

# **Project Goal**

Design an application to help inexperienced or infrequent users of the MBTA get from A to B

"There are dozens of other public transit applications, but if you spend any time talking the people who would actually use them, you realize how poorly designed the applications are. Some lack all transit options, some have outdated information, navigation for most of the applications is long and terrible, finding the information users actually need is a long and painful process"

# Personas

### Peter



"The T is a tool. It's your responsibility T's not ideal with to learn how to use the kids, but you transportation is to spend time it and how to try finding parking before! It's sooo compensate for its at the Aquarium much better than We don't want to problems."

# Samantha



"Yeah, maybe the traffic for an hour."

### Lilah



"I never realized how easy public after sitting in paying for gas every week!

## Henry & Elise



"We're in Boston because we want seeing the world. get lost and look like fools."

"So who are the users we keep talking about? Let's introduce you to our personas. Julian will give you a little more background on them in just a second, but I want to point out what their goals are.

Peter is is actually a fairly regular user of the MBTA, but only the one route that goes from his apartment to his work. He doesn't know anything about the other lines, but he wants to make sure that arrives on time for every meeting. Oonfident in his own abilities. Peter essentially wants a way to check and see when the next train or bus will arrive.

Samantha is a single mother of two young childr\u00e9n, aged 2 and 6. Sometimes it's a lot easier to use public transportation than to sit in traffic, find a parking spot, pay for for parking and gas, etc. etc. Managing her kids is a full-time job, so she needs to be able to look up public transit directions and see what her next step is as quickly as possible.

Lilah is a college freshman from Dayton, Ohio. She's never used public transportation before and is loving how much cheaper and easier it is than owning a car in somewhere like Boston. With that said, her lack of experience means it's easy to make mistakes and get lost, so an application that helps her avoid making mistakes would be a big confidence boost.

Our last persona is Henry and Elise, a retired couple on vacation to New England from old England. Like Lilah, they have no experience with the MBTA system. They're on vacation, so time isn't a big issue: their goal is to simply figure out what station A@^ }^^åÁg Áà^ÁægÁæg) åÁ @B&@Ágægā Ás@^Á,^^åÁg Á&ææ&@È

# When should I leave?



Julian: "Meet Peter, a young business professional working in the Financial District of Boston.

Punctuality is Peter's middle name; being late is out of the question.

He understands the MBTA system and uses it all the time, but he also knows how unpredictable the system can be.

On this particular afternoon, he is getting ready to go to his friend Jenna's apartment.

He opens Nietzsche Transit and starts to type in her name."

Brett: switch to the prototype, complete the task, explaining your thoughts along the way

//Plenty of time to finish writing his case briefing for tomorrow on the way there.

//Satisfied, he meticulously drains his cup of coffee and heads off, legal documents slung over his shoulder.

# Where should I go?



Julian: "Meanwhile, Sam, a single mother of two young children, is planning to do some shopping around Newbury street. Before she can do that though, she wants to take the kids to Ben & Jerry's -- a reward for them not murdering anyone on the train ride over.

One handed, Sam looks up the directions to Ben & Jerry's."

Laurence: switch to the prototype, complete the task, explaining your thoughts along the way

//She quickly scans through the options and selects the one with the fewest transfers -- Managing the little tykes can be quite challenging on the T.

# How long do I have to wait?



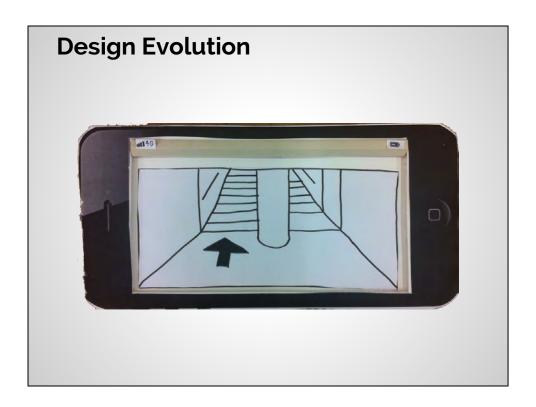
Julian: "Lilah is hanging out indoors, taking refuge from the bad weather. As a college freshman new to Boston, she doesn't do a lot of planning ahead. Getting lost -- as long as it's with friends -- is part of the charm of exploring a new city.

Ah - there's a text from Josh - he and some friends are going to watch a movie and is wondering how soon she can meet them at his house."

Pati: switch to the prototype, complete the task, explaining your thoughts along the way

# Design Evolution

Laurence: "So that hopefully gives you an idea of what our prototype can do and how that can help our personas. Now let's talk about why our design looks the way it does"



Laurence: Cut screen 4 - comparison with real world too difficult



# Laurence:

Completely revamped the information in screen 2:

- graphical display
- easy comparisons
- Large touch targets
- minor quirks to work out



### Laurence:

### Screen3:

- Building a mental model with animations
- Very similar
- Information spaced evenly (no scrolling hell)
- Maps for relevant walking directions
- I missed train button
- final important part: map/missed train/bus button (not in dynamic prototype ATM)

# **Lessons Learned**

- H.C.I. is interesting
- People are not blank slates
- Creating an integrated design is extremely challenging

### Brett:

HCI stuff = how people expect to hold their phones, information processing, animations in mental models.

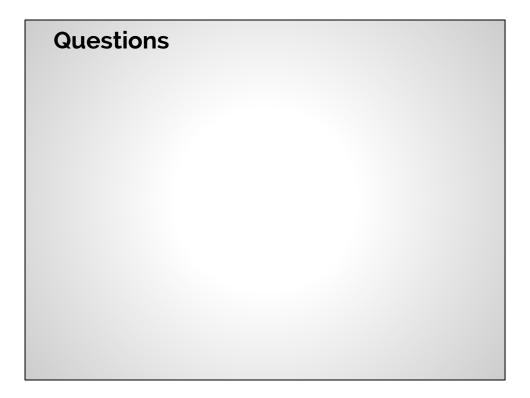
Blank slates = even people who do not frequently use public transit or transit apps have a fairly good idea of what they expect to see. "Where's the Go button", "points on a line mean places, not steps", "busses are always late"

Integration is challenging = even within our user group, there was a lot of variety in the exact information people wanted and the tasks they completed most frequently. From the outset, we wanted a very slick, integrated design that would not make the users have to click "next" or "done" a million times to make it work. That's easy to draw on paper, but actually implementing that in a way that balances information, readability, clickability, speed, etc. has been very challenging

# **Moving Forward**

- Refine and improve!
  - o Debug Screen 2
  - o Add maps and "I missed the train" to Screen 3
- Concern about Henry & Elise

Brett



Brett