WHERE'S MY DAMN BUS

Problem:

“Where's My Damn Bus,” abbreviated hereafter as WMDB, aims to solve the problem that many people don't know when their bus or train will arrive. Schedules are irregular and vary by time of day and traffic, and there is no guarantee that any bus will arrive anywhere when it says it will. It also solves numerous other problems, including, but not limited to: a public safety problem with young people waiting alone at bus stops at night, and a ridership problem by increasing ridership due to easier service and fewer missed buses.

Users:

Commuters: Commuters represent the majority of the target user base. Commuters are people who frequently travel around the city by one means of travel or another. Specifically, we are targeting commuters with smart-phones.

Persona

Jacob is 45 years old and works as an analyst near Downtown Crossing. He works in a team of 5-6 people.

Background

Jacob grew up in a suburb of Boston and went to college in the city. He's moved around the city a few times, but now lives near Franklin Square. He married Sally when he was 22, when they went to college together. He now has one daughter, age 14, who attends private school across town. They all share a car, so the mornings can get hectic.

Bi-weekly, he drives his daughter and her friends to school in a carpool. They have to arrive early so that Jacob doesn't get caught in rush hour, but he usually does anyways. It makes his day more stressful, but he enjoys seeing his daughter with her friends. Sally walks a short distance to her job and so doesn't need the car in the mornings.

He currently feels like he works far too much and is trying to free up more time for his hobbies and his family. He enjoys boating and cycling. For a time, he tried cycling to work, but found his work clothes restrictive and didn't like arriving sweaty and dirty in the morning. He's not in fantastic shape but isn't overweight either. He wishes he could spend more time with his family, but by the time he gets back from the office (with the traffic) they barely have enough time for dinner.

Jacob owns a smart-phone, but doesn't really know how to use it. He uses it primarily to answer email and send text messages.

Travel:

Jacob currently drives his car for upwards of an hour to get across town. The main thoroughfares quickly clog and so he finds himself driving down small side streets in a winding route to get to the office. He does this rain or shine because he likes the air-conditioning in his car to keep him pristine for work.

If he does have to take the bus, then he is usually already running late. The added stress causes him to sweat nervously at the bus stop, and his rushed morning routine already left him looking less than his best. Due to past bad experiences he is hesitant to take the bus again.

Students: Students represent a large percentage of the population of Boston. They are usually strapped
for cash, and need ways to get where they want to go. They prefer trains but will take the bus because it is cheaper.

**Persona:**
Andrea is a sophomore student at MassArt. She grew up in a suburb of Portland Oregon and has lived in Boston for about a year now. She lives with two roommates, one of whom she's lived with in the past and they all get along very well. She likes to go to parties, and particularly likes the frat parties at MIT.

As an art student, she frequently needs to go to stores like Blick and Utrecht for materials. The materials can be heavy and so are difficult to walk with. Occasionally she needs help and recruits a friend. She also needs to visit various galleries around town. She usually runs these errands mid-day when the streets aren't as crowded.

As part of her student lifestyle, she tries to get out and party a lot. Sometimes these parties are close by, but they are often across town. She usually travels with 3 or 4 friends because it helps her feel safe at night. She knows things can be dangerous at night, particularly for people who dress as she does, and so sticks to well lit areas.

Andrea owns a smart-phone and considers herself an expert on it. Her most used apps are Snapchat and Instagram, but she also uses it to text her friends constantly. She has an unlimited data plan and uses most of it.

**Transit:**
While she prefers Blick, she ends up going to Utrecht more because it's an easier hop on the green line. She knows that a bus goes to Blick, but it stops about a block and a half from her dorm. She need only walk outside to get on the green line. Normally, to go that distance, she would walk, but it is difficult to carry the necessary supplies on foot.

To go to parties, she takes the green + red line. On the way back however, she is forced to walk. She walks with her friends down well lit streets, and occasionally sees a bus pass, but it never occurs to her to take it. She doesn't know where it stops, and in her current state, doesn't care to think about it.

**Tasks:**

*I want to find out when my bus arrives.*

<table>
<thead>
<tr>
<th>Know which bus route I need to take</th>
<th>Know where I am</th>
<th>Know which direction I want to go</th>
<th>Look up in schedule / RealTime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Know how long until the bus arrives</td>
<td>Find a street sign + cross street or street number</td>
<td>Look at a map</td>
</tr>
</tbody>
</table>

Do the first 3 in any order
*only one task has been described because this is a single-purpose application. All other tasks are simply a part of this one task.

**Problem Scenario:**
Alex, who lives on Mission Hill, wants to take a bus to a club in Cambridge. Before leaving his house, he opens up WMDB and it locates several nearby bus stops. He knows that the 66 goes to Harvard Square. He taps his finger on the nearest bus stop that displays 66 near it. A list of bus routes expand upward. He selects the 66 and sees that two directions have appeared. He slides his finger toward Harvard Square, because that's where he wants to go. He skims the list of arrival times that display. It usually takes him 5 minutes to walk to that stop, but the next bus arrives in 3 minutes. Knowing he won't make it, he looks at the next bus. It arrives in 16 minutes and 33 seconds. He concludes that he should wait 10 minutes before leaving for the bus stop.

**Usability Requirements:**
- Users should reach a screen with bus arrival times different than the ones they want less than 10% of the time.
- Experienced users should reach a screen with bus arrival times different than the ones they want less than 2% of the time.
- New Users should take less than 3 minutes to navigate to a page with bus arrival times
- Experienced users should take less than 30 seconds to navigate to a page with bus arrival times.
- A user should be able to get back to the start with one button click anywhere in the app.