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Low Fidelity Prototype and Usability Testing Report CSE 440 Autumn 2009

# Roles

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This report can be found online at:

http://www.cs.washington.edu/education/courses/cse440/CurrentQtr/projects/ridealong/documents/Low\_Fidelity\_Prototype\_Report.pdf

# Introduction

RideAlong is ridesharing application built around making easy and convenient connections between drivers with extra space in their vehicles and people looking for rides. RideAlong uses simple social networking to creating trust between drivers and riders to enhance the process of forming rideshares. The low-fidelity prototype that we developed was tested with target users to identify design issues prior to developing a high-fidelity prototype.

# **Mission Statement**

RideAlong aims to promote ridesharing as a practical means of transportation by facilitating easy, trustworthy connections between drivers and passengers.

# **Prototype Description**

The paper prototype consists of a cardboard structure covered in a transparency. Index cards can be slid in and out of a slot between the cardboard and the transparency. The prototype is built to resemble a touch screen phone like an iPhone, as it is a common shape of current mobile devices. The transparency reinforces the perception of a touch screen device while enabling us to quickly add and remove overlays and text using dry erase markers.

Each screen of the interface is drawn on separate index cards. Some have multiple copies, such as the profile, which has different index cards for different possible profiles and profile states. Other interactive screens on the interface take advantage of custom cut pieces of index cards and transparencies, such as pins on a map and screens like possible trips, which appear semi-transparent on top of the map view.

To use the paper prototype, the current "active" screen is placed inside the cardboard structure. When a user selects a button or interacts with the interface in a way that brings up another screen, the new screen is inserted into the plastic sleeve on top of the previous screen. When the user enters text or adds an element to a screen, either a custom transparency can be placed on top, or the details can be written in using a dry-erase marker.

Images 2-4 show samples of which screens a user will see and the order they will appear in a given task. Of course, this is an ideal run, so the actual sequence depends on what the users selects during testing. The screens shown are the expected paths through the interface for each given task.



Image 1: Full paper prototype laid out on table.



Image 2: Sketches and flow of task to post a trip.



Image 3: Sketches and flow of task for confirming a rider.



Image 4: Sketches and flow of task for finding a ride to a specific location.

# Method

# **Participants**

Note: Pseudonyms have been assigned to each participant to protect their privacy

**Steven** is a Microsoft employee who runs a King County Metro VanPool, transporting 6 other coworkers to Microsoft daily. He represents a power user that would be interested in RideAlong for shorter trips and carpooling, particularly for fixed routes.

**Martin** is employed part time and lives on a low income. He commutes to work on a motorized scooter, but does not have a vehicle that he can take on longer trips. Ridesharing appeals to Martin because of its low cost. Unlike our other 2 participants, Martin owns an iPhone.

**Alex** is a freshman at the University of Washington and is a member of a fraternity. He does not have a car, so he relies on public transportation. He represents a user who would use the system infrequently for longer trips. He could also use the system to coordinate trips within his fraternity.



Image 5: Steven in front of his VanPool vehicle

Environment

As it was gracious enough for the people who participated and lent us their time, we let them chose the environment. For Steven and Alex, we went to their houses to conduct the test. Martin we met at a coffee shop, where we ran through the activity on a small table.

#### Tasks

Users were given the following tasks to try to complete. Notes in parentheses were for our use, and were not given to the participants.

#### Moderate Task – Post a ride

Post a trip between your house on Capitol Hill and Electric City, leaving on Friday, 11/27 at 2:00 PM. You have space for one passenger, and you would like to get about \$15 from whomever rides with you.

#### Moderate Task - Confirm a rider who has requested to ride with you.

Respond to an alert. Two riders have requested a seat on the trip you posted. Choose between the two riders and confirm one. Choose a place to pick the passenger up. (The two riders should be one friend, Edward, and one unknown, Angela).

#### Difficult Task – Find a ride to somewhere specific within a specific time frame

Search for a ride between your house on Capitol Hill and Electric City, leaving on the afternoon of Friday, 11/27. (Three rides will appear for this task - Chris (contact), Angela (unknown), and Tom (unknown). The user will have to choose which one seems best.)

# Procedure

To begin our usability tests, we went over the details of the RideAlong project as well as the general purpose of the test. We informed the participants that they were participating to test our interface and design rather than having us test them on their competency with it. We also told them that we would not be providing any help, but that they should talk out loud as they thought through the interface and describe anything that seemed confusing. We told them that they could stop at any point if they felt uncomfortable or needed to leave.

At each test we had three group members present. One of us took notes, one was the computer (swapping in and out screens and managing the many moving parts), and the last was the main point of interaction for the user, describing tasks and asking pointed questions to discover what mental steps the participant was following.

Users were then asked to run through all three tasks in succession as we observed.

#### **Test Measures**

The primary measure of success was the users' understanding of each step in the process of completing a task as well as their intuition about the flow of the task. Each task was singular and complete, allowing us to assess their entire workflow. By asking the participants to speak their minds while performing the tasks, we could identify pain points and confusing design decisions. We also

inquired into their understanding of specific icons and whether they would have liked to see anything changed.

# Results

The results of our user tests gave us great insight into the current limitations of our system as well as interactions that work well. Each of the three users provided a different perspective on the interface. Steven, a Microsoft employee, was very detailed and wanted to explore everything in the interface, exploiting many features we had partially implemented but were not part of the main workflow. Martin, an iPhone user, seemed to have an easier time with some concepts than either Steven or Alex, as some features of our interface were modeled after UI components found on an iPhone. This allowed him to run through the tasks more quickly. Alex moved through the interface slowly. It appeared that it took him a while to get used to imagining the interactions and understanding his role. With Alex, we only managed to get through one task in 45 minutes.

The range in time taken to complete a task reflected the learning curve of our interface. As Martin was familiar with many of the interaction techniques we were trying to simulate, he was able to quickly identify different objects he could interact with. For all three, the first task took noticeably more time to complete than the subsequent tasks.

There were several recurring issues that came up. The "post a ride" and "find a ride" screens had several issues. First, date and time selection interface was very ambiguous and confused all participants. The two-calendar system was complex and without words left it open to interpretation from the user. Steven eventually was able to figure out the purpose, though the thought process that he took to discover it came from his natural want to explore all facets of the interface. Alex ignored the second calendar all together, and Martin assumed it was a method for planning a return trip. From this it is apparent that the current system is not representative of its purpose, though users gave us good suggestions on how we could improve this interaction. For instance, we could remove the second calendar and, within the date/time selection screen, include a way to toggle whether the user is setting the beginning or end of a range.

The same screen also caused issues for users with attaching some form of message. For our test, we had the system set up so that a user was required to attach either an audio or text message to their post. All users were confused by this requirement and were frustrated when they could not continue until some form of communication was established. Similarly, we found that the current system requires users to attach an audio or text message twice before requesting a seat in a driver's car; once to search for rides, and then again to actually request a seat.

At various points the participants had difficultly correctly recognizing what a symbol or icon was for. Our original interface was very text heavy. In an attempt to fix this, we moved to an icon and graphic-rich interface. These often left users confused at first and required unnecessary amounts of exploring to determine the purpose of an icon.

Though there were quite a few issues that arose, we did receive positive feedback as well. Users seemed happy with the flow of each task. There was a logical order that seemed natural. Users did not get themselves "lost" or "stuck" in the system and all eventually completed each task successfully.

# Discussion

The low-fidelity prototype we developed performed well as a whole, but needs work in some key areas. The two screens with the most pain points were the post a ride/find a ride specifics screen and the Trip Details screen.

For both posting and finding a ride, the main difficulty came in setting the date and time. The ability for a user to have time "flexibility" and create time ranges for their trip was very difficult for the user to discover and was also mistook for a "roundtrip" feature in one case. We discussed the reorganization of our date choosing layout with users, and found that instead of having two distinct calendars, we would merge them into one workflow with an option of specifying a date range. Roundtrip functionality we chose to exclude at this point to keep the design simplistic, but we will consider it for future iterations.

Two more issues with the setting up of a trip came with specifying luggage and the number of available seats/riders. It was clear to the user that the passenger icons represented passengers, but their confusion over whether or not they were included in the count or whether the number they left blank were the number of open seats has shown the need for documentation of the exact usage. This can be done with a tool-tip or a question mark box. As for luggage, our icon needs to be more representative. One participant suggested we make the icon look more like luggage, angle it a bit, and have two pieces of luggage, a small one in front of a big one. Additionally, the iPhone slider was not easily understood, so toggling luggage will be done with a check box.

The Trip Details page had two minor issues and two major issues. The first minor issue was that when a user opened up the map of their trip, there was no way to close it, and the second was the disabling of text/audio message queues when either format is not present. The major issues came with visibility and workflow. We need to specify that a user is waiting for a driver response when the request a ride, and clearly show the driver where to find new requests on the Trip Details page. To highlight requests, it was suggested that we include an "inbox" style header to the passenger section, showing the number of requests to in brackets. A banner at the head of the page will also appear when requests are pending. As for flow, participants did not like having to set a rider for each available seat separately and would rather select all passengers at once from the pending requests screen.

Despite the pain points, there were some areas we did well in. The audio recording and text messaging interfaces we had were very well understood. Most users were able to follow the general workflow despite confusion over specific functionality. Trip Details as a whole was able to provide participants with the information they were in search of. Participants also enjoyed the list overlay on top of a map when viewing available trips in their area.

Something to consider for future testing, the heavy iPhone based design on the application catered much more to the iPhone using population. For non-iPhone users, their confusions distracted them from other aspects of the design, suggesting that we might have relied too heavily on iPhone paradigms.

As a general conclusion the interface is on track, but needs some tweaks. Participants were comfortable with the concepts and the flow, and enjoyed being a part of the project.

From our results and ensuing discussion we have developed a list of issues, prioritized from severity 0 (not too important) to 4 (very important):

#### Severity 0:

- Prices in dollars should not have decimals. [Aesthetic and minimalist design]
- Vehicle profiles would make setting up rides easier. [Flexibility and efficiency of use]
- Passenger photo when selecting a pickup location seems unnecessary. [Aesthetic and minimalist design]
- Time selector wheels can be confusing. [Visibility of system status] [Recognition rather than recall]
- "Start" and "End" language when finding a ride is ambiguous. [Recognition rather than recall]

#### Severity 1:

- It's annoying to have to leave a message whenever trips are requested/posted. [Flexibility and efficiency of use] [User control and freedom]
- Profile screens / social aspects are not easily discoverable, which leads to other problems.
- It's difficult to request multiple possible rides for the same trip. Users may want to try several possibilities to improve their chances. [Flexibility and efficiency of use]
- The return/enter buttons on the keyboard can be confused with application functionality. This may be an iPhone familiarity problem. **[Match between system and the real world] [Error prevention]**
- Clicking open passenger seats when searching rides does nothing. [Visibility of system status]
- The function of the phone message button on a profile is ambiguous. It looks like a phone call, which discourages users from trying it out. [Error prevention] [Match between system and the real world] [Consistency and standards] [Recognition rather than recall]
- Riders cannot request trips that do not exist. [Feature request]
- The trip details screen for confirming passengers does not provide enough information for the user to take action. [Visibility of System Status] [Recognition rather than recall]
- Confirming passengers for each open seat is arduous. [Flexibility and efficiency of use]

- "Pending" language on my trips screen after requesting a ride is ambiguous. (Martin and Alex understood this) [Visibility of system status] [Match between system and the real world]
- "Trips" tab should be named "Home". [Match between system and the real world] [Recognition rather than recall]
- It's not immediately apparent what stars mean, though the general idea is recognizable. [Recognition rather than recall]
- 7+ maximum passengers doesn't work for vanpools, is confusing. [Flexibility and efficiency of use]

#### Severity 2:

- Clicking plus sign in driver area of trip detail did nothing in one case and discouraged its future use. [Consistency and standards] [Visibility of system status] [Match between system and the real world]
- Clicking on an open seat on a ride details screen gives no feedback. [Visibility of system status]
- Profile icons for number trips given/taken were thought to be number of available seats. [Match between system and the real world]

# Severity 3:

- Users understood the idea of passenger icon(s), but were confused over their exact meaning. Number of total seats? Total people? Additional people? [Help and documentation]
  [Visibility of system status] [Consistency and standards] [Recognition rather than recall]
- It's unclear why a user can't post a ride without creating a text or audio description of the ride. [Visibility of system status] [Help users recognize, diagnose, and recover from errors]
- Voice and text messages when posting a ride isn't clear what it is or who it's for. [Recognition rather than recall] [Match between system and the real world]

#### Severity 4:

- No way to revert picture selection [User control and freedom]
- Can't get out of the drop down map in trip details [User control and freedom]
- Calendar range is not at all intuitive. [Visibility of system status] [Match between system and the real world] [Recognition rather than recall]
- Meaning of the luggage icon is very ambiguous. [Recognition rather than recall] [Match between system and the real world] [Consistency and standards]

- Action / feedback of the luggage switch is ambiguous. Consider a checkbox. [Visibility of system status]
- Users can't enable the find a ride button without posting an attachment. This is a mistake the "feature" should not exist. [User control and freedom] [Aesthetic and minimalist design] [Visibility of system status]

The appendix contains an action checklist of the outstanding issues found through testing.

# Appendix

# Action Checklist

- Redesign the process of selecting departure dates and date ranges
- Consider implementing roundtrip functionality
- Make number of passengers/riders selection clearer
- Redesign luggage icon to better reflect "luggage"
- Use check boxes instead of sliders or buttons to indicate clear on/off toggling
- Start/End text box editing unclear
- Next/Enter buttons on keyboard unclear
- Let user save car info for car type posting and number of available seats presets
- Create address book feature for frequently used addresses/locations
- Make clearer the existence of text/audio message from the driver on Trip Details
- Add functionality to clear picture selection
- Add exit functionality for Trip Details map
- Remove "Back to my trips" from viewing a trip details or make back button workflow clearer
- Icons for number of trips given/taken need work
- Make "phone" icon on Profile into audio message icon
- Decide how to handle finding rides for trips that are not yet created (alert system? poster requests rider?)
- Change request respond workflow so driver can select passengers for all seats rather than for each seat individually
- Remove message requirement from find a ride detail screen
- Allow user to request a ride by clicking "OPEN" passenger on Trip Details
- Clarify status of a request (e.g. pending driver approval)
- Change "Trips" tab to "Home"
- Discuss making attachments optional
- Increase visibility of pending requests on Trip Details
- Improve communication of text/audio message requirement for posting and requesting

### **User Testing Script**

#### <u>Pre-tasks</u>

Thank you so much for helping us out today <insert name>, we really appreciate it. RideAlong is a project we are doing through our Human Computer Interaction course, where we go through the design process of conceptualizing a mobile application. Our project, RideAlong, is a ridesharing application that looks to improve upon existing methods of ridesharing to make giving or finding a ride easier and more accessible, while facilitating trust between the driver and riders through social networking devices such as profiles.

That said, we want to stress that the usability study that we are doing today is not a test on you, but a test on us. It is our design that is being critiqued, so if anything doesn't make sense, it is a fault of our design and not of you. If at any point you feel uncomfortable and wish to stop, please do so.

For us to follow what your thought process, please try as best you can to talk through what you are doing and what you are thinking. This will help us determine whether the intent of our design fits how you interpret it.

We'll be asking you to complete a few basic tasks using the system we've created. This is a paper prototype, meaning it's a paper simulation of how it would look on a mobile device and how it would act. <insert name> will be the computer, switching out screens and responding to your actions. We apologize for the slow load times, but bear with us.

I think we're ready to start. Do you have any questions or concerns before we begin?

#### <u>Post-tasks</u>

Alright, that's it! Now that you've had experience with the application, do you have any questions, comments, or suggestions? Was there anything particularly confusing about the design. Does it look like something you would use?

<discussion>

Again, thank you so much!

#### Raw Notes

#### Steven

#### TASK 1

- After selecting an end point, he wanted to change the start point and hit the back button to do that. Back was seen as undo but takes you back to the home screen.
- Keyboard wasn't address friendly. Couldn't see where to find symbols/numbers
- Start/End text field edit button was confusing
- Next/Enter button on keyboard confusing
- Why empty space by calendar?
- Didn't like the feeling of leaving the "post a trip" screen to set the date/time
- Time selection interface was fine
- Wanted text input option for date/time
- Thought the second calendar was the return trip [-Match between the system and the real world, -Help and Documentation]
- Passenger selection looked like number of seats taken, was confused by 7+ concept/icon, doesn't work for vanpool paradigm [-Match between the system and the real world, -Help and Documentation]
  - Selected 2 seats for a two person car though the driver would occupy 1
- Would have liked convenience of having his vehicle type saved so that the number of open seats was intelligently selected, maybe have different vehicle type preferences depending on the day (we have yet to consider saved vehicle types).
- Drop decimals for price
- Attach photo's purpose unintuitive, he tried to post a photo of himself (might be more clear if a profile was set up initially)
- Record feature used flawlessly [+Match between system and real world]
- On text message, tried to use return to go back [-Consistency and Standards, -User Control and Freedom]
- Use +/- days or hours instead of second calendar? [!!]
- Clicking plus sign in driver area of trip detail did nothing and discouraged its future use [-Visibility of System Status, -Aesthetic and Minimalist Design]
- Clicking open passenger seats did nothing which didn't phase him
- No way to revert picture selection [-User Control and Freedom]
- Decided to attach a picture of electric city to the trip [!!]
- Can't get out of the drop down map in trip details [-User Control and Freedom]
- Where to go after my trips, was the trip posted?
- Selecting trip and clicking back button does something different when editing and when viewing a trip, which was OK
- Didn't like the back to my trips button on viewing a trip since back button already did that, made him think that the back button had other functionality.

#### TASK 2

- Wondered if stars were for driving or riding, concluded they were friendliness stars
- Icons for number trips given/taken he saw as number of available seats [-Match between system and real world, -Help and Documentation]

- Phone used to send message to edward or call? Can these be clearer? [-Help and Documentation]
- On profile trips tab, might be worth making it clear if trips are in the past
- Select pickup location providing a default was understood and appreciated, he was able to move the marker without issue. [+Aesthetic and Minimalist Design, Recognition rather than recall]
- Having the passenger's photo on select pickup location he thought was odd and unnecessary [-Aesthetic and Minimalist Design]
- Questioned whether a rider could post a request for a trip that didn't yet exist [-Help and Documentation]
- Wanted to stay on pending requests screen until all passengers were selected or he was done rather than needing to open it once per open spot [!!]

#### TASK 3

- Wanted to select home address as an option for start location, address book feature?
- Was able to click on the map to zoom in and drop the end location pin on electric city [+Match between system and real world]
- Interface was familiar because of experience with posting a ride
- Didn't know was passenger icons on "Find a Ride" meant [-Help and Documentation]
- Thought luggage icon was "shopping" [-Match between system and real world]
- Confused why next button on find a ride was still gray after options selected
- Posting audio/message in find a ride setup page was unwanted, desired to check out available trips before he created the message. [-Aesthetic and Minimalist Design]
- Liked frosted overlay [+Aesthetic and Minimalist Design]
- Interpreted stars well, saw Chris' 2 stars, went back, saw Angela and her 4 stars, selected her. [+Match between system and real world]
- Missed plus sign to expand text so missed full message [!!]
- Tried to click on an open seat and got no feedback (should you be able to request a ride by selecting an open seat?) [!!]
- Recorded a message to send to the driver of the ride he requested [+]
- After requesting, it was unclear that the status was "awaiting driver response" [-Visibility of system status]

# GENERAL

- Luggage icon should be angled bags, one big shadowing one small
- Was able to distinguish people by star ratings, but would have been more concerned about time than rating had he not been flexible
- Riders don't want to think they just want to ride
- Could "Trips" be "Home" [!!]
- Keep attachments optional [!!]

# Martin

• Alex first clicks "My Trips" when trying to find a ride because he "needs a map" to find a ride. When that doesn't work he tries the map tab. He is clearly expecting to look at a map right away in order to find a ride.

- At the map screen, trying to find a ride, can't find electric city on the map (map only showing immediate area around him) so goes back to trips before finally clicking "Find a Ride". He thought he should be using MapQuest or something similar to plan the trip, outside the RideAlong application.
- The labels "start" and "end" on the find a ride screen were confusing. Alex wasn't clear at first that they referred to start and end \*location\* rather than times or something else. [-Help and documentation, -Recognition rather than recall]
- "Why are there two Novembers?" The date/time range didn't make any sense and wasn't explained by the interface in a way the he could understand. [--Help and documentation, --Recognition rather than Recall]
- The button that enables/disables the second part of the date range just looked like a random meaningless button until it was clicked on. [-Recognition rather than Recall, -Match between system and real world]
- Can't figure out what the second calendar button is for, fills it in with the same date/time as the first. Thinks perhaps it means "I want to travel again on the same trip at another time as well."
- Time selector Alex just tried to click on the times that were visible rather than scrolling the wheels to select a time. [-Match between system and real world, Consistency and standards]
- The passengers icon(s) were fairly obvious in their meaning, although there was some confusion over whether it meant how many people \*this user\* was going to bring along vs. some kind of selection on how many people he would be comfortable riding with. [+Aesthetic and minimalist design, -Help and documentation]
- Luggage icon The yes/no slider was confused for an ok/next type button. The "briefcase" was confused for the same thing, or a save button. Alex never understood that it had anything to do with luggage as was only ever confused by it. [--Match between system and real world, -Help and documentation, , -Recognition rather than recall]
- Thought yellow highlight on the [ABC] and voice message buttons meant they were disabled this could have just been the fault of our paper prototype rather than an actual problem with the interface design.
- Didn't quite understand at first why he would want to be adding a voice message or who it was for. Thinks the voice recorder could use some text explaining why a user would be recording a voice message or what kinds of things he should say. [-- Help and documentation, -Recognition rather than recall]
- The text message interface was clearly understood, and the reason someone would want to leave a text message seemed pretty clear. [+Recognition rather than recall, +Consistency and standards]
- The icon for the camera button was not obvious as to its function (perhaps just didn't look like a camera enough). [-Match between system and real world, -, Recognition rather than recall]
- At the attach picture screen, he wonders why all pictures were visible "wouldn't you only want to post photos of yourself?"

- List of possible rides fitting search criteria was clearly understood, but meaning behind the number of stars was unclear (did it refer to how well the trip matched the search or what?) [-Help and documentation, -Recognition rather than recall]
- On the trip details page, the back button and its function were obvious and caused no problems [+Aesthetic and minimalist design]
- Alex immediately understood that he needed to click the voice or [ABC] buttons to leave a message in order to actually request a ride.
- After requesting a trip, on the "My Trips" screen, when it says "pending", he would have liked some feedback as to what that meant and/or how long he might have to wait, and whether it was confirmed or not (he seemed to have confused pending = "not yet confirmed" with pending = "trip hasn't happened yet"). Trip results screen was otherwise quite well understood. [-Help and documentation, -Recognition rather than recall]
- When finding a ride, in the search results, Alex would have liked a way to quickly go back and also request other rides from the same search. [-User control and freedom]
- Alex never got to a profile screen, and didn't seem to realize that there were profiles that he could have examined before choosing a trip.

# Alex

TASK 1

- Immediately found the "post a trip" button.
- Meaning of the start/end location fields were clear ("It's just like Google maps") [+Consistency and standards]
- Understood to scroll the number wheels when entering the time (has used iPhone before)
- Number of people (icons) were understood with no difficulty [+Aesthetic and minimalist design, +Recognition rather than recall]
- On "post a trip" screen, he didn't know what the [ABC] and voice buttons were for until he clicked them the icons/functionality weren't intuitively obvious. [-Help and documentation,
- Camera icon/functionality wasn't understood until he clicked the button to find out what it did, but he then added a picture with no trouble and understood why one would want this feature.
- Date range button was not understood [-Recognition rather than recall, --help and documentation, -Match between system and real world]
- Trip details made sense, confirm button was clear as to functionality [+Recognition rather than recall, +Consistency and standards].
- Contents of "My Trips" screen after confirming the trip was clearly understood that the trip listed was the one he just posted, and that others would likely show up in the same place if he added more.

TASK 2

- Highlight/red border on the passenger icon wasn't clear as to what the meaning was, but he clicked it because it was the only thing that was different from the trip details screen he had seen before. [-Recognition rather than recall]
- Choosing from the list of passengers, he first just selected one, but then went back because he wanted to see more detail. He had no trouble finding the back button, and correctly assumed that there was more information to be had in the previous screen(s) [++User control and freedom].
- The profile was accessed intuitively by clicking the user's portrait, without even having to think about it. [+Match between system and real world, +Aesthetic and minimalist design]
- Access to and contents of "Reviews" tab in the profile was grasped immediately. [+Match between system and real world, +Aesthetic and minimalist design]
- Pickup location dialog was understood with no difficulty. [+Match between system and real world, +Aesthetic and minimalist design]
- He thought the add passenger interaction (from immediately after the alert) should have behaved more like email, with some indication of how many people were possibly waiting for the slot and who they were. [-Match between system and real world, -Recognition rather than recall, -Consistency and Standards]

# TASK 3

- When entering the departure time, he was looking for an "anytime" option (for the given date), and when he couldn't find one he gave up and just entered a time in the middle of the range he wanted to leave (didn't even understand that there was an option for a range of times). [-help and documentation, -Error prevention]
- Thought second date/time box was for a "round trip", so he entered a date and time for when he wanted to return. [-Recognition rather than recall, -help and documentation, --Error prevention]
- Understood the luggage icon, sort of, but couldn't figure out whether luggage was selected or not. When the slider said "yes" he didn't know if that meant he should click it to say "yes luggage" or whether that meant it was already selected to be "yes luggage". [--Match between system and real world, -consistency and standards, Recognition rather than recall]
- Couldn't figure out how to enable the "find a ride" button. Tried adding a picture first, but that didn't work. [-help and documentation, -recognition rather than recall, -Visibility of System Status]
- Annoyed at being forced to add a message, he just entered a space for the message so that find a ride would enable.
- Wondered what 2-stars meant, so looked at the profile and reviews for the trip with the user who had two stars (it still wasn't totally clear that the stars were a rating for the PERSON. [-Recognition rather than recall, -Help and documentation]
- Back button in profiles and trip details was intuitive and easily understood. [+Recognition rather than recall, +consistency and standards, +Aesthetic and minimalist design]
- Looked through profiles of various possible trips clearly understood the usefulness of this feature and how to take advantage of it. [+Recognition rather than recall, +consistency and standards]

- When requesting a specific trip, he was again annoyed at being forced to leave a message, but actually left one this time, as now there was a specific person he was clearly opening a dialogue with.
- Understood intuitively that he could look at the profiles of other passengers on the trip by clicking their portraits. [++consistency and standards]

# GENERAL

- Didn't understand that the highlight on [ABC] and voice meant it was required. Thought perhaps a red \* would have been more intuitive, that was what he would expect when filling something out that had a required field. [-consistency and standards, -recognition rather than recall, -help and documentation]
- For date range, some things that might make it clearer: "until", or "between" label on the second part of the range, or a button that changes between "leaving on" with one date field to "leaving between" with two.

or, have the range of date/times all appear in the same calendar dialogue, selecting a start date/time and end date/time on the same screen.

• Luggage - A checkbox instead of the completely confusing yes/no slider would be clearer - you can't tell whether yes means click it for yes or that yes is currently selected.

