Week 5 Blog

First of all, I read two research papers to increase the knowledge about different domains of contact tracing using Bluetooth devices. These are the link to their wiki.

1) **Adding Location and Global context to the Google/Apple Exposure Notification Bluetooth API**

   https://github.cs.adelaide.edu.au/2020-Mobile-and-Wireless-Systems/CovidGuard-F/wiki/LOKESH-PATHAK-GAEN-API-paper

2) **A Study of Bluetooth Low Energy Performance for Human Proximity Detection in the Workplace**

   https://github.cs.adelaide.edu.au/2020-Mobile-and-Wireless-Systems/CovidGuard-F/wiki/LOKESH-PATHAK---A-Study-of-Bluetooth-Low-Energy-Performance-for-Human-Proximity-Detection-in-the-Workplace
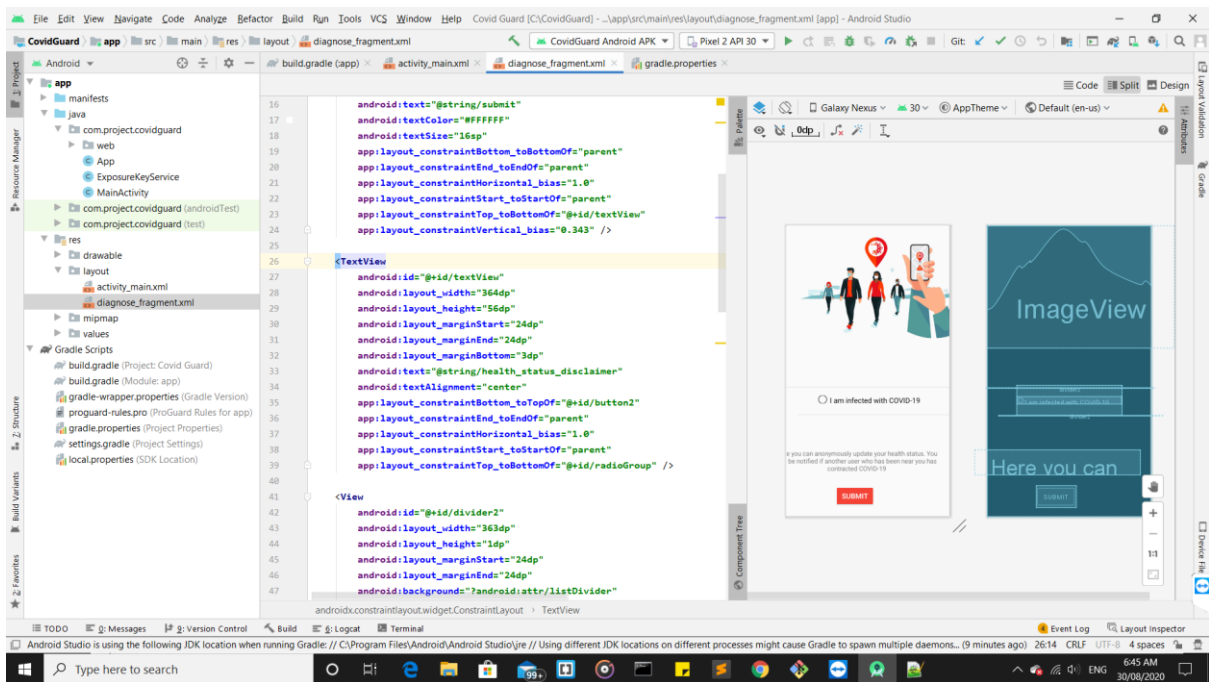
Apart from that, the work assigned to me was to remove the user interface issues that were found when the app was installed on devices of different sizes.
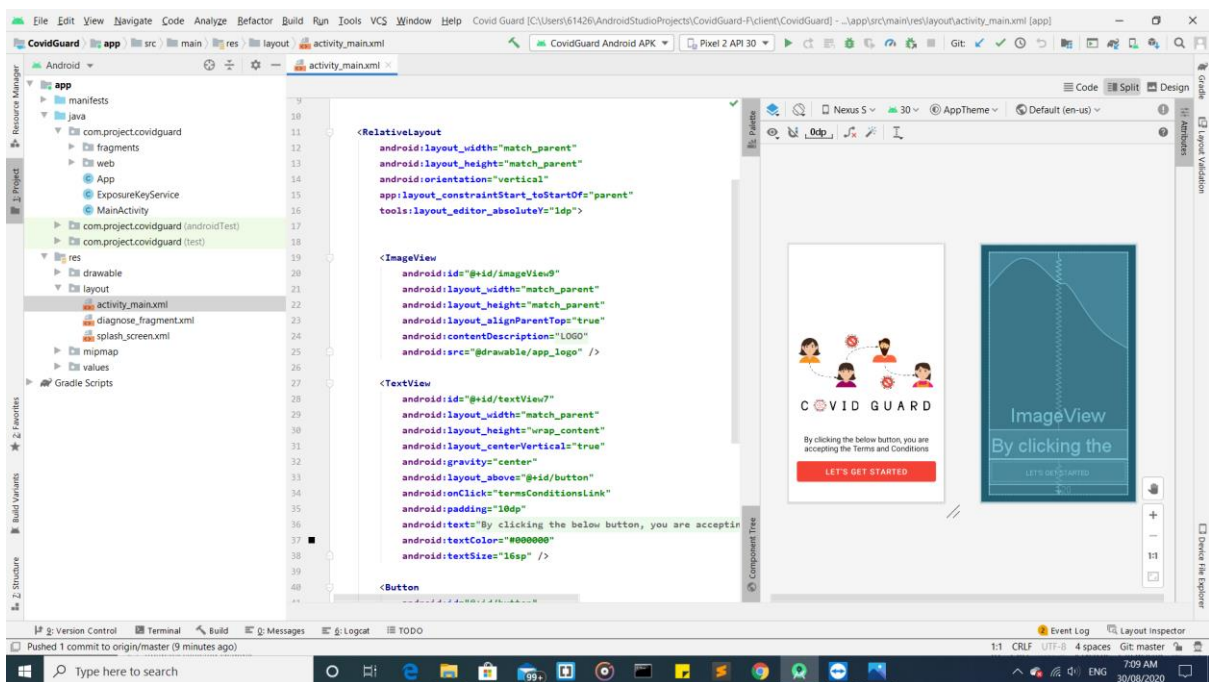
The issues were:-

- Cropping of the text
- Wrongly scaled images
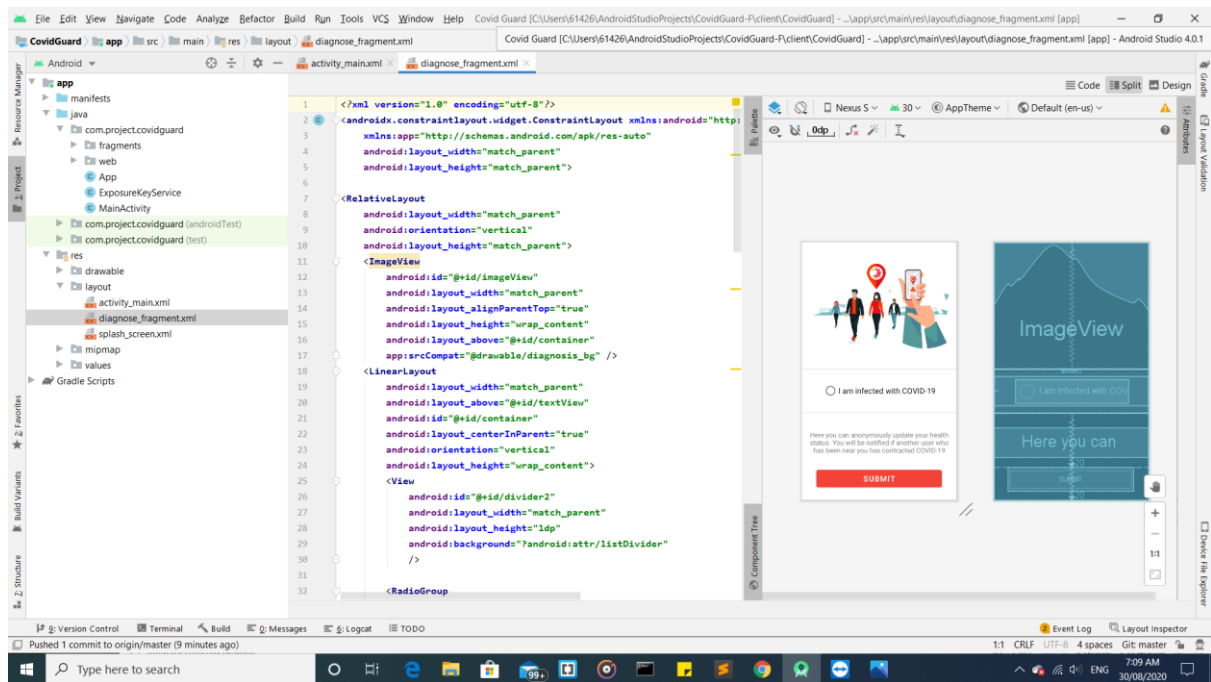- Variation on the components position on different devices

Before images of the UI:-
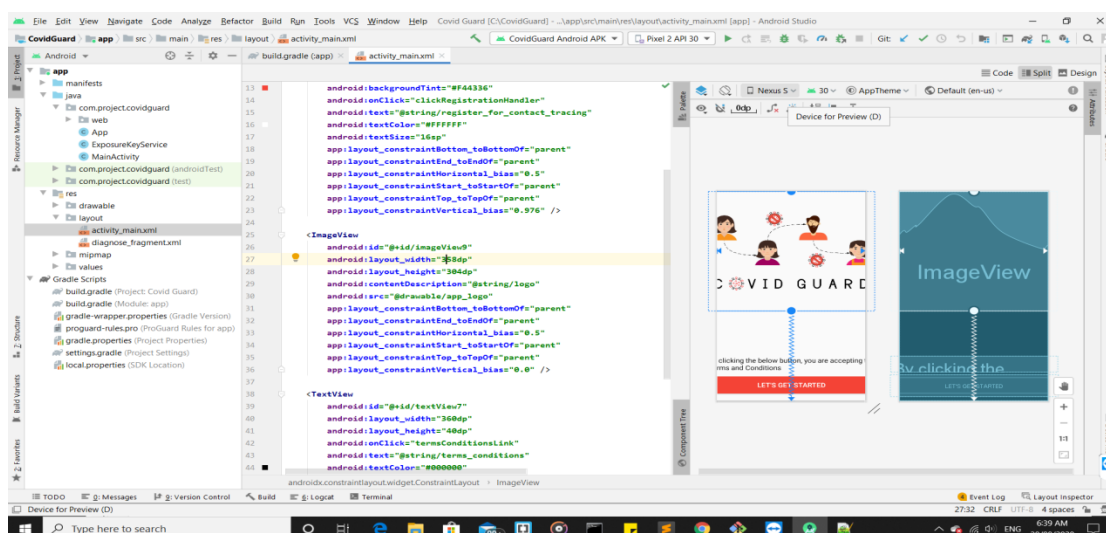
After fixing the issues:-

2) Another important UI design change was to introduce material design to make the app more responsive, have animations and to give a modern look to it.

https://material.io/components

Out of the above components, I have added the animated button and radio button property to the app.

The functionalities were tested by employing to devices as low as 4 inches to 6.5 inches to make the app uniform and responsive.

Plan for next week

1) Install popular contact tracing apps to observe their user interface and incorporate the best elements from them.
2) Perform static analysis on the app using mobSF and dynamic analysis using Flowdroid.