## **Weekly Blog 12**

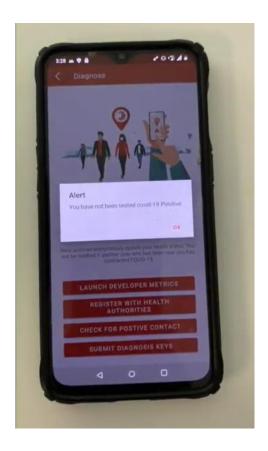
As this was the final week for the course, I worked with the team members to test the application in various scenarios for creating the demo video and presentation. All the scenarios which were tested in the week are:-

1) Testing whether a phone receives RPIs even when there is no other user around.



**Result:** - Diagnostic metrics of the app shows the toast message that there are no RPIs being received

2) Testing if non-positive users can upload the TEKs or not

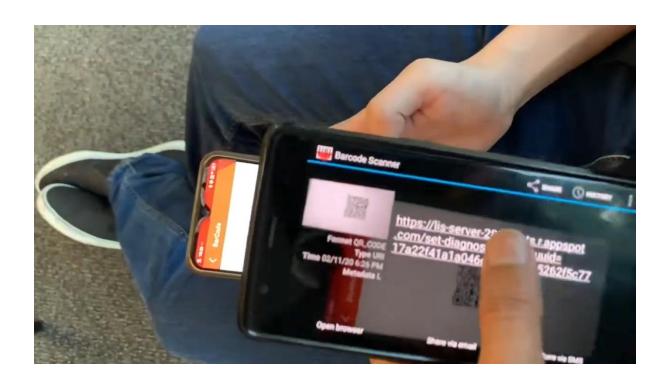


**Result-** If the user is not marked positive by the health authorities, he/she cannot upload the TEKs. This functionality was implemented by me last week, two APIs are called to check and change the patient status by the health authorities.

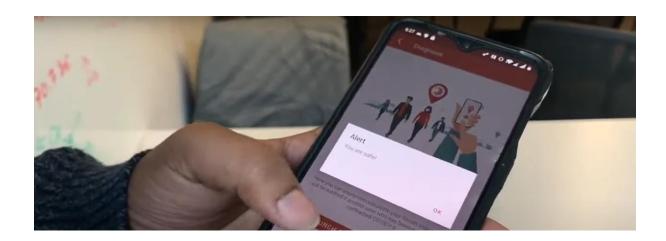
**Pull request**- <a href="https://github.cs.adelaide.edu.au/2020-Mobile-and-Wireless-Systems/CovidGuard-F/pull/77">https://github.cs.adelaide.edu.au/2020-Mobile-and-Wireless-Systems/CovidGuard-F/pull/77</a>

3) Distance between users is more than 1.5 metres



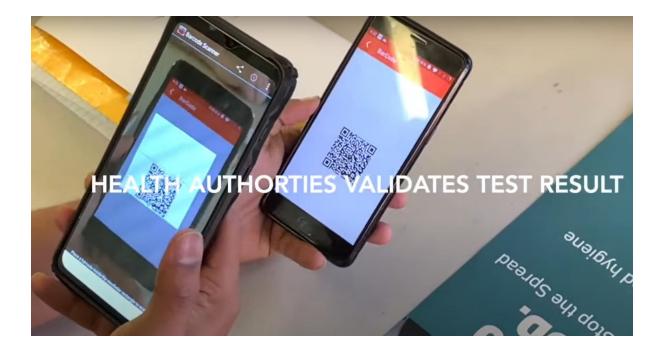


One user is marked positive



Second user is safe if the distance is more than 1.5 metres

4) Health Authorities can mark a user positive using the unique barcode created upon registering



Unique Barcodes are created for each user and this barcode allows the health authorities to change the status of the patient.

Commit- https://github.cs.adelaide.edu.au/2020-Mobile-and-Wireless-Systems/CovidGuard-F/commit/4e88f15a8a807d630c39a24dff89c34c3606e772

Testing of the apk- MobSF was run on the application to perform static analysis. The risk score was 6.5 and moderate, and the detailed results will be shared in the research paper

## **Future Work**

- 1) Automating the positive contact message
- 2) Solution to the scalability in the server part
- 3) A fully functional health authority web app

## **Acknowledgment**

We would like to thank our professor, Damith Ranasinghe and our supervisor, Zach Wang for their consistent support and guidance in making this project happen.