PLECTR
A mobile platform for finding campus tutors on demand

Andrew Lewis '19 | Advisor: Professor T. Miyazaki
Department of Computer Science, Trinity College

Motivation

As it stands, students lack access to real-time information regarding the scheduling and availability of tutors. Rather, they rely on static information pertaining to designated tutoring centers and have no flexibility around scheduling sessions. Likewise, tutors at these centres are limited in their availability and lack the ability to hold sessions around the clock at their pace. Lastly, there is no way for students to give feedback, or access information about the types of tutors available to them. This system has room for improvement with regards to:
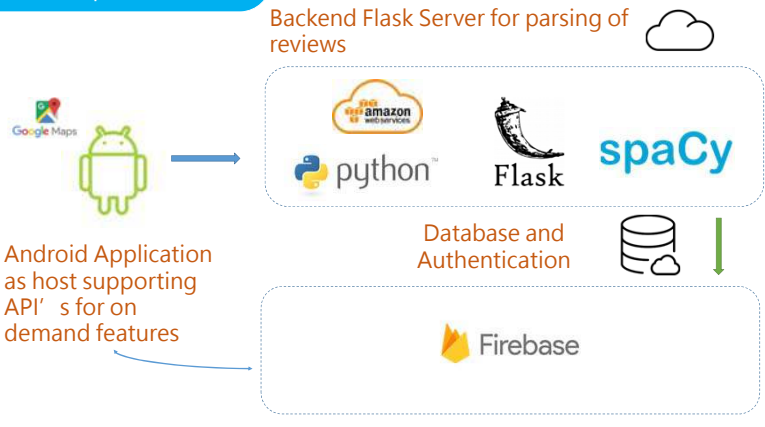
Information   Scheduling   Feedback

Components

Backend Flask Server for parsing of reviews

Google Maps

amazon web services   python   Flask   spaCy

Android Application as host supporting API's for on demand features

Database and Authentication

Firebase

Solution

- Create Android app with integrated map and location services to render a real-time view of tutors within the campus vicinity

- Collect data about tutors attained from student reviews and categorise feedback into meaningful attributes

Features

Data driven tutor profiles

Sentiment extraction and categorization of reviews from students to rank tutors
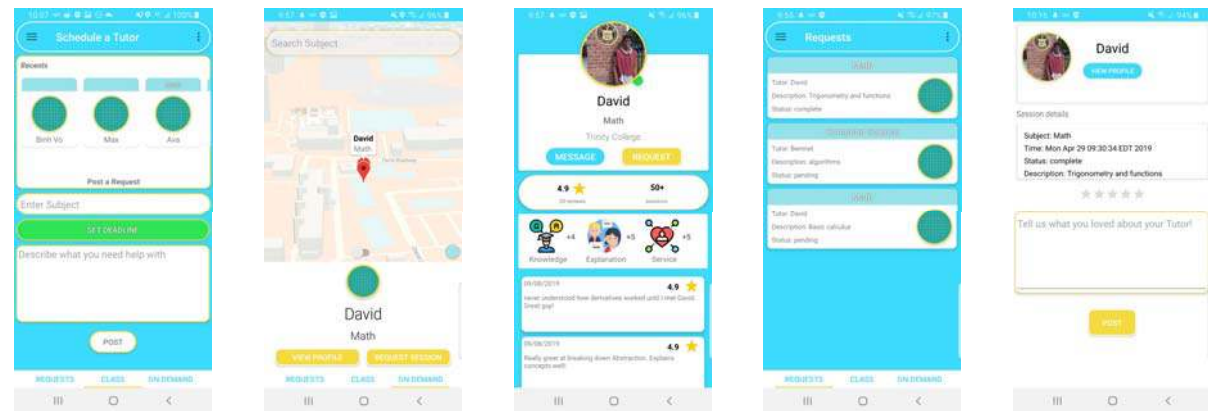
Knowledge   Explanation   Service

On demand scheduling

Real-time geo querying for a live map of tutors within campus vicinity

App Layout

| Home screen with frequently contacted tutors | Live map with tutor availability on demand | View tutor profiles, real-time status and ratings/reviews | Keep track of scheduled sessions | Leave a review after a session |