((car)) EnRoute

Coordinating Carpools and Rideshares

• Drivers have to guesstimate the most efficient route and arrival time to the riders

• Poor coordination and miscommunication of pickup time and location leads to driver and passenger frustration

• Coordinating/communicating with riders may distract the driver from keeping his attention on the road

• Timing between the driver and passenger is a huge pain point

• Difficult to estimate monetary contribution to carpool

EnRoute allows drivers and passengers to communicate and coordinate in real-time efficiently and safely.

Touchscreen Dashboard for Drivers

• EnRoute finds the most efficient route for the trip using the location of riders

• Routing is flexible enough to be easily modified based on personal preferences or a change in plans

• View current location of riders via their mobile phone

• Listen to incoming text messages from riders

• Send useful pre-set messages to riders

Mobile App for Riders

• Track the location and estimated time of arrival of the driver

• Send safe text-to-voice updates to the driver

• Photo-sharing and recommended contributions
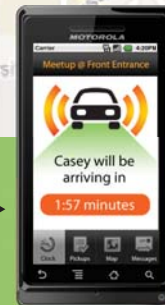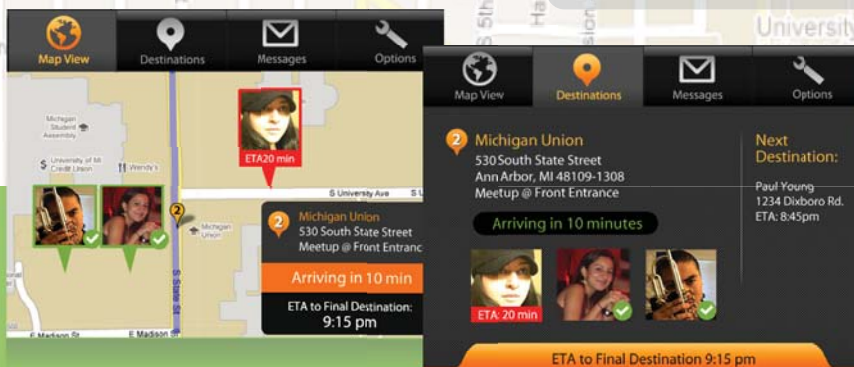
Real-Time Updates

Our Process

Contextual Inquiry & Interviews
Inspired by our personal experiences in carpools and rideshares, we observed and interviewed drivers and riders to learn how we could improve or enhance the experience. We found that lack of real-time and coordinated updates led to unnecessary wait times, miscommunication, and frustration for the drivers and riders.

User Scenarios & Storyboards
Based on our research, we created storyboards to explore possible scenarios of drivers and their passengers using our system to coordinate a route and communicate during the route with ease. This exercise helped our team keep our design ideas grounded in the user experience.

Ideation
Once we understood the type of experience we wanted to create for our drivers and riders, our team brainstormed and sketched out several ideas for the interaction flow, interface design, and system architecture.
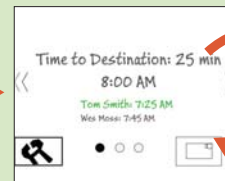
Prototyping
We created lo-fi prototypes of both our touchscreen dashboard (Microsoft Sketchflow) and mobile application (Android). In our next iteration, we will be creating a hi-fi version of the prototypes. We plan on conducting one more round of usability testing before finalizing our design.

Iterate

User Testing
We tested our lo-fi dashboard prototype with 5 drivers. Based on our findings, our next design interation will focus on simplifying the interaction flow for:
  a.) modifying a route and
  b.) sending and receiving messages. In our next usability test, we also plan on testing the mobile application with riders.

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