Product backlog

Dan Chiem, Patryk Ilinski, Edmir Alagic
Team Unique Name

	User Stories	Size
1	**As a commuter, I would like to search for my destination so that I can get the best bus route.** Precondition: checks if commuter inputs a valid address. Postcondition: the address real and is within CTFastrak.	**8**
2	**As a commuter, I would like to choose my bus route so that I know what route I am using.** Precondition: the bus route must exist. Postcondition: making sure the bus route is not cancelled.	**8**
3	**As a commuter, I would like to view arrival and departure predictions so that I know when a bus is coming.** Precondition: bus must exist and going to a bus stop. Postcondition: getting estimate time of arrival to a bus stop.	**2**
4	**As a commuter, i would like to cancel my bus route so that i can choose another one**. Precondition: user must have an selected route for this option to appear. Postcondition: the route is not selected by the user anymore.	**1**
5	**As a commuter, I would like to interact with the bus stops on the map so that which buses are going to stop by that bus stop.** Precondition: bus stop must exist on the UI. Postcondition: retrieving information about incoming buses.	**5**
6	**As a commuter, I would like to view approaching buses so that know what buses are coming on a selected bus stop.** Precondition: bus stop must exist. Postcondition: the bus stop is constantly getting information about incoming buses.	**2**
7	**As a commuter, I would like to view a bus route so I know where the bus is going.** Precondition: the bus route must exist. Postcondition: displays its next stops.	**2**
8	**As a commuter, I would like interact with bus so that i can look at information about the bus such as arrival times and delays.** Precondition: bus on the UI must exist and on a route. Postcondition: constantly updating the arrival times and delays	**5**
9	**As a commuter, I would like to view delay information so that i know if a bus is going to be late.** Precondition: the selected bus must exist and currently on a route. Precondition: sending information about delay, such as how long the delay is.	**2**
10	**As a commuter, I would like to receive alerts so that I know of any changes that occur.** Precondition: The route is what the commuter selected and a condition sets off the alert. Postcondition: commuter acknowledged the alert.	**3**

11	**As a commuter, I would like to receive a "bus is here" alert, so I know when the bus arrives.** Precondition: the route is selected by commuter and selected bus stops at the bus stop. Postcondition: commuter acknowledged the alert.	**2**
12	**As a commuter, I would like to receive " bus is delayed by # minutes" so that i know what time the bus would arrive at my selected bus stops.** Precondition: the route is selected by commuter arrival time is delayed. Postcondition: commuter acknowledged the alert.	**2**

Total story points = 42.
Average points per sprint = 14.

User stories for the first sprint

Before any of the user stories can be accomplished during the first sprint we need to create a large portion of the back end of the web application that retrieves the JSON data, parses it, and begins to make sense of it. We also need an initial implementation of the front end that the user will interact with (which we have mostly made). Once we have all of the data parsed and the UI created, we can begin implementing each of the user stories below:

3. As a commuter, I would view arrival and departure predictions so that I know when a bus is coming. Size = 2.

5. As a commuter, I would like to interact with the bus stops on the map so that which buses are going to stop by that bus stop. Size = 5.

6. As a commuter, I would like to view approaching buses so that know what buses are coming on a selected bus stop. Size = 2.

8. As a commuter, I would like interact with bus so that i can look at information about the bus such as arrival times and delays. Size = 5.

After these user stories have been implemented, we will have a basis for the creation of routes which is what our whole application revolves around. Once we can create a route for a user and track their journey throughout this route, we can grab and display all of the information (in the form of ETA's/delays/arrivals/etc) from the JSON data and make sense of it! We will also have the basis of of the UI such as the map and user panel (information display, user input will be added at a later sprint), and will be able to interact with buses and bus stops to get information from such as upcoming buses to a bus stop, delay and arrival times of buses. The first sprint is

to get the basic functionality of displaying information from the CTFastrak website and must be done before implementing the algorithm of finding the best route to a destination.

Total size for first sprint = 14.

Our goal by the end of the first sprint is to have a UI similar to this model: