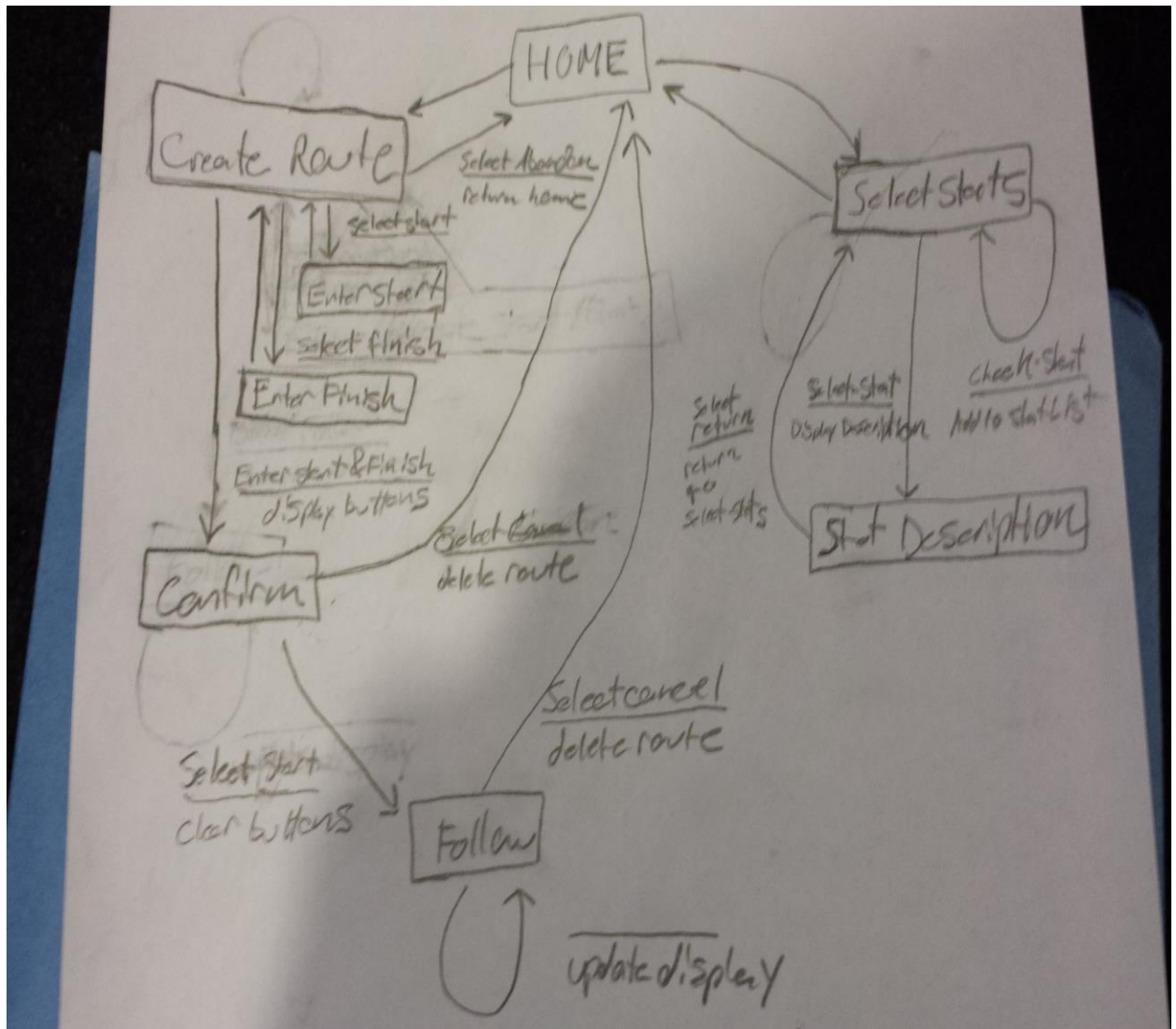


Semantic

- Function: Select statistic
 - Parameters
 - check
 - Description: the user selects a checkbox to include a statistic in stat list. Each statistic has a checkbox next to its name.
 - Feedback: The checkbox is marked with an x
 - Errors: none
-
- Function: Create_start/finish
 - Parameters
 - Address
 - Start_or_finish
 - Description: an instance of a location is entered into the system. The address is used to generate GPS coordinates and added to the route as either start or finish.
 - Feedback: The address is highlighted in green if it is confirmed, or red if it is not recognized.
 - Errors: The address is not recognized
-
- Function: Create route
 - Parameters
 - Start
 - Finish
 - Description: an instance of a route is generated. The start and finish instances are used to generate a turn-by-turn set of instructions.
 - Feedback: the route is displayed to the screen, overlaid with buttons to follow or abandon the route.
 - Errors: Start and Finish cannot be joined by known bike routes/lanes.
-
- Function: Follow/abandon route
 - Parameters
 - Route
 - Description: The user selects either the follow or abandon button.
 - Feedback: The follow/abandon buttons disappear. If abandon was selected, the user is returned to the home screen. If they select follow the display of the route is updated as the user's GPS location moves along the route. As the user goes through turns, the next turn will be updated from the route's instructions. The selected statistics will be displayed above the route.
 - Errors: none

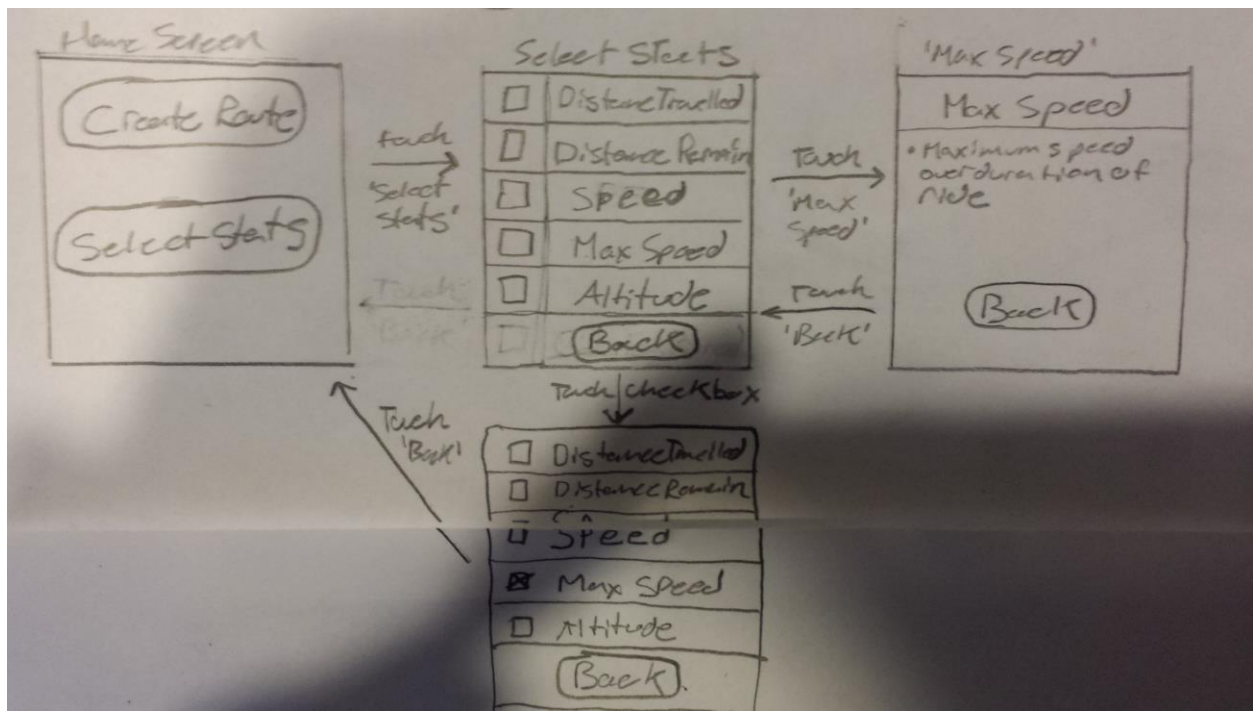
Syntactic



Lexical

- Home: Screen with buttons "select statistics" and "create route"
- Select stats: scrollable list of statistics in the system. Each statistic is accompanied by a checkbox
- Stat description: a description of what the selected statistic measures. There is a return button to go to the "select stats" page
- Create route: Screen with fields for "start" and "finish"
- Enter start: field for start
- Enter finish: field for finish
- Confirm: Screen with buttons to follow/cancel route
- Follow: display route as user follows route.

Storyboard



User documentation:

To get started, press 'select statistics.' You will see a list of travel and workout stats. You can select check boxes next to the statistics you would like to see during your bike ride. If you are interested, you can also press a particular statistic to learn more about it. When you have selected the statistics you would like to include, return to the home page. Now, press 'create route.' There are fields to enter a 'start' and 'finish.' Type in the addresses you would like to use, and wait for the GoBike to verify that it can generate a route for you. If you would like to follow the route, press "follow," otherwise, press "abandon" to return to the home screen.

Task-command analysis

- 1) View statistics – check 2 statistics – read statistic description – return – check statistic --
return
 - a. Press 'select stats'
 - b. Press a check box
 - c. Press a check box
 - d. Press a statistic
 - e. Press return
 - f. Press a check box
 - g. Press return
 - h. Total = 7 button presses
- 2) Create route – enter start – enter finish – follow
 - a. Press 'create route'
 - b. Press 'start' field
 - c. Type address (~10 button presses)
 - d. Press enter
 - e. Press 'finish' field
 - f. Type address (~10 button presses)
 - g. Press enter
 - h. Press follow
 - i. Total = 26 button presses (depending on length of addresses)
- 3) Create route – enter start – cancel
 - a. Press 'create route'
 - b. Press 'start' field
 - c. Type address (~10 button presses)
 - d. Press enter
 - e. Press cancel
 - f. Total = 14 button presses (depending on length of address)
- 4) create route – enter start – enter finish – abandon
 - a. press 'create route'
 - b. press 'start' field
 - c. type address (~10 button presses)
 - d. press enter
 - e. press 'finish' field
 - f. type address (~10 button presses)
 - g. press enter
 - h. press abandon
 - i. total = 26 button presses (depending on length of addresses)