it out.

So, after today, I had managed to implement my idea of showing a summary of a random event, via Wikipedia api, for the 'current' day and the ability for the user to choose a date. The google button was also modified to be able to get the link to the current events Wikipedia article, and thus redirect the user there after clicking on it. My next goal is probably to implement the second activity screen, where I would like to show all/many of the events for that day, using something like the recyclerView.

08.11.2024

Today, I started implementing by thinking about how I'm going to implement the second activity screen. My idea is that as the wikipediaFetch function retrieves the events for that day, I'd be able to store them all in some list and then pass that list to the second activity,

when the user clicks on the button. Since my initial configuration yesterday didn't support this, I had to do a little bit of refactoring. I implemented Event class, which holds each individual event. Then I added an ArrayList, that would hold an array of those events, and it would be populated by the fetch function. Then, I could pass that list to the second activity, with the implementation done yesterday.

Then, I had to deal with the recycler view implementation. It was a bit of a pain as the logic wasn't so familiar for me, but it ended up working fine after some time. With this done, I would be able to show each events summary and be able to let the user click the individual event, to let them access the Wikipedia page.

The styling and design has definitely been a hard part in this project. I'm not really great at designing and choosing colors/themes. That and the fact that Android Studio is quite a laggy software, which makes everything 10x worse, when trying to go back and forth between. I think my design is acceptable, but it would definitely still classify as more of a prototype.

Much of what I wanted to do with this project is done, I ended up spending quite a lot of time in these past few days, due to wanting to make a project of my own, but also because of bugs and annoyance from Android Studio, which ended up slowing me down. I also had to setup the environment for my laptop midway through, which brought a host of different issues, that just took extra time.