Cyberdyne Systems

Product Backlog

CTFastrak Application

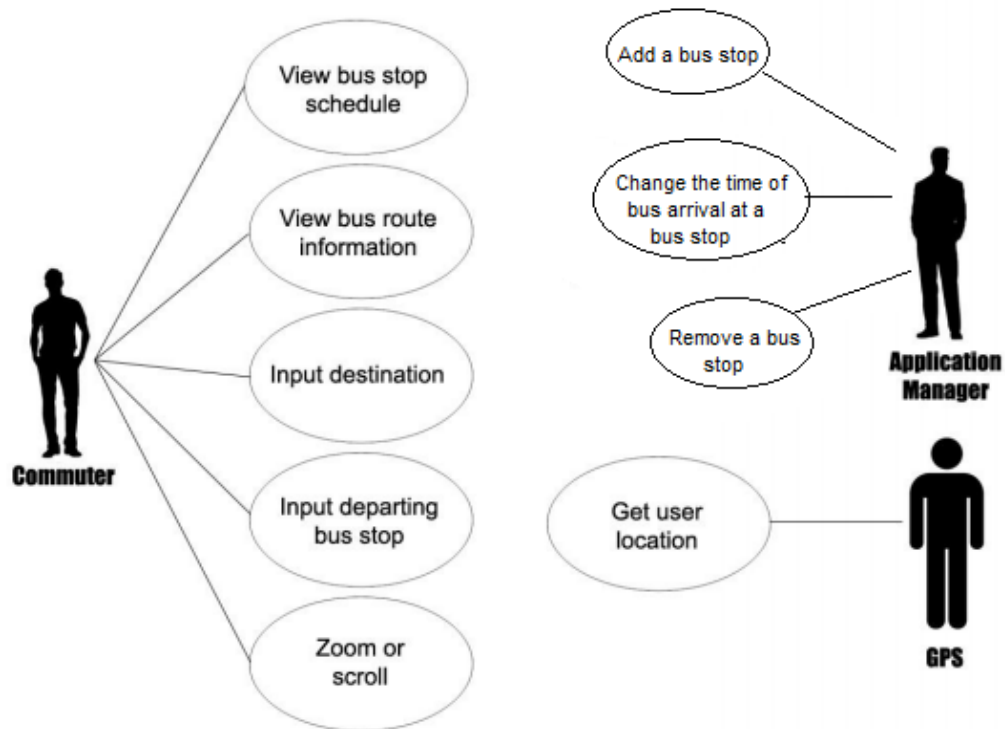10/23/16

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I.   Overview of Systems Functional Requirements:

II. User Story Sizes:

Size 1: View Schedule, View bus route info, Change bus arrival time

Size 2: Zoom or scroll screen, Add a bus stop, Remove a bus stop

Size 3: Input departing bus stop

Size 5: Input destination

III. Numbered List of User Stories:

1. View bus stop schedule
   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

2. View bus route information
   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 <u>accentuated</u> along with the bus stops along the selected route

3. Input destination
   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

4. Input departing bus stop
   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

5. Zoom or scroll
   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

6. Add a bus stop
   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

7. Change bus arrival times at bus stops
   a. Precondition: The bus stop exists on the map and only the app manager can edit its information
   b. Post-condition: The arrival time of a bus is changed and the schedule reflects this change

8. Remove a bus stop
   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

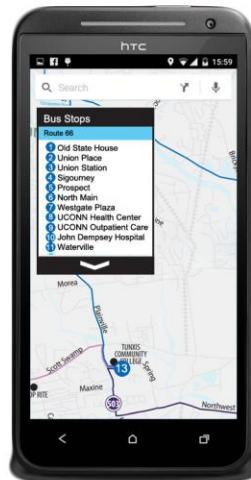IV.   First Iteration of User Stories:

The first user stories to be implemented are the functionalities of viewing the bus stop schedule, viewing bus route information, changing the arrival times at bus stops, and zooming and scrolling on the map. The application will have a basic layout with all of these functionalities implemented.
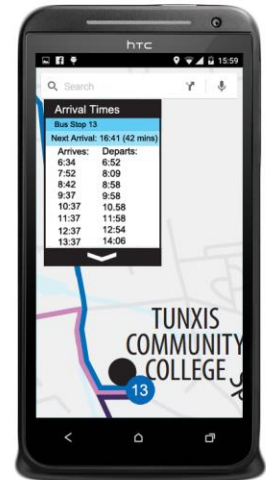
V.   User Interface Features:

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.