



Cyberdyne Systems

Product Backlog

CTFastrak Application

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I. Numbered List of User Stories:

1. As a commuter, I want to view bus route information so that I may be able to view where a bus will stop along its route.
 - a. Precondition: Color highlighted bus routes are visible on the map or are selectable from search bar
 - b. Post-condition: The selected bus route is accentuated along with the bus stops along the selected route
2. As a commuter, I want to view a bus stop schedule so that I will be able to view the approaching buses that will arrive at a specific bus stop.
 - a. Precondition: The bus stop is selectable on the map or search bar
 - b. Post-condition: The system tells the user the bus schedule for that stop and the next arriving bus
3. As a commuter, I want to scroll and zoom in and out on the map so that I can examine points of interest on the map
 - a. Precondition: The current section of the map is fully loaded into the system
 - b. Post-condition: The app displays the new section of the map
4. As an application manager, I want to be able to change scheduled arrival and departure times at bus stops so that the displayed information is up to date.
 - a. Precondition: The bus stop exists on the map and only the app manager can edit its information
 - b. Post-condition: The time of a bus arrival or departure is changed and the schedule reflects this change
5. As an application manager, I want to be able to add a bus stop so that I can update a bus route
 - a. Precondition: The bus stop cannot already exist on the map, it must have no route including it, only the app manager can add this information
 - b. Post-condition: The bus stop is added to a route, its information is visible to the commuters, the bus stop is added to the schedule
6. As an application manager, I want to be able to remove a bus stop so that users are not mistaken to use unutilized bus stops.

- a. Precondition: The bus stop must exist on the map, it must have a route assigned to it, only the app manager can delete its information
 - b. Post-condition: The bus stop no longer exists on the map, the information can no longer be viewed by the commuter, and the bus stop is no longer on the schedule
- 7. As a commuter, I want to input my destination so that the app can calculate the nearest bus stop to take.
 - a. Precondition: Destination must be a real location along CTFastrak routes
 - b. Post-condition: App generates route to bus stop based on user location and user preferences
- 8. As a commuter, I want to select which bus stop to depart from because the one the nearest bus stop might not be preferred.
 - a. Precondition: Bus stop must still have an incoming bus for the day
 - b. Post-condition: The route is updated to show the user's new arrival time

II. User Story Sizes:

Size 1:

- 1. View bus route information
- 2. View bus stop schedule
- 3. Scroll or Zoom

Size 2:

- 4. Change schedule
- 5. Add bus stop
- 6. Remove bus stop

Size 3:

- 7. Input destination

Size 5:

- 8. Input departure

III. First Iteration of User Stories:

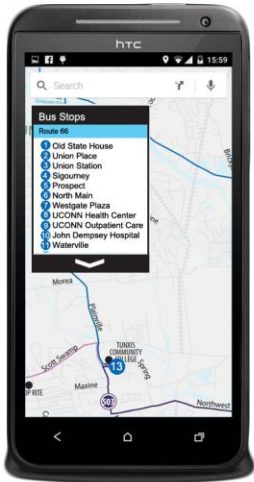
The cumulative total size of the user stories is 17, so the target for each iteration is 6. The first iteration will implement user stories 1, 2, 3, and 4 since the first three user stories are necessary for the application to be of any use. This iteration is of size 5, but takes into consideration the work needed to initially build the core application components (Google maps implementation, UI design, etc.) By the end of the first iteration, a user will be able to view bus routes, view bus stop information along those routes, and zoom and scroll to areas of interest in the areas surrounding the CTFAstrak system. An application manager will have the basic ability to change the arrival or departure times at bus stops. The user interface at this iteration will include the map and a drop-down box which will tell users about the information about bus routes and bus stops.

IV. User Interface Features:

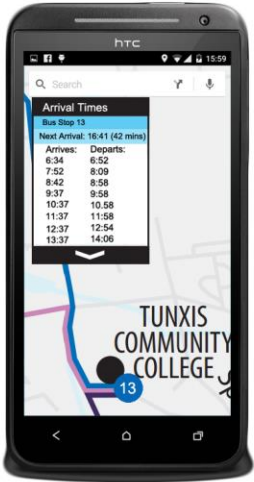
NOTE At any stage of the process, the user may be able to press the back key to go to the previous stage of the process



Upon opening the app, the user will be able to select a route either through the search bar, the drop down box, or by tapping on the route on the map



After a route has been selected, user will be able to see and select bus stops along that route



After a bus stop has been selected, the user will be able to see the arrival and departing times of the bus, along with the next arrival time. The user may be able to select this as either an arrival location or a departure location



If the user selects both a departing and arriving location, then the app will give directions on how to get there using CTFastrak routes.

