DEPARTMENT OF COMPUTER AND COMMUNICATIONS SYSTEMS ENGINEERING

# SECURED IN CAMPUS RIDE-SHARING

## INTRODUCTION

Among the ideas of sharing information, ride-sharing is one of the promising growing trends. Public transportation in UPM are provided only at a specific time, and it does not cover the whole campus, thus the time taken to travel within campus is high. A mobile application has been designed to coordinate and use MyCOMS. However, the previous application is not deployed currently, and several weakness have been found in the application. This application is built by using Android Studio. Google Maps API is used to obtained location information of both MyCOMS and user. This application is able to locate real time location of MyCOMS, place and manages booking of the vehicle. Fuzzy logic is used to predict the station level demand with simulation of data which includes location of station, temperature of the day, time of travel and population of station.

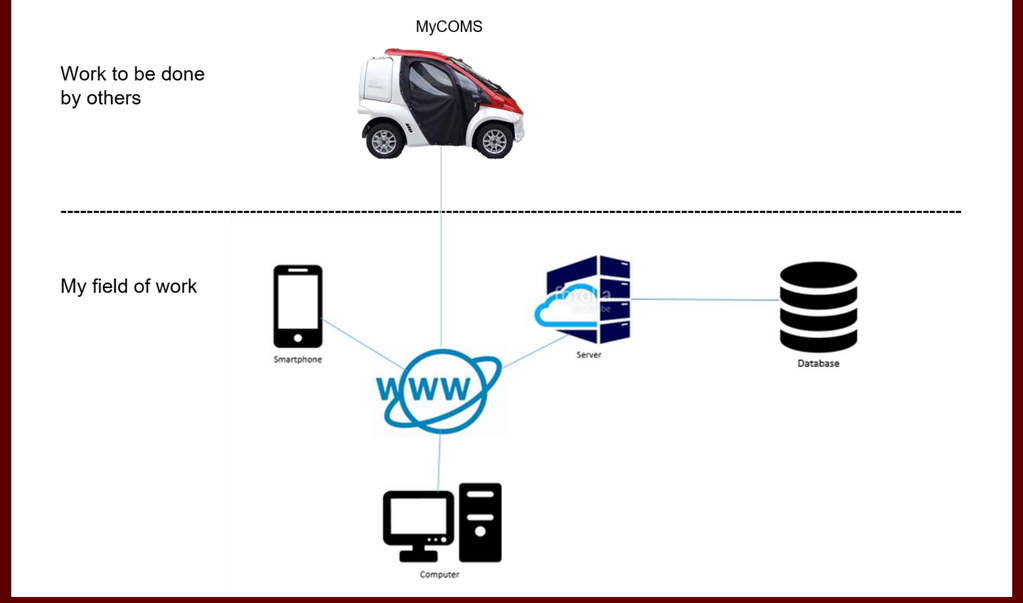
## AIM AND OBJECTIVES

The aim of this project is to develop a fully working secured in campus ride-sharing application.

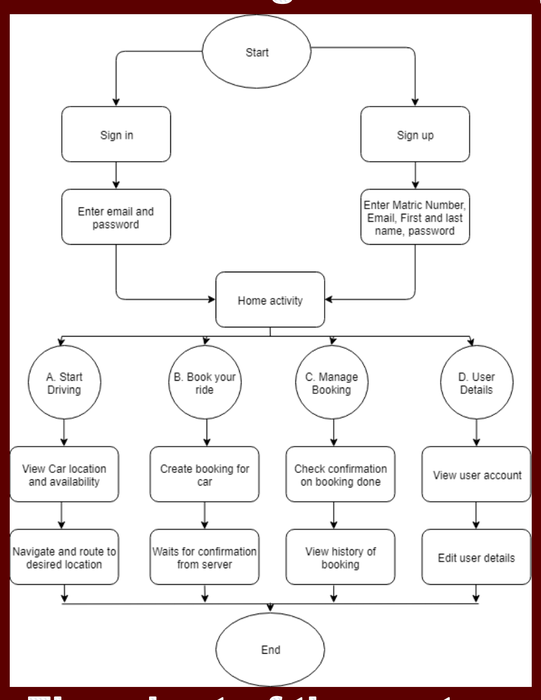
The objectives of this project are:

1. To design and create an EV ride-sharing application in UPM Serdang campus.
2. To predict station level demand of EV.
3. To evaluate the system design performance.

## METHODOLOGY

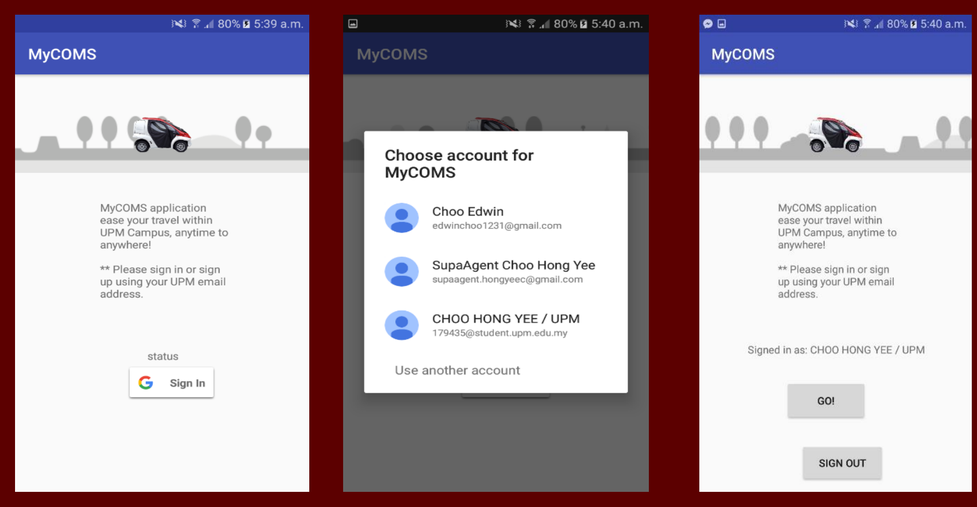



System block diagram of the system

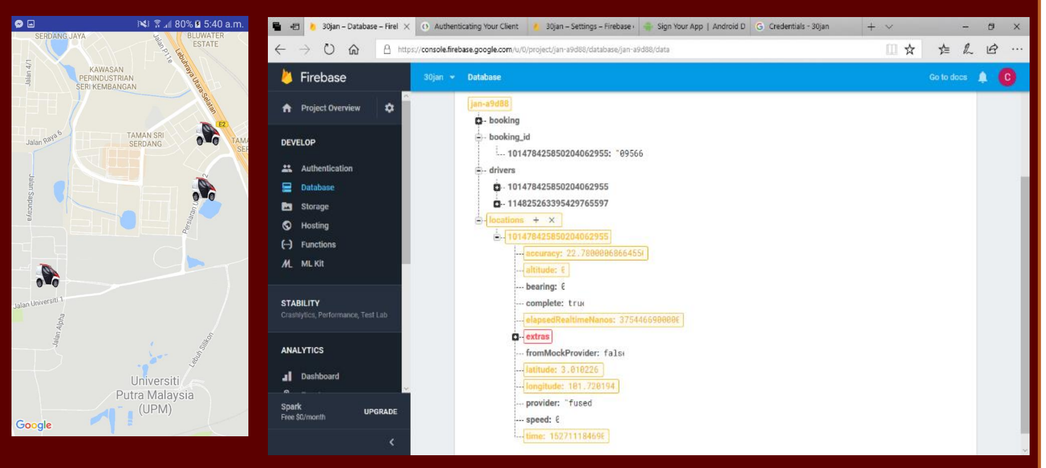



Flowchart of the system

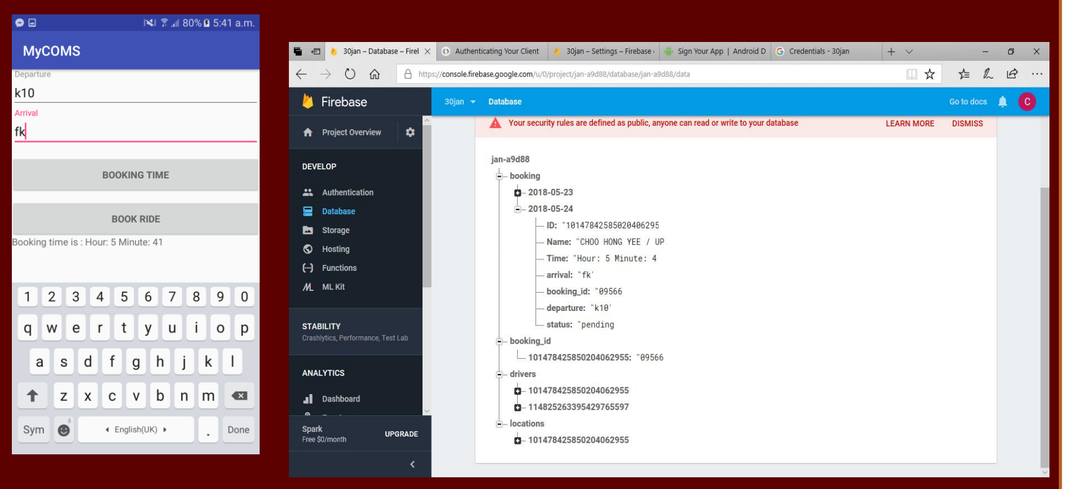
## RESULTS



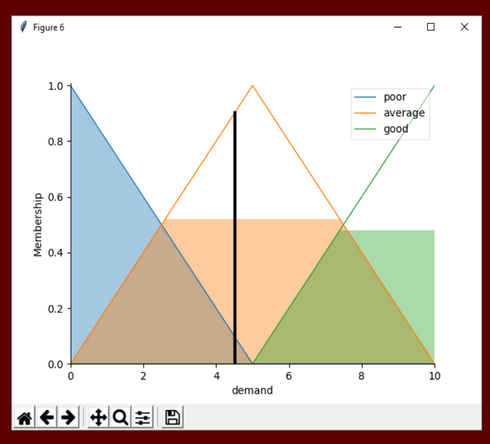

Authentication of the system



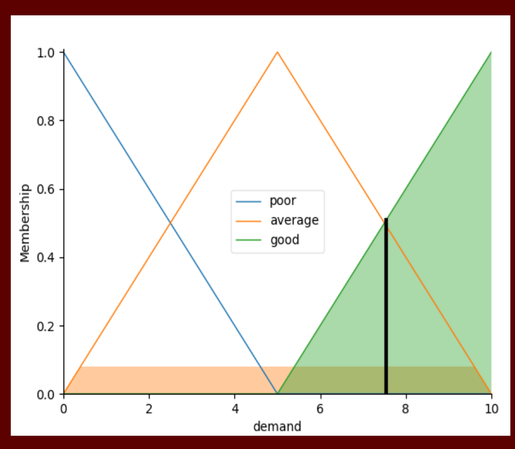

Location tracking




Booking management




Case 1: Fixed input




Case 2: Demand level > 7.5

## CONCLUSION

In conclusion, the fully workable Android application is developed for MyCOMS is capable of providing convenience and resolving part of the issues in commuting in campus for UPM students and staff.

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