

Matt Schroer & Kyle Vinagro
Paper Prototyping

FindRack

Briefing

Hi, we're designing a new application for finding a place to store your bike. This application allows you to look for bike racks near your current location or search in a different location. You can also see if the bike rack is full or not, a map view of the rack and pictures of the rack. It also allows you to favorite bike racks for quick access later on.

Informed consent: We are conducting a study to find out what people think about this. We will not record or publish any information with your name. This is for a course we're taking in Human-Computer Interaction from Prof. Bickmore in the College of Computer and Information Science. Your participation is voluntary and you can stop anytime and ask that your data not be used. It should take about 20 minutes and we will compensate you with a bar of chocolate. Can you help us out with this?

Great. The purpose of today's session is for you to help us figure out how to make this mobile application interface more user-friendly. But believe it or not, we aren't going to use a computer. As you'll see, we've actually created paper versions of the screens, and Matt will be playing the computer.

We'll give you some tasks that we think are representative of what people might do in real life, such as finding a nearby bike rack, searching in a different location or adding a bike rack to your favorites. Your job is to tell us what makes sense, what's confusing, whether it works the way you'd expect it to.

The other members of the team will just be watching and quietly taking notes. Keep in mind that we're testing the interface—we're not testing you—so if you run into any problems it's not your fault and it means that there's something we need to change. I'll be sitting next to you, and I can help you if you want.

The prototype still has some rough edges—we're still thinking through how it should work and some parts of it are incomplete. Before we cast it in concrete, we want to get some feedback about how well this design works.

Matt here will be playing the computer. Matt may seem like a pretty smart computer, but he has no speech recognition and no artificial intelligence. Since machines can't talk, he's not

allowed to explain anything. If you want to do something, you'll need to interact with the prototype just as you would on a computer. Use your finger to click on buttons. These pieces of tape indicate places where you can type something in, and here's your keyboard (give pen). It's OK to write on this.

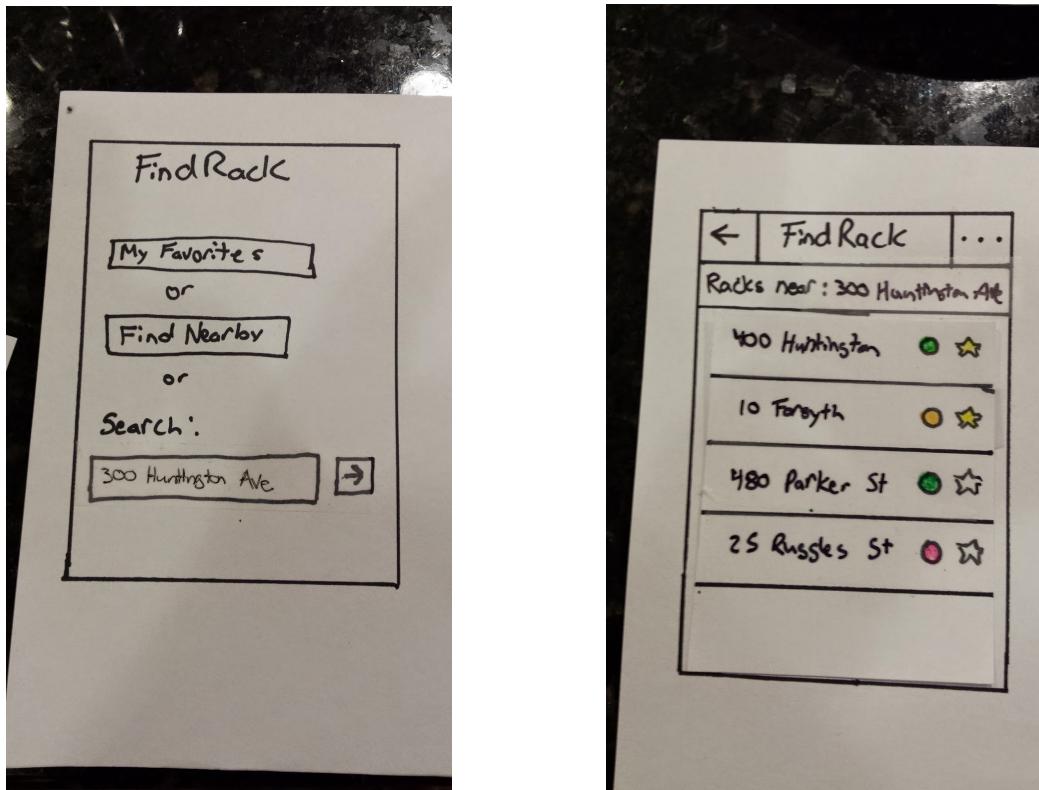
Please tell us what makes sense to you, what's confusing, and any questions that come to mind. Your questions are especially valuable, but I may not answer them right away because our goal is to change the interface so it answers them.

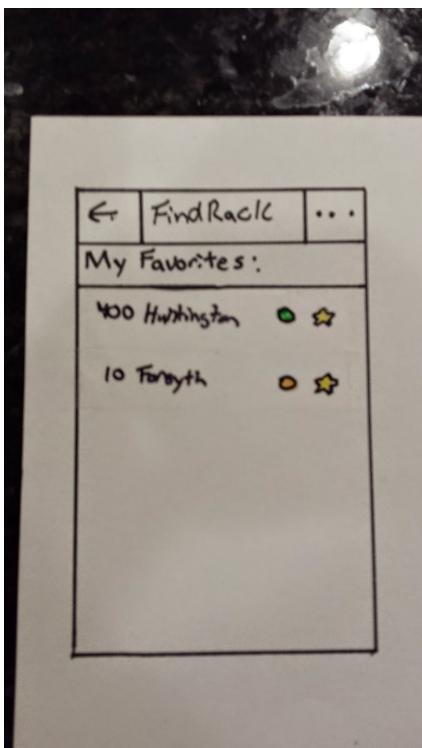
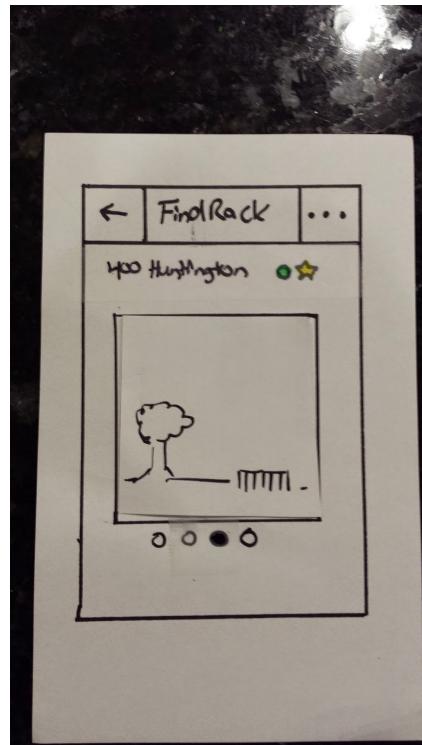
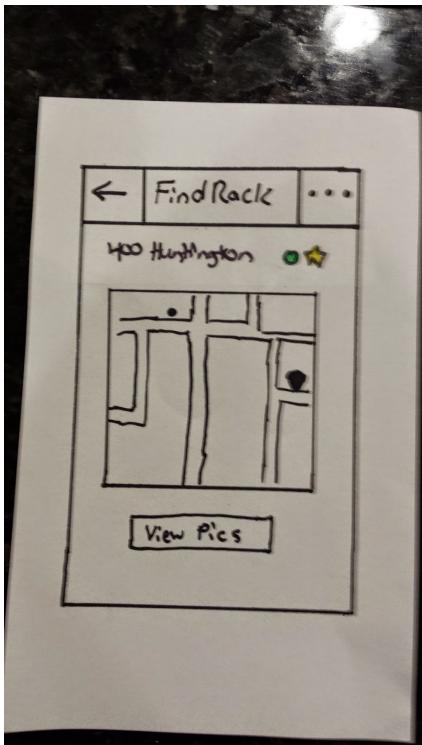
Remember that we're testing the interface—we're not testing you. Are you ready to start? OK, here's the first thing we'd like you to do. Take a minute to read this and let me know if it makes sense. If so, then whenever you're ready please show us what you would do first.

Tasks:

1. Find a nearby bike rack and view the map
2. Search for a bike rack in another location and look through the pictures
3. Favorite a bike rack and then look at your favorites list

The Prototype:





Test Users

Sample User #1

- Scenario: 7:00pm, in West Village B, Used our paper prototype along with a pen as a pointer
- Age: 21
- Gender: Female
- Education: Some College
- Occupation: Student
- Observation Notes
 1. Everything was straight forward when viewing the map
 2. Not obvious to swipe through pictures
 3. Took three guesses to figure out what the colored dots were
- Interview
 1. Did you feel stuck at any point like you did not know where to go next?
 1. When trying to click on title
 2. What do you think could be improved to make it easier to use for you?
 1. Nothing. It's the best thing ever.

Sample User #2

- Scenario: 7:30pm, in West Village B, Used our paper prototype along with a pen as a pointer
- Age: 21
- Gender: Female
- Education: Some College
- Occupation: Student
- Observation Notes
 1. Tried to click on the map
 2. Did not know what the colored dots were supposed to mean
 3. Swiped through pictures
- Interview
 1. Did you feel stuck at any point like you did not know where to go next?
 1. No not really
 2. What do you think could be improved to make it easier to use for you?
 1. The star should be bigger

Sample User #3

- Scenario: 6:00pm, in Matt's apartment, Used our paper prototype along with a pen as a pointer
- Age: 21
- Gender: Female
- Education: Some College

- Occupation: Student
- Observation Notes
 1. First person to understand colored dots
 2. Commented that the favorites section was a nice feature
 3. Tried to click on the FindRack logo at the top of the prototype
- Interview
 1. Did you feel stuck at any point like you did not know where to go next?
 1. Nope
 2. What do you think could be improved to make it easier to use for you?
 1. The yellow and oranges used should be more different from each other

Sample User #4

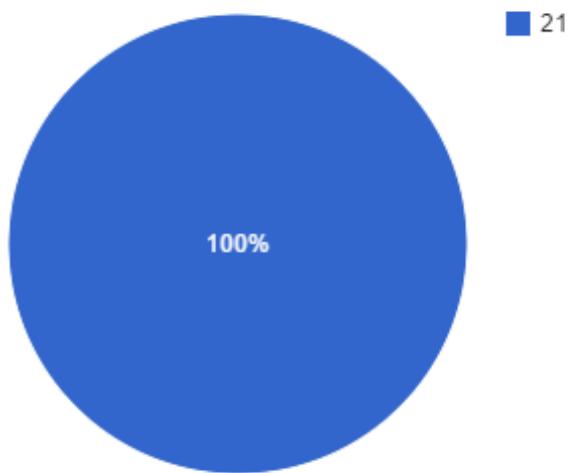
- Scenario: 6:10pm, in Matt's apartment, Used our paper prototype along with a pen as a pointer
- Age: 21
- Gender: Male
- Education: Some College
- Occupation: Programmer
- Observation Notes
 1. Thought the map should be clickable
 2. Clicked through pictures
 3. Like the inclusion of pictures.
- Interview
 1. Did you feel stuck at any point like you did not know where to go next?
 1. A little bit before I realized the rows were clickable.
 2. What do you think could be improved to make it easier to use for you?
 1. Allow for launching of navigation app on rack page.

Common Problems and Solutions

1. Some people believed that the FindRack logo was clickable.
 - a. This could be solved by highlighting the clickable buttons to either side of the logo and making it more obvious that the logo is not a button.
2. Most people had a hard time figuring out what the colored dots meant.
 - a. We could add some small text that points out this feature.
3. Not everyone knew to swipe through the pictures.
 - a. This could be solved by making the dots below the pictures smaller so people would focus more on the pictures than the dots.

Demographics

Age



Gender

