

Phase II: Gathering User Requirements

Easy Delivery Tracking

Kevin Biro, Yulun Wu, Zhao Ji Wang, Jin Ting Zhou, Yunfei Wang

CSCC10

Naureen Nizam

Personas

Jim Jimothy



A 25 year-old entrepreneur with a background in computer science, who is currently working in the tech industry. He lives in his apartment with his roommate John Smith, with whom he'd been friends since elementary school. As part of his job, Jim plays around with electronics and makes robots for his clients. He often orders specific electrical components that he can only find online and has them shipped to his apartment. Jim is a very organized individual who is always on top of his work and tasks he needs to accomplish during the day. He likes to have a clear list of things to do, which keeps him motivated during the day. He seeks to improve his portfolio with more personal projects that can attract more clients.

Jim occasionally visits the grocery store to buy food, but finds it inefficient of his time since he does not have a car. He prefers ordering in food as it saves time and effort that is better spent on his work.

He likes long walks in the morning to clear his head, and goes to the gym with his roommate twice a week.

Holly Granger



As a self-employed small business owner, Ms. Holly Granger is a strong, smart, hard-working woman, who has spent the last 3 years trying to put her business on the map. She is 28 years old, single but in a relationship with her partner David Hofstadter, a fine young man, supportive of her work. With an early dream of being a veterinarian, she has a caring heart for animals, and a passion for ensuring the well-being of these creatures. Though the dream didn't quite work out for Holly, she has since reshaped her career and devoted herself in a pet supporting business that sells pet related products, and provides pet related services.

Holly has great care for her work, but also for her family. She has always been a family person, that one kid who always enjoys taking family photos, a tradition that existed in her family ever since she has memories. Though she lives in a 2-room apartment with David, she always returns to her family house on weekends for dinner, sometimes bringing David along. For her, family, friends, work, and her pet dog Goldie is all that matters to her.

Persona Profile


Develop a persona to understand who you're designing for

1

Focus on the person you're designing for

NAME: Jack

PORTRAIT:



It is frustrating trying to re-order something when I forget which website I bought it in.

Please do consider the amount of data that is going to be used by the app

ATTITUDES:

The app does not need to be complicated, a lot of features is already being thought of.

Best if design team can base their design from popular delivery apps

Filters for orders has higher priority than order history

GENERAL DESCRIPTION:

Age: 21

Location: BC, Canada

Occupation: Undergraduate student

Frequency of shopping online: Once/ 2 weeks

Familiarity with other delivery apps: Somewhat familiar

GOALS:

Search for order history

Use filters such as websites or dates to search for a specific order

Go from the application to the original ordering website or the shipping company's website



Scenarios

Scenario 1

Jim likes to create electrical projects and simple robots in his spare time that he intends to make profitable by selling the prototypes to his clients. One day, he has a great idea to create a robot that he can use to automate the lights in his apartment when he walks in and out of a room. He gathers his supplies and begins brainstorming how to create such a project, while also researching the market for similar ideas. While creating the first prototype for his project, he soon realizes that he does not have many of the electrical components needed to finish completing his task. Jim scours the internet for the parts he needs, and he ends up ordering parts from as many as 10 different websites. Due to the importance of this project, Jim needs a way to keep track of his parcels so he can more easily plan the creation of his project. Although he is very organized, he struggles to monitor all 10 of the websites he ordered from, as it takes up a great chunk of his time to individually log into all the different tracking services.

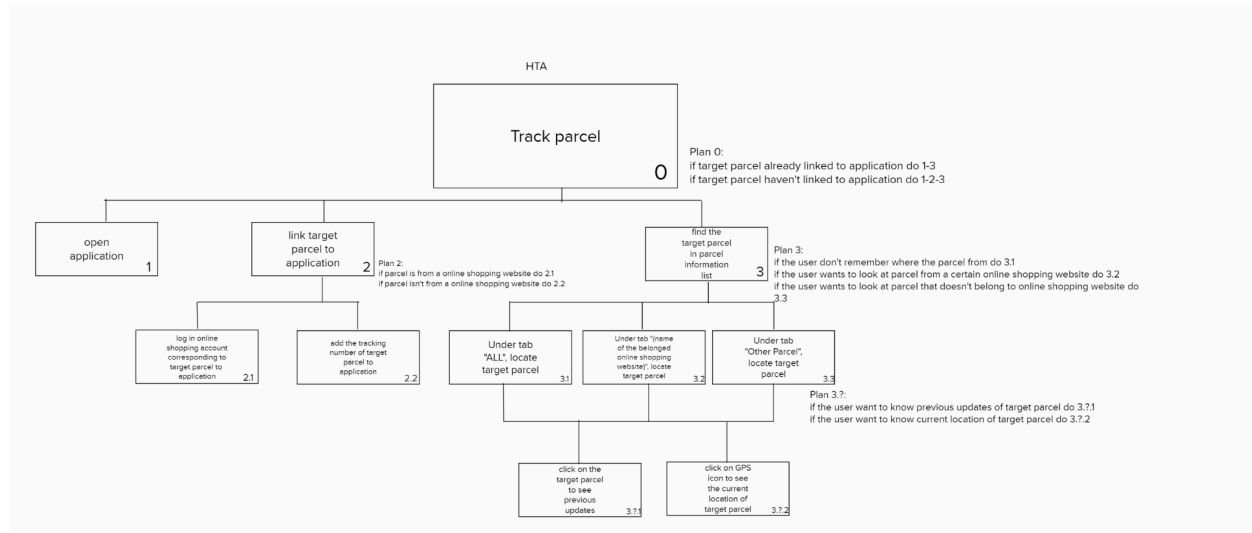
Scenario 2

Holly's pet shop was pretty busy last month. She has done a lot of restocks online with different platforms. She has to check every different website very often to check the delivery progress for all goods. The pet shop still needs to restock very often online in the next few months. She needs to find an application to wrap all the delivery together to save more time for her business.

Scenario 3

Holly also wants to see all the history of her online ordering on various websites and platforms of her shop for recording purposes. Every time she collects information from different sites spent plenty of time which is unnecessary. She needs an application that can collect all the information for her every time she orders online. Since the orders for her shop would be a lot, this will save a lot of time for her.

HTA



<https://app.mural.co/t/csc10group153552/m/csc10group153552/1633290095026/9c3be4a7c9885ba751c2d74f92fa01bcaa866eed?sender=ue97dbabe4149883373396954>

2. Technique(s) used to gather user requirements with an explanation of why the technique was used (interview, survey, observation, etc)

- **Survey**
We choose to use the survey for user requirements gathering because the survey can be completed online and it can be filled quickly, also allowing us to get a large number of responses. The majority of our survey is closed-ended questions, which can be quickly analyzed by the statistical analyzing tools. We also included some opinion driven/open ended questions to catch any suggestions the participants might have.
- **Interview**
Other than the surveys, we also chose to do some interviews with selected people. This allows us to ask some more open ended questions about certain aspects of our design. We were able to show the interviewee our low fidelity prototype and ask for opinions as well as asking some follow up questions, which is not easy to do by asking short multiple choice questions on survey questionnaires.

3. Type of users selected, number of users selected and why (describe any limitations)

For our survey, we were able to get 13 responses from people within our university. All of the people that have answered our surveys have had some online shopping experiences and have

used delivery apps before. About 60% of the participants do online shopping more than once a week. Since these people have used existing tools and apps fairly often, they have much better understanding about the pros and cons of the tools, and should give us more informative feedback about struggles they might have faced.

For our interviews, we were able to get 2 interviewees, both had at least 5 years of experience in online shopping and using delivery apps. With their experience, they are able to compare our low fidelity prototype with delivery apps they have used before and accurately tell us what we did well and what we need to improve on. The only limitation is that although they are experienced users of such apps, they may not have the experience in app development or interface design, so some suggestions might not be feasible from the perspective of an interface designer.

4. Artifacts used to conduct the user requirements gathering (sample interview sheet, sample questionnaire, guidelines for assessing observations, low-fidelity prototypes)

- Sample Survey:
https://docs.google.com/forms/d/e/1FAIpQLSdyceEfCzQqcaLwOSX637Um3zlSnT90OkY0uPvloBXj_W5GoQ/viewform?usp=sf_link
(See Appendix A for screen shots of the sample survey)
- Low-fidelity Prototype:
(See in text pictures in Appendix B for pictures of the low-fidelity prototype)
- Sample interview sheet
(See Appendix B for the sample interview sheet)
<https://docs.google.com/document/d/1K2Pm2DaK96jl02xw8WMF7yE0UMwV5kjS45Jklz90ZzA/edit?usp=sharing>

5. Summary of results - explain how your results inform your design decisions as you move to the next phase of the project (creation of high-fidelity prototypes)

Our results have shown that 6 of our participants(around half) have fairly often faced issues of packages arriving when no one is home to pick up. 10 of the participants said it would be very helpful to receive notifications when the delivery person is nearby. 8 of the participants said it would help a lot to see a map to locate where the package might be while it is being delivered. Some participants have also answered that it would help to see a progress bar to inform them about which phase the delivery process is in. These figures have shown that package tracking has been a fairly big problem for most of the users, which is caused by not being given enough information about the delivered packages. Being able to know where the package is and how far it is to being successfully delivered can help avoid problematic cases for delivery. Which tells us that our design should put a large emphasis on the tracking of the packages, and should make the tracking pages very easy to navigate to and use.

Also, around 70% to 90% of the participants indicated that they think it would be very convenient to be able to track their packages bought from several different websites in one centralized application. Likewise, around the same percentage of people have indicated that it can also be very helpful to have the ability of manually adding/deleting packages and accounts to track. This shows that when designing our website for tracking, not only do we need to ensure that packages from different websites can be tracked in one centralized website. We also need to give the user enough control to decide what packages to track.

Another interesting feedback we got from one of our participants is that not only do we need better tracking for packages when they are delivered to the users, users might also want to track the progress of returned items, so that they will know when they might get their refund. This is an idea we did not previously think about, but it is reasonable; users might feel anxiety when not being able to track the packages' progress as they are returned for refund. Therefore, we will also try to implement that feature as well.

Our interviewees looked at our design and decided that the majority of our design is nice and easy to use, meaning that the overall interface design is on the right track. However they also made several remarks on how we can improve:

1. We can add a feature that allows users to rate the delivery experience after a delivery is complete, or perhaps even allowing feedback comments on a particular delivery person, which will allow better interaction between the users and the system. We will be considering this feature in our high fidelity design, and perhaps adding features that allow users to see the previous ratings of the current delivery person.
2. On the "Add" page, the search bar for searching online shopping companies conflicts with the option in the drop-down list. We need to make that feature more clear in our future prototype.
3. We can have multiple-line input control for adding tracking numbers to the tracking list, so the user don't need to add them one by one if they want to add multiple packages at a time.
4. We can change the navigation bar on the main page to a drop down list or a filter so that if the user add many accounts into the tracking list, the bar won't be too long.
5. We can add the delivery person's phone number to the package's detail page; one interviewee suggests that since the delivery person needs to drive the van for most of the time, they won't have time to read and reply to chat messages.

Appendix A

Screenshots of the Sample Survey

Section 1 of 3

Easy Delivery APP Survey

Hello, we are the Easy Delivery Tracking group from CSCC10: Human-Computer Interaction. We are designing an application that concentrates package information from different websites in one place, and will give the user notifications for delivery updates. We appreciate your help if you can take 5-10 minutes to answer our survey. We will not collect any personal information in this survey.

How often do you do online shopping? *

- ☐ < Once a week
- ☐ >= Once a week and < five times a week
- ☐ >= five times a week

Have you used any kind of package/delivery tracking APP? *

- ☐ Yes
- ☐ No

If yes, which package/delivery tracking APP(s) have you been using?

- ☐ Amazon
- ☐ UPS
- ☐ FedEx
- ☐ Parcels
- ☐ Other...

Tell us about the problems you have faced with the current parcel/delivery tracking APPs.

Description (optional)

How often do you receive your package incorrectly? *

| | | | | | | |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| Never | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Always |

How often are you required to pickup your package? *

| | | | | | | |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| Never | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Always |

How often do packages arrive when nobody is home? *

| | | | | | | |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| Never | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Always |

How often do you lose a package after being told to pick up the package? *

| | | | | | | |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| Never | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Always |

How often does the delivery person call before sending the package to a pick up location? *

Never 1 2 3 4 5 Always

Please rate how easy it is to track your packages with the current delivery apps you are using? *

Very Hard 1 2 3 4 5 Very Easy

Do you have any not listed problem(s) with the current package/delivery tracking APP? If so, please list any.

Long-answer text

After section 2 Continue to next section

Section 3 of 3

How helpful do you think if a package/delivery tracking APP with the following features will be in improving your online shopping experience?

Description (optional)

Being able to track all your packages purchased on different platforms(E.g. Amazon, newegg, etc.) by adding your account in one single APP. *

Not Helpful at All 1 2 3 4 5 Very Helpful

Being able to delete your added account. *

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to manually add a package to be tracked. *

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to delete a manually added package. *

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to sort on the packages you have regarding on their provenance (for example: Amazon, UGG, Walmart).

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to sort on the packages you have regarding on their status (for example: out for delivery, delivered).

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to see the picture of item(s) you have in a package besides its tracking information. *

1 2 3 4 5

Not Helpful at All ○ ○ ○ ○ ○ Very Helpful

Being able to locate the package on a map when it is being delivered. *

| | | | | | | |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not Helpful at All | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Helpful |

Notification when the package is out for delivery. *

| | | | | | | |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not Helpful at All | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Helpful |

Notification when the delivery person is close by. *

| | | | | | | |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not Helpful at All | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Helpful |

Being able to contact the delivery person directly with a chat system. *

| | | | | | | |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not Helpful at All | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very Helpful |

Can you think of any other feature(s) that you would like to have in a package/delivery tracking APP that can improve your online shopping experience? If so, please write below.

Long-answer text

.....

Appendix B

Sample Interview Sheet

Welcome to the interview! We are the Easy Delivery Tracking group from CSCC10 in UTSC. Our project is to design an APP that allows the user to track the packages from different platforms. This interview will show you the low-fidelity prototype we drew for this APP and ask you some questions related to the prototype. Notice that all prototypes doesn't guarantee what the final work looks like.

Choose one of the following ways to track the packages →

Please Sign in to The Package's Online Shopping Account:

☒ Add an Online Shopping Account ☐ I have the package's tracking number

Type here to Search for Online Shopping Company

| | |
|--------|---------|
| Amazon | |
| Apple | |
| Bell | |
| Dell | Sign in |

↑

This Box will show up as soon as you click the radio button to search for the online shopping company name. You can click on the results popped up in the list to select which online shopping account you want to sign in with.

Choose one of the following ways to track the packages →

Please choose from the following:

☒ Add an Online Shopping Account ☐ I have the package's tracking number

Selected Company: Amazon (Click [here](#) to Change)

Please Sign in to The Package's Online Shopping Account:

Username:

Password:

After you choose to change the company, the search box will pop up and you will be able to select again.

1. These two pictures are to show what the add account page looks like. Look at these pictures, imagining you want to add your Amazon account to the tracking list, will you be able to locate your target button or input box quickly? Is there any area that makes you feel confused?

Choose one of the following ways to track the packages →

Please choose from the following:

☐ Add an Online Shopping Account ☒ I have the package's tracking number

Please Enter Your Package's Tracking Number:

Add Package

2. This picture is to show what the add package page looks like. Look at this picture, imagining you want to add one package you recently have shipped by Canada Post to the tracking list, will you be able to locate your target button or input box quickly? Is there any area that makes you feel confused?

ALL Amazon Walmart Other Manage + Add

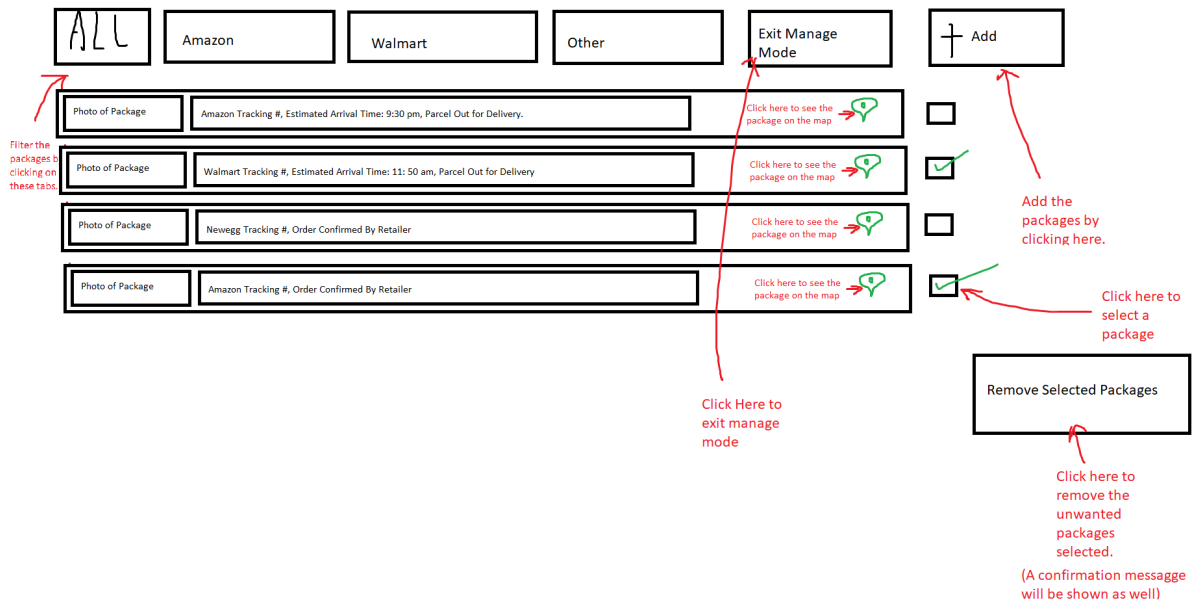
Filter the packages by clicking on these tabs.

| | | |
|------------------|--|--|
| Photo of Package | Amazon Tracking #, Estimated Arrival Time: 9:30 pm, Parcel Out for Delivery. | Click here to see the package on the map → |
| Photo of Package | Walmart Tracking #, Estimated Arrival Time: 11: 50 am, Parcel Out for Delivery | Click here to see the package on the map → |
| Photo of Package | Newegg Tracking #, Order Confirmed By Retailer | Click here to see the package on the map → |
| Photo of Package | Amazon Tracking #, Order Confirmed By Retailer | Click here to see the package on the map → |

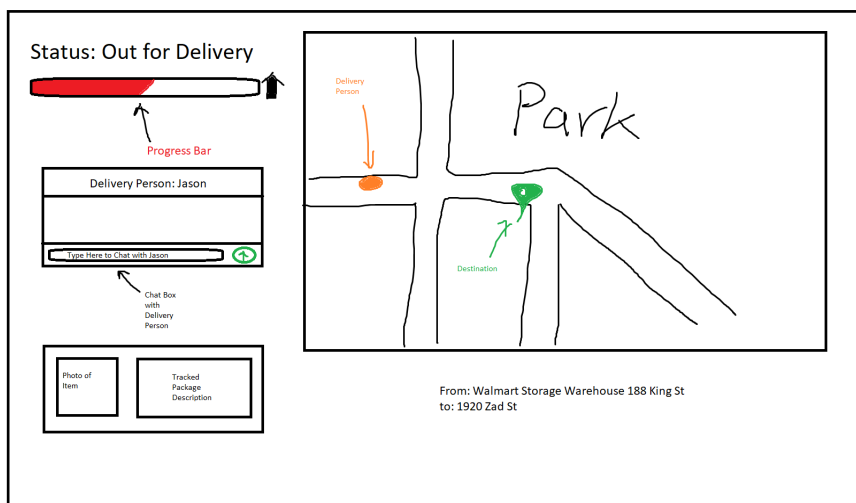
Click here to enter manage mode in which you can delete certain unwanted packages

Add the packages by clicking here.

3. This picture is to show what the main page looks like. Look at this picture, imagining you want to find the information of a package you recently ordered from Amazon, will you be able to locate your target information quickly? Is there any area that makes you feel confused?



4. This picture is to show what the edit mode looks like. Look at this picture, imagining you want to delete your Amazon account and the package from Newegg from the tracking list, will you be able to locate your target checkboxes or buttons quickly? Is there any area that makes you feel confused?



5. Also this picture. Look at this picture, imagining you want to know what progress this package is currently in, will you be able to locate your target information quickly? Is there any area that makes you feel confused?
6. This picture is to show what the detail page of a package looks like. Look at this picture, imagining you want to see where the current location of your package is, will you be able to locate your target information quickly? Is there any area that makes you feel confused?
7. Also this picture. Look at this picture, imagining you want to contact the delivery person who is delivering this package, will you be able to locate your target information quickly? Is there any area that makes you feel confused?