CS530 Software Engineering Group Project

‘CTFastak Website Iteration Report 2’

Dt: 11/20/2016

Supervisor: Dr.Stan

Team: Scrum Masters

Group Members:

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System Functionality:

After the second Iteration, the application is able to implement the backlog stories along with user stories related to search by address. The cross-origin access issue was resolved and the team was able to implement the JSON data-feed. The ability to get fastest route for trip plan and get estimated real-times are backlogged to the next iteration. But we have done with other functionalities to get real-time bus locations using JSON data-feed provided by CTFastrak. The other aspects of this iteration: searching any bus-stops or locations by entering address is also implemented. This should leave just the user stories related to create a trip plan for the next iteration.

Implemented User Stories:

Id	Title	Pre-condition	Post-condition	Story Point	Iteration
5	As a user, I want to search information on map by address, so that I can get information of my preferred location.	User has to select Search by Address menu and enter address.	System will generate the information for preferred address.	5	2
10	As a user, I want to view all real time buses on CTFastrak route map along with all bus stops, so that I know the approaching bus to a certain bus stop.	User has to select a route.	The approaching buses showed along the route on the map.	8	2
New	As a user, I want to see all bus schedule, so I can plan my trip according.	User has to select Get schedule.	System will generate schedule with bus number and timings.	5	2

Change to User Stories:

We have decided to implement all trip plan functionality for the next iteration instead of this iteration. We coped with JSON real-time data feeds by successfully implemented to show bus real-time locations.

User Story [7]: We decided to implement trip plan user story for next iteration.

User Story [9]: We decided to implement this user story for next iteration because it is depending on trip plan function.

User Story [10]: We decided to implement this user story right away as it will add value to user by knowing real-time location of buses.

User Story [New]: We included new functionality Get schedules.

Lessons Learned:

In the previous report the team mentioned needing to be more flexible with implementation. For this iteration, the team went with different possible solution for real-time JSON data-feed. This exploration found a solution that fixed the problems and we were able to implement JSON real-time data-feed successfully. We were also searching for solution, how we can implement search by address issue. The team decided to use Google APIs to cop up with this issue and don successfully. Still we think further to add new edge to our functionality with better solution that we already implemented.

Updated User Stories:

Id	Title	Pre Condition	Post Condition	Story Point	Iteration
1	Analysis: As a developer, I need initial setup of the application, so that I can start working on further user stories.	Downloading required software and data feed formats as JASON & GTFS	Development environment will be setup on the developer's machine.	5	1 Completed
2	As a user, I want to see all CTfastrak bus routes with different colors and get bus stop information, so that I can overview CTfastrak map. (Home Page)	Internet should be accessible on device.	System will generate all routes with bus stop information.	5	1 completed
3	As a user, I want to get scheduled arrival times for CTfastrak at a selected stop, so that I can plan my trip well.	User has to click on bus stop marker.	System will generate bus and bus stop information and location details.	2	1 Completed
4	As a user, I want to search bus stop information on map by current location,	User has to allow to track current location on	System will generate the information for nearest bus	3	1 Completed

	so that I can get bus information based on my location.	device.	stops and arrival/departure bus timings.		
5	As a user, I want to search information on map by address, so that I can get information to my preferred location.	User has to select Search by Address menu and enter address.	System will generate the information for preferred address.	5	2 Completed
6	As a user, I want to open the CTfastrak web site with any device like mobile, PC, Laptop, tablet.	User's device should have compatible web browser installed.	System will generate a responsive web design using experience on device.	5	1 completed
7	As a user, I want to get the fastest route from source A to destination B, so that I can reach to destination early. (reach the destination using one route)	User has entered valid address information and clicked trip plan.	System will generate fastest recommended route.	8	-
8	As a user, I want to get the all bus routes from source A to destination B, so that I can choose my preferable route. (with no transfers)	User has entered valid address information and clicked get directions.	System will generate all recommended routes from A to B with no transfers.	8	-
9	As a user, I want to get estimated real-time arrival times available for all CT FastTrak buses at a selected stop, so that I can plan my trip well.	User has planned trip.	System will generate estimated real-time arrival times that has been calculated per current traffic changes and displayed on the pin.	3	-
10	As a user, I want to view all real time buses on CTFastrak	User has to select a route.	The approaching buses showed	8	2 Completed

	route map along with all bus stops, so that I know the approaching bus to a certain bus stop.		along the route on the map.		
11	As a user, I want to see all bus schedule, so I can plan my trip according.	User has to select Get schedule.	System will generate schedule with bus number and timings.	5	2 Completed

Total Story Points: 57

Iteration 2: 18 points

Iteration 3: 19 points

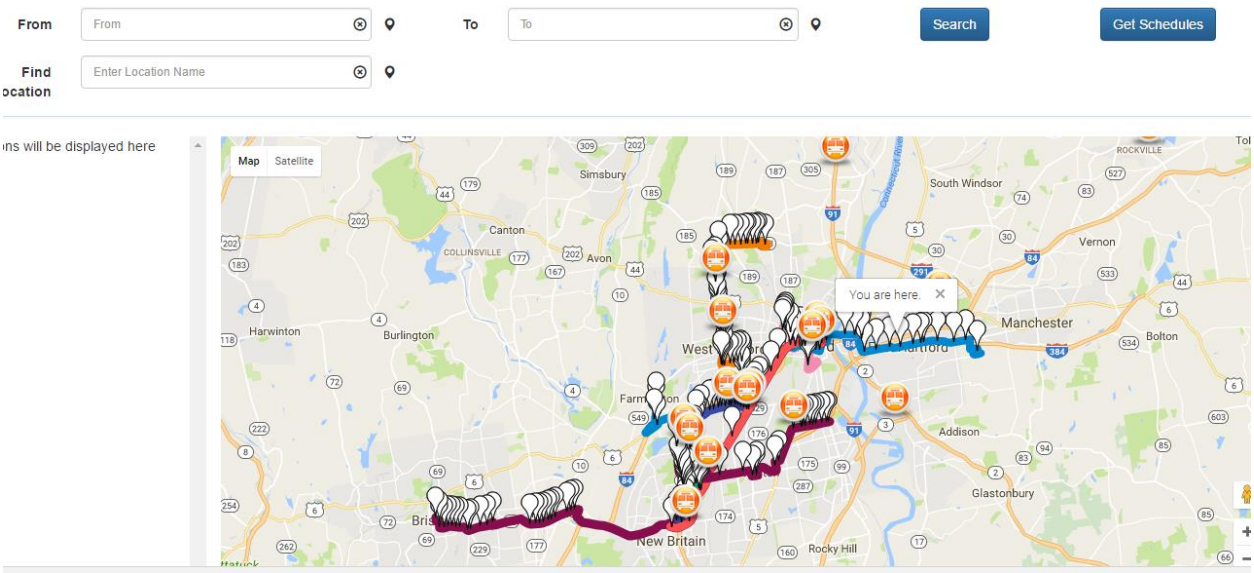
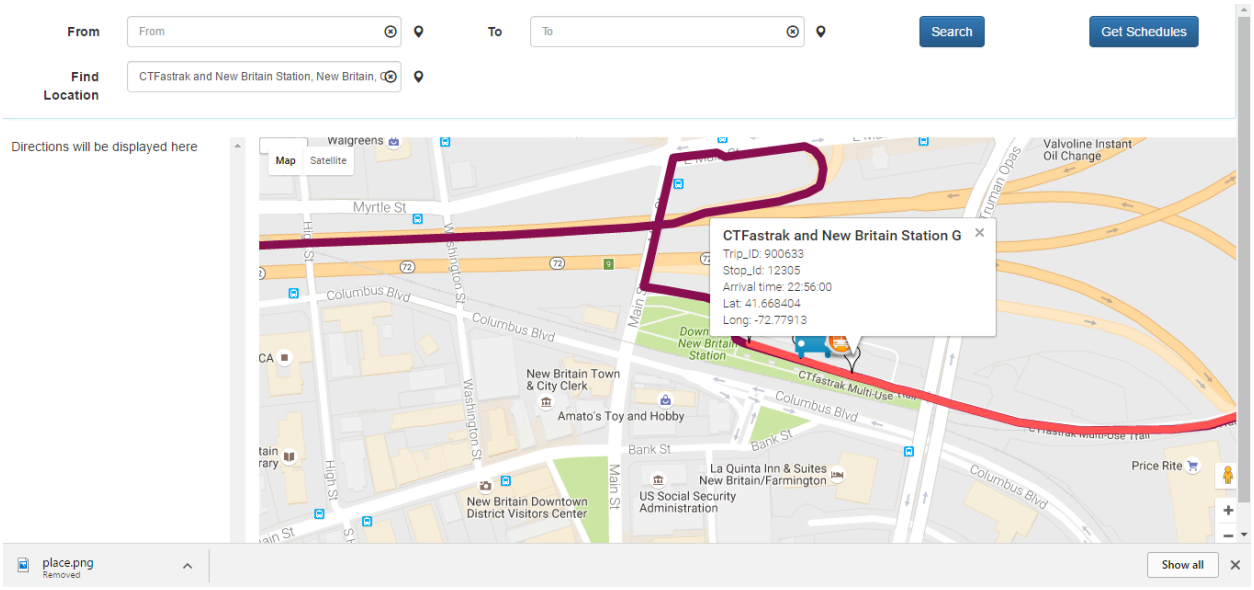
Subset of User Stories for next Iteration:

User Story 7

User Story 8

User Story 9

Functionality of System after Iteration 3:

Display CTFastrak routes between two bus stops with arrival departure times for intermediate bus stops. All buses will be identified on the map. Given the user's current location on the map, the system will be able to provide a walkway to reach to preferred bus stop. The system can provide all recommended routes from source A to destination B address. The system can provide the fastest route among all recommended routes to user from source A to destination B address. All stops will have information about the estimated real time arrival and departure time of the bus.

UI After Iteration 2: