Matt Schroer & Kyle Vinagro
Design Sketches

FindRack

Interaction Scenarios

- **Rocco finds a nearby bike rack** - Rocco, on his way to work after a long day of sitting around and watching House of Cards on Netflix, flies by cars sitting in traffic as he crosses over the Charles River into Cambridge. Already running late to work, Rocco arrives at a pair of bike racks closest to his work and discovers that both are completely full. He then pulls out his phone and opens the FindRack application by clicking on its icon on the home screen of his phone. Rocco chooses to find racks nearby based on his current location, so he clicks on the “Find Nearby” button on the home screen of the application which brings him to the main screen.This screen displays a list of the bike racks closest to him. The first two on the list are the ones he drove up to and he can see that the app shows they are full by the red circle next to their names. He looks further down the list and the application shows him there are four more racks in the vicinity. He can see that two of them are filling up because they have an orange dot next to the rack name. He can see that the other two are mostly open because there is a green dot next to the rack name. He clicks on one of the open racks and this brings him to another screen that shows him the exact location of the bike rack using a map view. It also displays his current location and he can see that he is just two streets over from the rack. He clicks the “View Pics” button and is then shown a picture of the rack. He swipes left to see two more pictures of the rack. He can see how many there are by the small dots below the pictures. He closes the application, puts his phone away and heads to the rack. After securing his bike to this nearly empty rack, Rocco makes it to work just before his pre-meal meeting starts.

- **Trixie searches for a bike rack in another location** - Trixie, while sitting in class, receives a text from her friend to meet for lunch in downtown Boston.Trixie is a freshman at Northeastern, and wants to explore her new home. Trixie agrees and once class ends, she heads outside to her bike and gets ready to ride. Since the restaurant is in an area she is not familiar with, she pulls out her phone and opens the FindRack application by clicking on its icon on her phone’s home screen. Since she is not yet in the area of the restaurant, she chooses to search for racks near it by entering the restaurant's

address in the search box and then clicking the arrow button next to the search box. This brings her to the main screen of the application that lists the address she just put in and a few racks near the restaurant. Trixie can see that the first one is filling up because of the orange dot next to its name, but she can also see that there are three more that are mostly open because of the green dot next to their names. Trixie clicks on the first "mostly open" rack and is taken to a map view screen that shows her its exact location and also shows her location. She then clicks the "View Pics" button below the map and is taken to another screen where she can scroll through the four pictures of the rack. She knows there are four because of the four dots below the picture. She can also tell which one she is looking at because one of the dots is filled in. Trixie does the same exact thing with the next "mostly open" rack on the list just to be safe. She is confident she can safely secure her bike while eating. Trixie closes the application, puts away her phone, rides to the restaurant and is able to quickly lock her bike to one of the racks she found earlier. She has a delicious lunch with her friend.

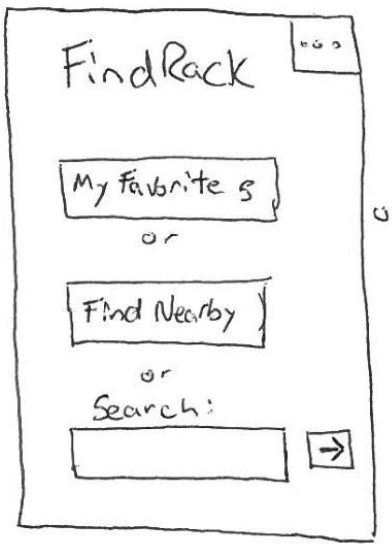
- **Trixie favorites a bike rack** - Trixie, after meeting her friend for lunch, walks back to the rack at which she parked her bike. She begins thinking that this bike rack was in a safe location and was mostly open when she got there. She then pulls out her phone and opens the FindRack application by clicking on its icon on her phones home screen. She then clicks the "Nearby" button to look at the list of bike racks nearby. She is then taken to the main screen of the application that lists the racks closest to her location. She can see four racks near her that are mostly open. She then clicks the entry for this specific bike rack, which is the first one in the list. She knows she is clicking on the right one because it was the first on the list, meaning it is the closest, and because she recognized the name from earlier. When she clicks it she is taken to the map view and looks at the pin on the map that indicates the location of the rack. This confirms to her that she is looking at the correct one. She then clicks the "back" button, which is indicated by an arrow in the top left corner of the application. This takes her back to the main screen of the application. She clicks the outlined "star" button to the right of the bike rack and the "star" is then filled in. This indicates to her that the rack was added to her favorites list. This will allow her to easily return to it in the future and to also monitor the status of the rack before she arrives.

Preliminary Design Sketches

Storyboards

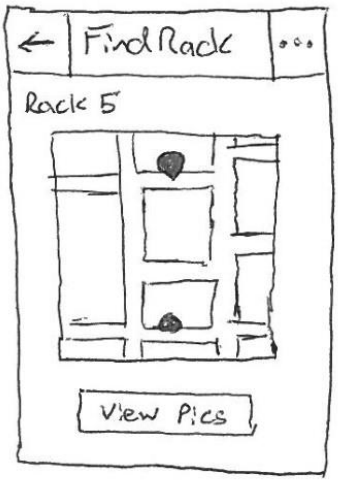
(Attached)

Rocco Finds a Nearby Bike Rack:



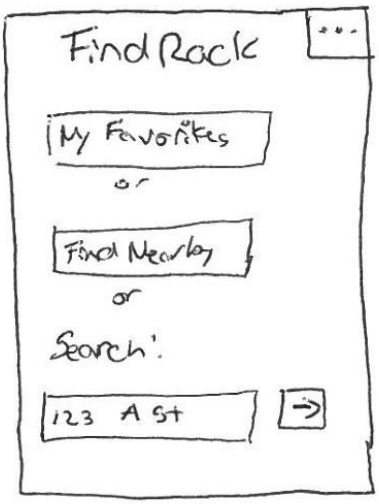
User clicks on "Find Nearby" button

User clicks on "Rack 5" row

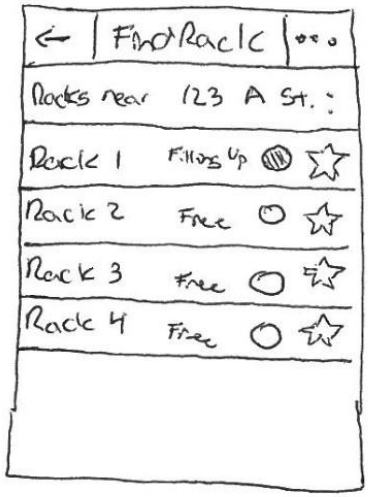


User clicks "View Pics" Button

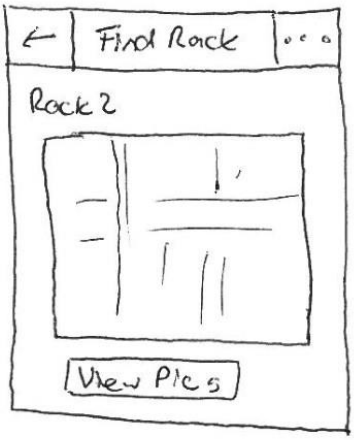
Trixie Searches for a Bike Rack in Another Location:



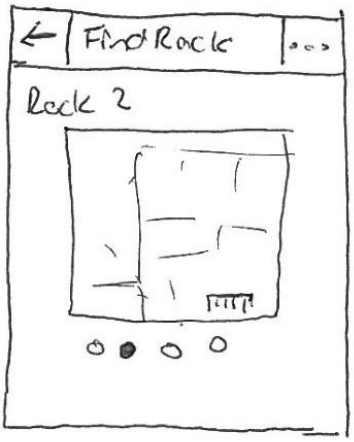
User enters an address into the Search Box and presses "Go" arrow button



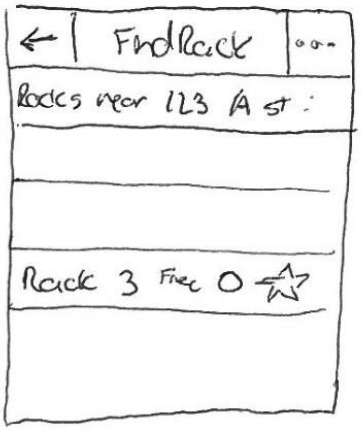
User clicks on "Rack 2" row



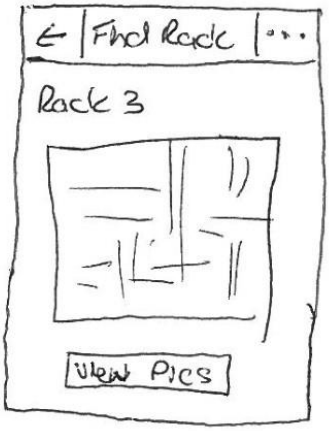
User clicks on "View Pics" button



User clicks "←" button twice



User clicks on "Rack 3" row



Trixie Favorites a Bike Rack: