# Project Title: CT Fastrack Website

Deliverable Name: Product backlog

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#### **Refined User Stories**

#### 1. Check User's current location-

*User Story:* As a passenger, I want to identify my current location on the Map. So that, I will have information about the distance from my current location to the bus stop and also from the bus stop to the destination.

*Precondition:* User should provide source location.

Postcondition: User current location should be displayed on a map.

Breakdown: No further breakdown.

#### 2. Locate Nearest Bus stop-

*User Story:* As a passenger, I want to identify nearby bus stops based on my current location and any given location. With this feature, I will come to know how far the nearest bus stop is and accordingly I can plan my start time and commute to the bus stop.

*Precondition:* User's current location should be identified or desired valid location should be given as input.

Postcondition: Bus stops should be displayed on the map

Breakdown: No further breakdown.

#### 3. View Trip route-

*User Story:* As a passenger, I want to visualize the route and identify all the bus stops where the bus will stop on that route. Also, this feature will provide additional information like travel distance and travel time so that I can plan further commute at the destination location.

Precondition: User should provide valid source and destination.

*Postcondition:* System should display route and display all bus stops on maps for the chosen route.

Breakdown: This user story is further broke down to

• Identify the bus stops on the route chosen

Display travel distance

Display travel time

#### 4. View Bus schedule-

*User Story:* As a passenger, I want to view all the bus schedule. So that, I can plan when to start. With this feature, I can get all current and future schedule of a bus.

*Precondition:* User should know which bus schedule they are going to search. Valid bus route (i.e. bus route number) should be provided

Postcondition: Only current and future bus schedules should be displayed

Breakdown: No further breakdown.

#### 5. View Map-

*User Story:* As a passenger, I want to view routes on the map, real-time bus locations, and stop locations. So that, I can see exactly where the bus is on the map in real-time and helps to plan the trip accordingly.

Precondition: No precondition.

Postcondition: Map has been changed is the post-condition.

Breakdown: It would be broken down into two, zoom in/zoom out.

#### 6. Schedule of next few buses at a bus stop

*User story:* As a user, I want to track the next bus arrival times. The transit website provides dynamic predictions of the next bus arrival time at each stop. That really eliminates the odd of waiting for the bus at a bus stop.

*Precondition:* User should identify the Bus stop.

Postcondition: System should display next 3 buses.

Breakdown: No further breakdown

## **Story Size**

Story Number	Story Name	Story size
1.	Check user's current location	3
2.	Locate nearest bus stop	5
3.	View trip route	8
4.	View bus schedule	2
5.	View map	3
6.	Schedule of next few buses at bus stop	3

Total product backlog = 24 points

### **Construction of user stories**

### User stories to implement during the first iteration

Story Number	Story Name	Story size
1.	Check user's current location	3
2.	Locate nearest bus stop	5

### Description of Functionalities Used in the first iteration

During the first iteration, we will start with the basic functionality of the application. First of all, we will implement the User Story Check User's current location (1) and finally, Locate nearest bus stop i.e. User story (2).

After this iteration, there would be an Application through which User could see his/her current location. Also, User would be able to locate the nearest bus

stop from his current location and all these functionalities will be implemented with the help of JSON and Google Map API.

#### User stories to implement during the second iteration

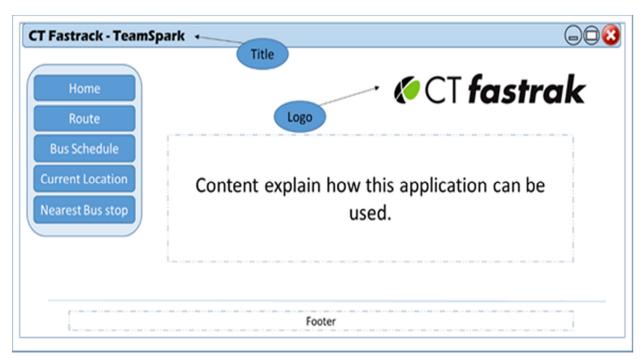
Story Number	Story Name	Story size
3.	View trip route	8

#### User stories to implement during the third iteration

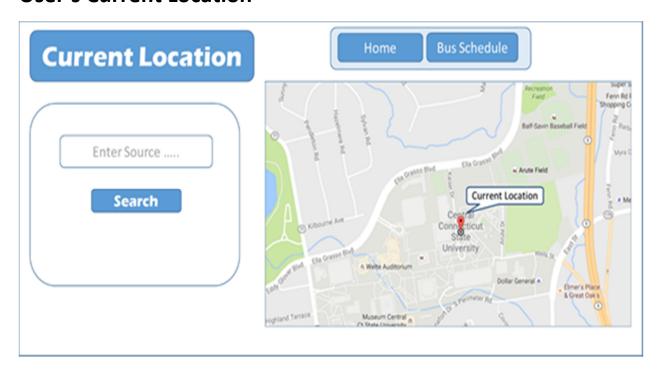
Story Number	Story Name	Story size
4.	View bus schedule	2
5.	View map	3
6.	Schedule of next few buses at bus stop	3

## **User Interface Design/Sketches**

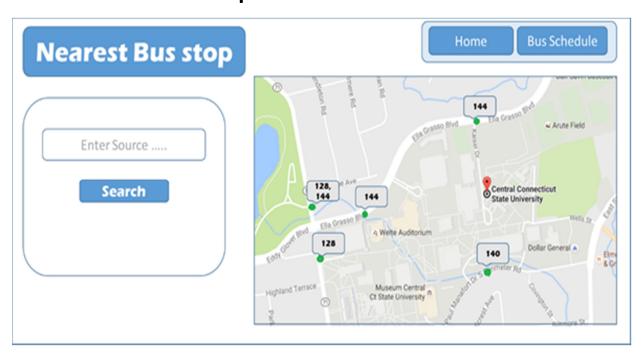
## **Home Page**



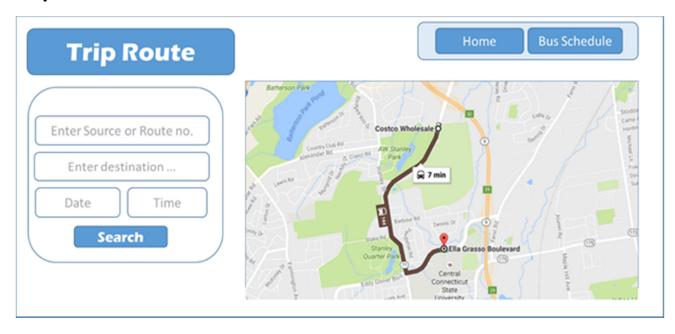
#### **User's Current Location**



## **Locate Nearest Bus Stop**



## **Trip Route**



## Schedule of next few buses

