For this sprint we tried to reorganize how we were to split up this sprint to ensure we were able to meet implementation goals. At the start of the sprint, Bryan was going to implement the SQL database, Avery was going to handle the login page/credentials as well as assist the database implementation, and Paul and Pete were going to set up our GUI's for all of our activity screens. After a few days of work, Bryan had a rough SQL database working through Google Room. Pete had managed to set up a database via Firebase, and his implementation was chosen as it was far less abstract as well as provided online storage for the database so it would be accessible across multiple users. In the end Pete worked mostly on backend Firebase implementation to get data pulled from and sent to our online database via our Android application. Avery stuck with his original task of setting up our login page, Paul worked on the front and back end for the Donation page and Bryan worked on the front and back end for the Staff page.

By the end of the sprint Avery had linked his login page to an online authentication database with email addresses and encrypted passwords, as well as implemented a "forgot password" activity that would allow users to receive an email to reset their password if forgotten. Pete successfully got data pulling and pushing from our database and implemented basic features to test that this was updating correctly in our application. Paul and Bryan set up object class files for donations and workers as well as implemented recycler views displaying cards for each object. For the staff page, Bryan also provided an implementation for displaying a users profile picture as well as expanding the card when clicked to show further information about a given employee.

We encountered a few issues such as Bryan struggling to get the SQL database working until Pete had found a simpler implementation, Bryan and Paul struggling to get well formatted cards to display on their respective screens as well as being scrollable, and Pete had a lot of

trouble with the learning curve for the FireStore database, which he managed to overcome with multiple hours of troubleshooting and dozens of open tabs. Avery seemingly had very little trouble with his implementation, we are all glad to say. Test cases also gave us all much more trouble during this sprint as we were not writing tests for things like pulling from a database as well as recycler and card views.

Overall we accomplished most of what we wanted to during this sprint, which we all feel will be the hardest. Most of the back end work is finished on all of our parts so during the third sprint we will spend the first half focusing on merging all of the different features we have implemented into one final product. By the end of sprint 3 we will have Pete and Avery's database features working seamlessly with Paul and Bryan's GUI displays of the data. Additionally we will touch up the aesthetic of our application so it looks less like the stock android skeleton.