	**ISCG 7424** **Mobile Software Development** **Semester 1, 2020**	**3**
School of Computing, Electrical and Applied Technology	**Project Proposal**	
Assignment Three **Mini Project**	**Team Members:** **Abdullah Raza (1502734)** **Lakshay Sethi (1487100)** **Wandan Li (1525797)**	

Assignment Proposal

1. **Your selected mobile application, its name, its origin and why you want to develop that application.**

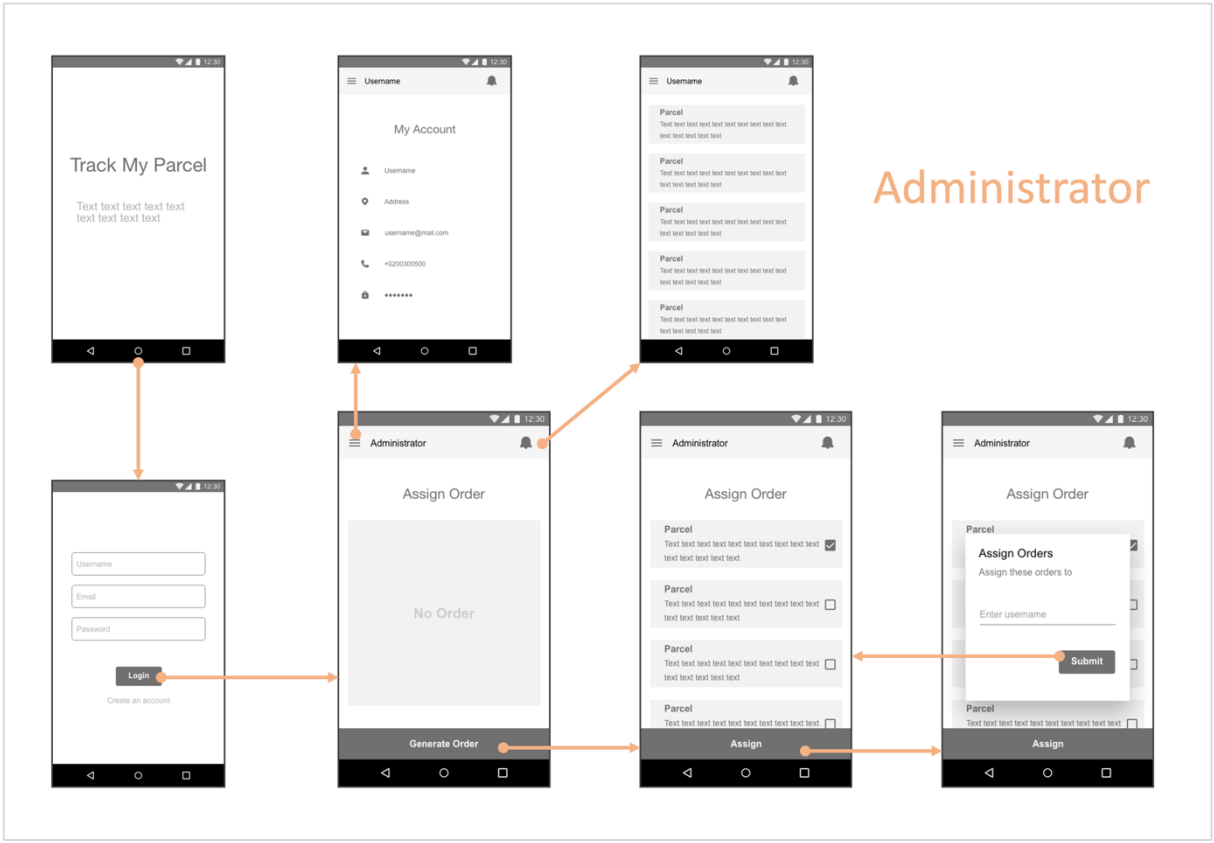
   We have selected the TrackMyParcel app. We want to develop this app which facilitates precise package tracking as online shopping is taking off these days and delivery services are a key part of daily life. This app increases the users experience and makings tracking their packages extremely convenient.

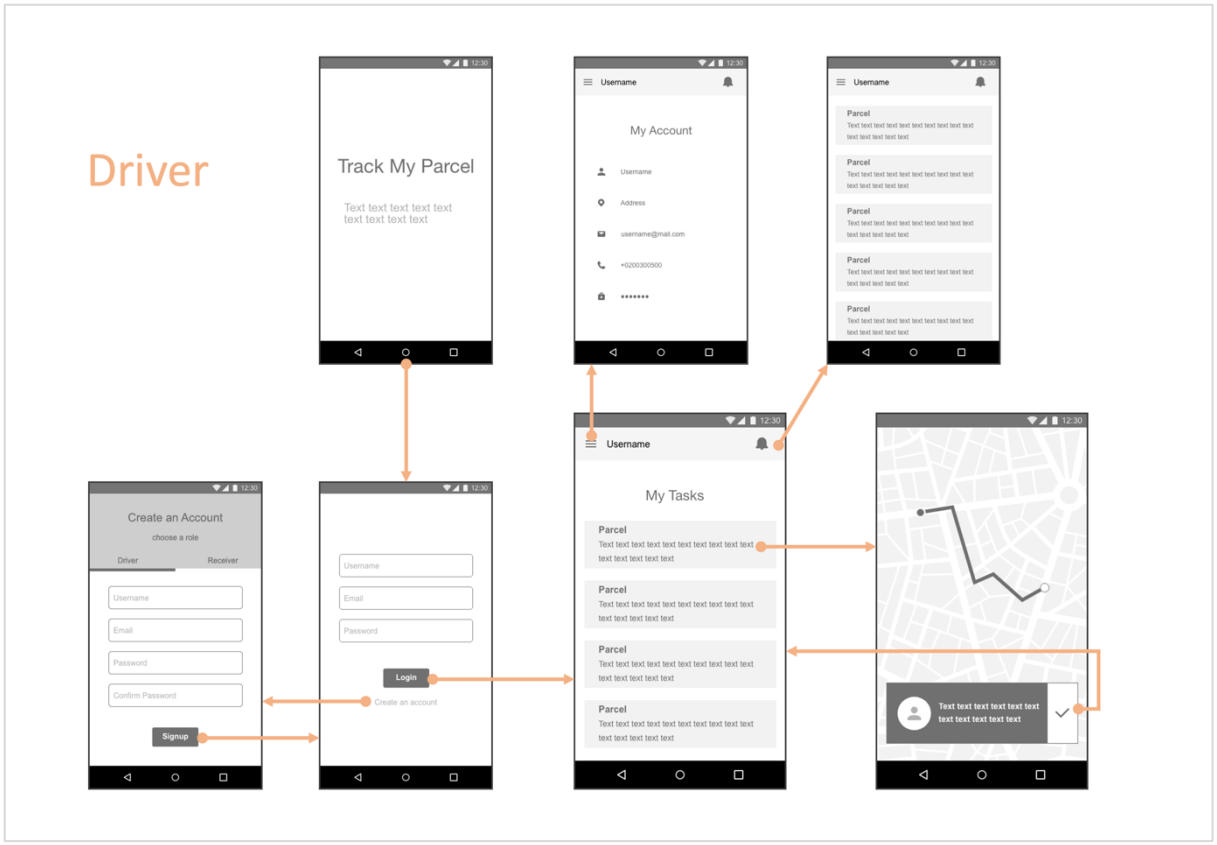
2. **Architectural design for the application**

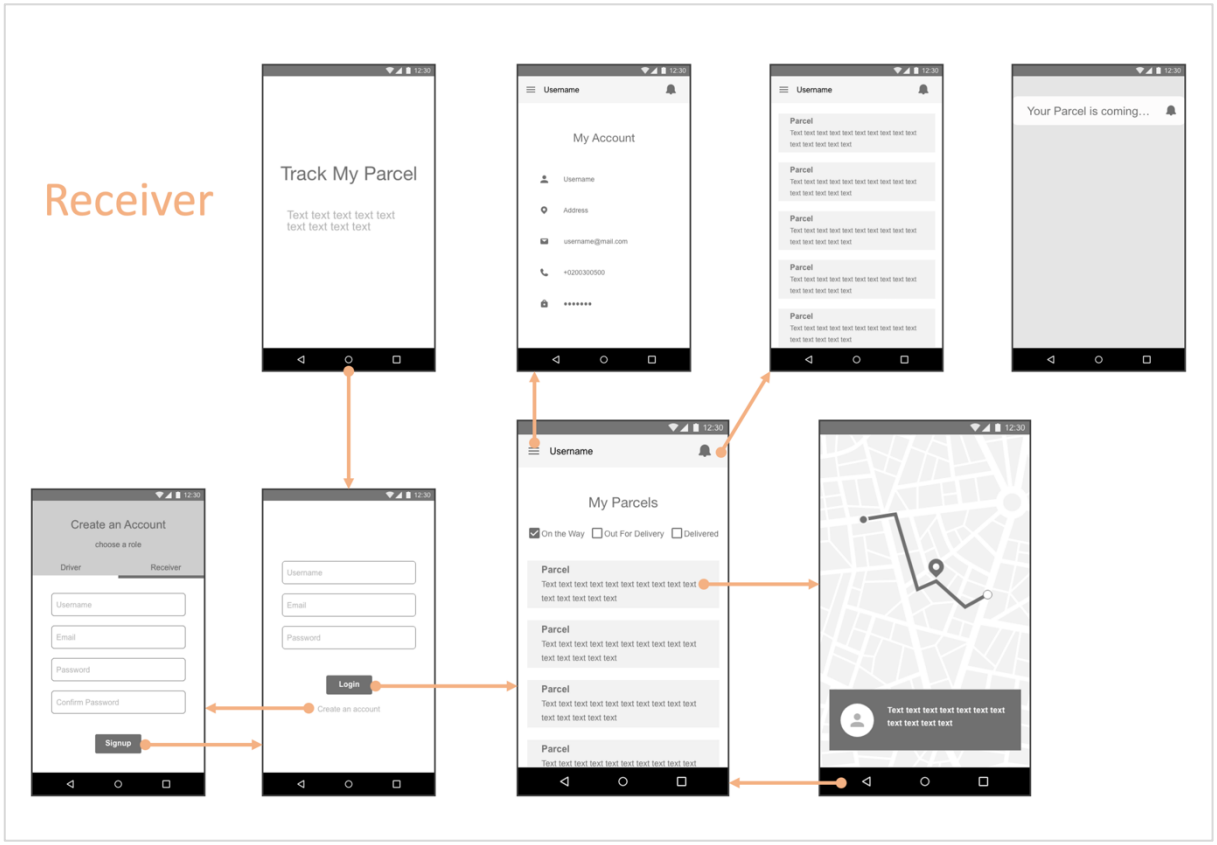
   Our application will make use of the following:
   - Firebase database
   - Google Maps API
   - Images API
   - GPS sensor
   - Email/WhatsApp API

3. **Initial implementation done for the application so far**

   We have created the Wireframes:




Driver
Track My Parcel
Text text text text text text text text
My Account
Username
Address
username@mail.com
+0200300500
Parcel
Create an Account
choose a role
Driver
Receiver
Email
Password
Confirm Password
Signup
Login
Create an account
My Tasks
Text text text text text text text text


Receiver
Track My Parcel
Text text text text text text text text
My Account
Username
Address
username@mail.com
+0200300500
Your Parcel is coming...
Create an Account
choose a role
Driver
Receiver
Email
Password
Confirm Password
Signup
Login
Create an account
My Parcels
On the Way
Out For Delivery
Delivered
Parcel
Text text text text text text text text

4. Thoughts on the complications in developing the application

- Implementing recycler views in multiple activities and passing data between them.
- Sending location data over the internet every x seconds from one device to another
- There is not enough time to implement all the functionality at the standard we would like, some sacrifices have to be made

5. Thoughts on acquiring knowledge and skills in order to complete the application

- We will need to revisit previous class lectures to fully understand and implement Firebase.
- We will need to learn how to send data over the internet.
- We need to learn complex recycler view implementations.

6. Thoughts on easy Android/Kotlin/Java concepts that you can use for your mobile application

We will use the following easy to use concepts:

- Object oriented programming.
- Event handlers
- Material design

7. Thoughts on any difficult Android/Kotlin/Java concepts that you may need to learn to complete the application

We will need to learn and understand how to use the MVC, MVP and MVVM design patterns and decide which is suits our application the best.

8. Achievability

We believe we can develop at least 80% of the proposed features at a functional level.

9. Risks faced in developing the application in the time frame available

We have not accounted for things going wrong or things that may be out of our control.

It is possible that the technologies we choose will not be fit for purpose and this may cost us time.

We may have incorrect assumptions about the technologies and time estimates.