Transportation Tracker

Application Overview

Making it to the bus stop on time can be a challenge if you are running late. It's always hard to tell if you show up after the bus already left, or if it's too cold out, you're waiting until the last minute to go outside.

Transportation Tracker helps users see where the busses are on their routes so that a Watcher knows when to go out to the stop. Route Administrators manage bus routes in the system while Route Watchers watch the bus travel along its route on the map. It even has a private route component so that only authorized users can view the details of a bus route.

FOR: Google Maps API, WebSockets, API

Users

| User Type | Description |
|---------------------|---|
| Route Administrator | A route administrator sets up all bus routes in the system. |
| Route Watcher | A user becomes a route watcher once they log in and are invited to view one or more private routes in the system. |
| Anonymous User | An anonymous user is capable of viewing the details for any public route in the system. |

Minimum Viable Product

The following User Stories are the functionality required to build the "Minimum Viable Product".

All must be completed in order for the project to be successfully completed.

Register

As a user of the application, I can register so that I can login and track routes that I care about.

A user provides at least the following information upon registration:

- E-mail address
- Password
- Phone number

Login

As a user of the application, I can login so that I can see the routes I care about.

Create a Route

As a route administrator, I need the ability to create a transportation route.

A route consists of:

- a start time and point
- way points
- an end point

Designate a Private Route

As a route administrator, I need the ability to designate a route as private and invite users to have permission to see it.

Edit Sharing Permissions

As a route administrator, I need the ability to remove users from the share list and disable their access.

Edit a Route

As a route administrator, I need the ability to modify an existing route so that I can add or remove waypoints.

Display Live Route

As any user of the system, I need the ability to see a map that displays an active bus route and the location of the bus on that route.

Optional Features

The following User Stories are ideas for optional features that can be added to the application after all MVP functionality is complete.

Invite Route Watcher to System

As a Route Administrator, I can enter an email address on a route to invite a new Route Watcher to register and be added to this route.

Receive Text Message Alert

As a user of the system, when a bus reaches a waypoint that I care about, I want to receive an SMS alert message so that I can start getting ready.