1. Android mobile application development is conducted with Android Studio which utilizes a pattern of Activities and a ViewModel architecture design. Android Studio uses an Android phone emulator that can run many different types of Android devices and Android versions.

1a. For my project, I used a Pixel 2 device.It's compatible with API 17

2. Development was a challenge for me since I wasn't familiar with any Android devices or development. I think the most challenging issues I faced were not understanding the different APIs being used and how certain examples online would be using incompatible APIs than mine which caused a lot of headaches. There was a period of time at the beginning that I wanted to give up due to trying to use the wrong API and having constant build failures.

I also had some challenges with getting to know the Android emulator and how to appropriately set it up for my project. I had issues with the time being different and not matching my system clock so setting the alarms was inconsistent.

3. I was able to overcome a lot of the problems with the API version by using the exact API used in the plain ol' notes app tutorial. Once I followed the video and copied his setup verbatim, I was able to properly build my app.

I was able to correct the time issues on the Android emulator by remembering to explicitly set the clock to my current time. I had to do this every time the emulator restarted.

4. If I did this project differently, I would definitely not try to use a different API than the one used in plain ol' notes. Without knowing anything about Android development, it lead to too many unknown errors that I wasn't able to figure out myself.

I would also probably finish out the entire course edit section, before moving on to the assessment section so that I could copy and paste code instead of having to fix issues in both layouts at the end.

5. Emulators are used to mock a mobile device in order to run and debug your mobile application. Being a Mac/iPhone user, this allowed me to build the project and worked pretty well throughout. As far as pros and cons with an emulator vs a development device, I'm unable to really speak to that as I do not own an Android device so I was unable to test outside of the emulator.