



# Course Project

## Project Proposal

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The CT FastTrak Application will be used by any user looking for the nearest bus stop to where they are and the fastest route to get to where they need to be. This application will be displayed via an android mobile application that will display the CTFastrak route map along with all of the bus stops via real-time data feeds in GTFS-realtime. This data is presented through data feeds which includes static schedules and service data using an open standard. The data feeds are broken down into categories:

- Trip Updates, which is trip progress and arrival/departure predictions.
- Vehicle positions, which has the real time vehicle position information
- service alerts
- Combination of all of the above three.

The application will identify all buses on the map and stops with all the information pertaining to the next few approaching buses. The user's current location on the map will be given to the system and the system will give back a recommendation for the nearest bus stop offering the fastest arrival to the destination. This revolutionary system will help any user looking for a short route to get from route a to b on a tight schedule.

The architecture of the CT Fastrak application will consist of a user facing GUI on the user's device and a back end application on a server. The GUI will request information from the backend and display it to the user. The backend will take the user's requests, information from CT Fastrak's developer website and google maps

and perform the necessary route calculations. This type of architecture will prove to be very beneficial to the user because of the ease of access of information by the backend schedule display. The simple GUI will have mainly drop downs with a submit button and a clear map showing just where everything is.