

Uber Everything Design Challenge

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1 Design Challenge Instructions

Uber is expanding its business into delivering anything (ie. grocery, clothing, household items, etc.) from anywhere (ie. Walmart, Costco, Canadian tire, Loblaws, etc.) on demand. Propose update(s) to the main Uber application to support this new initiative.

Your work will be evaluated in the following key areas:

- Research and understanding of the goal and problem
- Process to arriving at the solution
- Skill set with eye and creativity for design

2 Background

Uber started up as a luxury car service but exploded in popularity when it became a transportation network meant to rival taxis, known for its easy-to-use and cheaper services. Uber eventually expanded and added a food delivery system called *Uber Eats*. This originally started as a side-loaded tab¹, but grew into a standalone app to help keep the app's design simple and focused: "We felt we needed to resist the urge to overcomplicate things," said Jason Droege, the Head of Uber Everything. *Uber Everything* also created *Uber Rush*: the on-demand delivery service for small businesses and enterprises. They deliver food, clothing, and other parcels, but only after another business sends a request through them.

2.1 Uber Rush

Uber Rush has very similar goals and features with respect to the design challenge, but it is really just a courier service as it relies on businesses to send requests to Uber first. A process for Uber Rush may look something like this:

Customer orders from a business > Business handles transaction > Business orders Uber Rush > Courier finds and takes best path to business > Courier picks up package > Courier finds and takes best path to end point > Courier delivers package.

The new Uber application would serve the customer directly. In order to differentiate Uber Rush from this new product, I'll call it Uber Now; this new ordering process may look something like this:

Customer orders from Uber Now app > Uber Now handles transaction & orders courier (at the same time) > Courier finds and takes best path to business > Courier picks up package > Courier finds and takes best path to end point > Courier delivers package.

This is mostly the same, except there is one less point of action since the app handles two things at once. However, the time saved would end up nullified if the courier needs to manually get in line at said business, find the item(s), and line up via checkout. This process is more akin to a personal concierge, meaning the service would not be scalable nor efficient. In order to solve this problem, businesses would need to receive an order from Uber Now to prematurely prepare the item and place it in an easily accessible location for the courier to take when he or she arrives. Depending

¹ <https://www.wired.com/2015/12/ubereats-is-ubers-first-app-thats-not-about-rides/>

on the priorities of Uber Now, the “anything from anywhere” goal may shift to “anything from any-business-that-has-registered-through-us”. The new process would now actually be:

Customer orders from Uber Now app > Uber Now handles transaction & sends order to business & orders courier (at the appropriate time) > Courier finds and takes best path to business > Courier picks up package > Courier finds and takes best path to end point > Courier delivers package.

The app now handles 3 things at once. This overall process is very similar to Amazon's [Prime Now](#). Taking a look at how Prime Now works and examine its strengths and weaknesses is a good starting point for designing Uber Now.

2.2 Amazon Prime Now

Prime Now is a toned down version of what is wanted, since the items offered are limited to only a few retailers. It is easy to see the value proposition: order something and get it either within the next hour, or between 2 hour brackets at any time during operating hours. The convenience of having something delivered to your door in a timely fashion without even stepping foot outside is very enticing. In some cases, the delivery can be completed faster than personally going out and shopping, if it is a specialty item.

Upon launching the app, a user sees the area code (to ensure delivery is possible), the search bar, and some local stores, shown in Figure 1 below. This ensures that workflow is possible, and satisfies the only two categories of shoppers: people that know what they want, and people that don't. There are more categories to further cater to those in the latter category when scrolling down.

One feature that was lacking was a sort function, something that is commonly used in online stores; the option to sort results by popularity, price, alphabetically, or by most recent, helps many users shop. When comparing the app to the web version of Amazon, everything else was present, including filters, an item sizing/color option if available, a high quality image, a detailed description, related products, and reviews. Once an order was placed, the user can select the delivery time as shown in the center image in Figure 2.

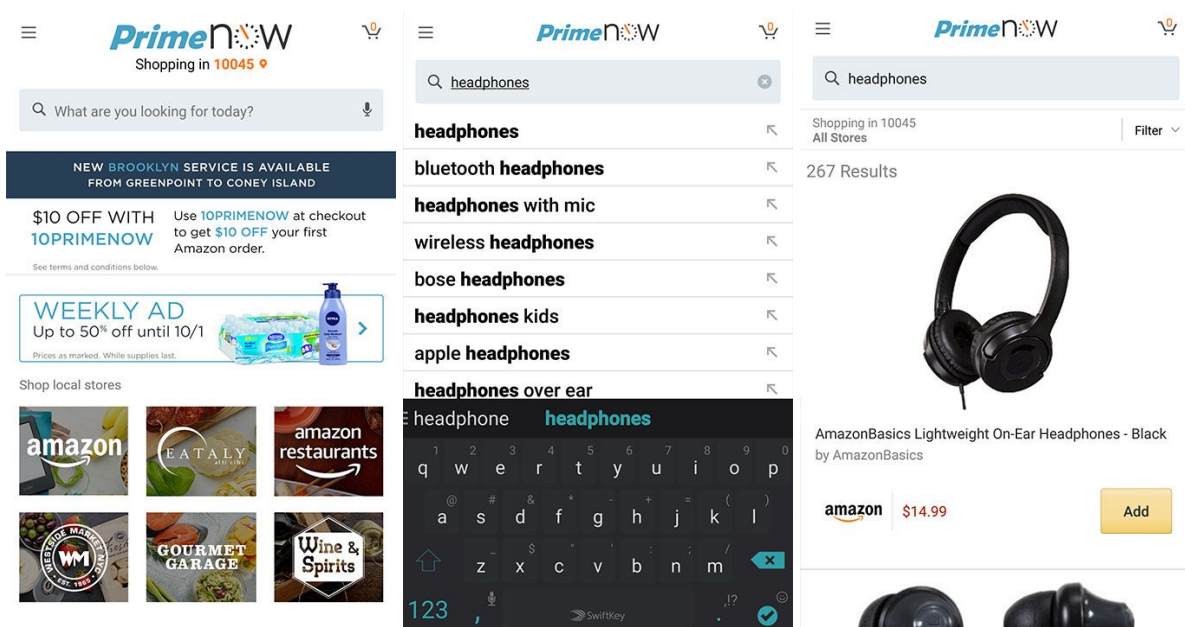


Figure 1: Screenshots of the Amazon Prime Now App from left to right: The home screen with a search bar and categories, the autocomplete with real-time suggestions while searching, and a results list.

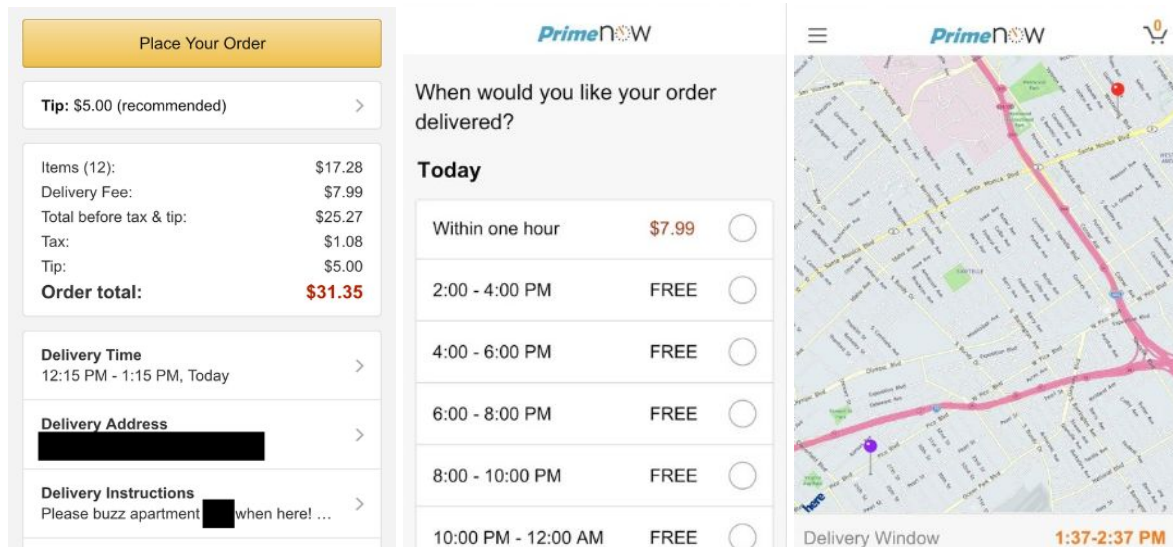


Figure 2: Screenshots of the Amazon Prime Now App from left to right: The order screen, the time selection, and a real time view of the courier (if “Within one hour” was selected).

Overall, the app is very reminiscent of the Amazon web store in terms of layout, visuals, and interface. However, something that is succeeding without much of an interface, are personal concierge apps.

2.3 Personal Concierge Apps

Personal concierge apps are a luxury service, trading off value for convenience. Using [magic](#) as an example, the only interface it uses is text. This is a more human experience and easier to use, but it is unreasonable to expect Uber Now to handle every single request with another human response. This is where technologies come to the rescue: natural language processing, search algorithms, and predictive demand methods have come a long way, and using these in Uber Now and can help users in some specific areas, namely in search accuracy and item discovery.

3 Objectives

From the brief analysis of the aforementioned services, a requirements list is created to form the basis of a preliminary design.

3.1 Main Objectives

The main feature list is shown in Table 1 below. A rewards system - which also exists in the main Uber and Uber Eats application - was added, and is something that is proven to increase purchase intent², helping with boosting app engagement and retention.

Table 1: Main features for the Uber Now app

Feature	Reason
1. App is separate from main Uber app	Keep the design simple.

² <http://ipglab.com/wp-content/uploads/2014/06/MomentsThatMatter.pdf>

2. App must have customer, business, and courier UI/integration	A two sided market requires more than one interface to work
3. Allow users to define the delivery time bracket	Convenience
4. Show the real time location of the delivery	Build Trust
5. Allow for natural language in search	Convenience and efficiency
6. Sort option	Convenience
7. Rewards system	Loyalty and growth

3.1 Secondary Objectives

Aside from these main features, another basic objective would be to have a similar visual style as the main Uber app, and to use allow users to connect with the same account as the main app so all data is connected to on account, without the hassle of re-onboarding.

Another feature that can be added to not only the benefit of Uber but also planet Earth, is sustainability. Delivery services have an impact on greenhouse gas emissions, so lessening this when possible is the right thing to do. People even often opt for a more environmentally friendly alternative when given a choice between otherwise similar decisions³. Uber Now can not only use this to the Earth's advantage, but also increase their delivery efficiency. A courier that can make two deliveries along one route is better than a 2 couriers making two separate trips. Uber does something similar already with uberPOOL, showing it is a cost effective model and there is an interested user base.

4 Information Architecture

The information architecture is necessary to ensure a smooth workflow for the users of the app, and to help guide the app designs. The diagrams are located in the appendix at the end of the report for ease of access. There are models for 3 types of users.

4.1 Customer Information Architecture

Refer to figure A1. The customer workflow is a linear process. Returning users start at step 2. After Step 9 is completed, the user is returned to Step 2.

4.2 Business Information Architecture

Refer to figure A2. This assumes the business has been already approved and been onboarded by Uber. This process ideally only happens once and once complete, the user would turn on the app and would remain at step 4.

4.3 Courier Information Architecture

Refer to figure A3. This assumes the user has been already approved and been onboarded by Uber. Returning users would start at step 3.

³ <http://www.ipsos-na.com/news-polls/pressrelease.aspx?id=5598>

5 Application Design

The application should exist on mobile and desktop devices. For the purpose of this design experiment, I will focus on an Android app to narrow the scope.

5.1 Introduction Screen

The first screen introduces the user to the app. It doesn't require a login to access the store, but it does require a location in order to see if the Uber Now service is available where the user is. If the main Uber app is also installed on the device, a prompt to continue as that user is given, and the user data and location is pulled from the account (Figure 3, centre). If there is no other Uber app installed, the user is asked to input their location. The location is used instead of a regular sign in page because it is easier and faster than a regular sign up page, and it is the limiting factor as to whether or not a user can use the service.

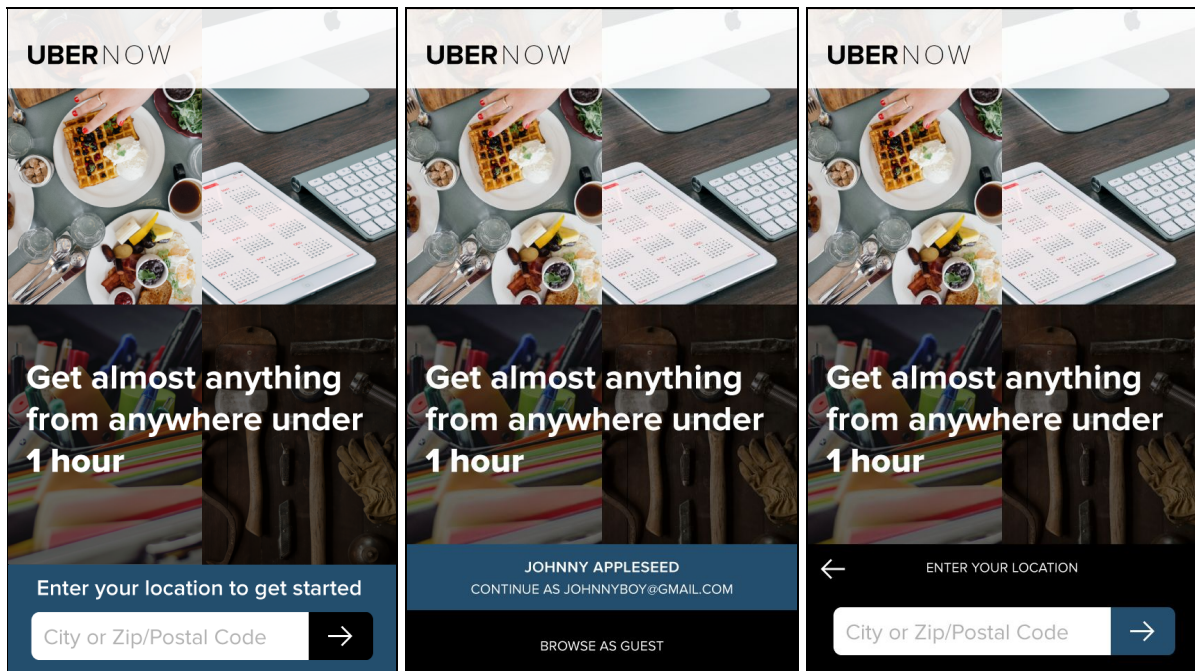


Figure 3: (From left to right) intro screen for a new user; intro screen with for a user with Uber data detected on the device; intro screen for when when the user selects "Browse as guest" and are prompted for their location

5.2 Home Screen

Once the user is in a location with confirmed Uber Now service, they are presented with the home screen. It contains essential elements of an online shopping experience: a search field, a featured item, a cart, and category filters.

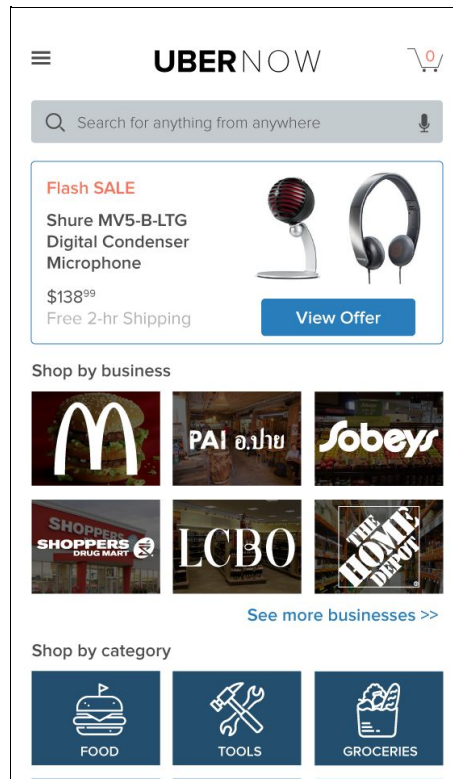


Figure 4: The home screen of the Uber Now app.

5.3 Menu

The menu is accessible at all times from the hamburger icon at the top of the screen. There are more options once a user has logged in.

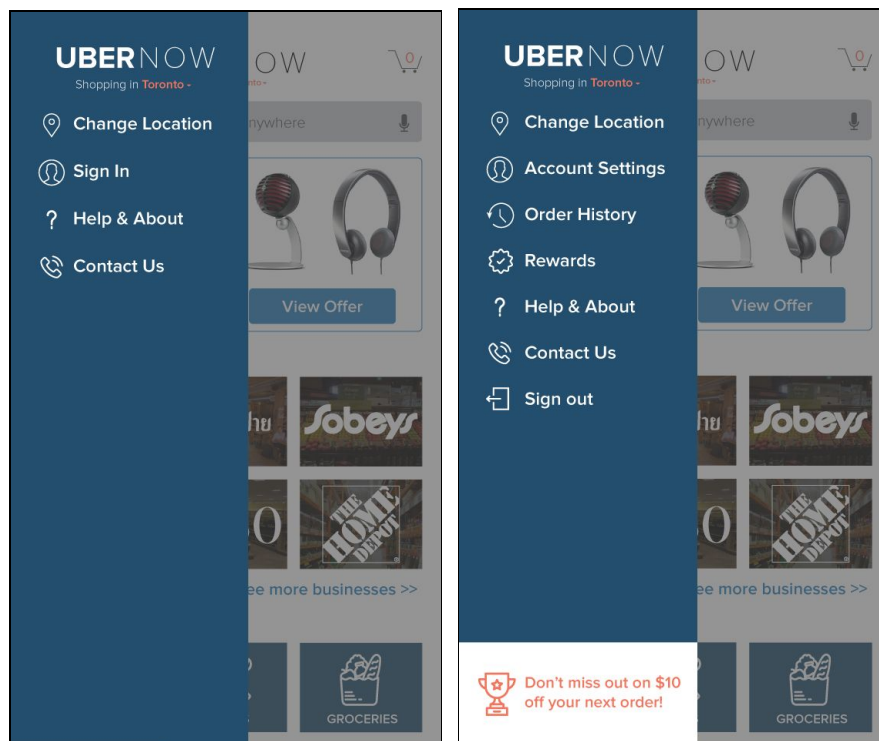


Figure 5: The side menu is overlaid on top of the screen.

5.4 Search by text

The search by text results offer helpful suggestions that try to narrow the scope of the results list in a conversation-like fashion, instead of simply providing a list.

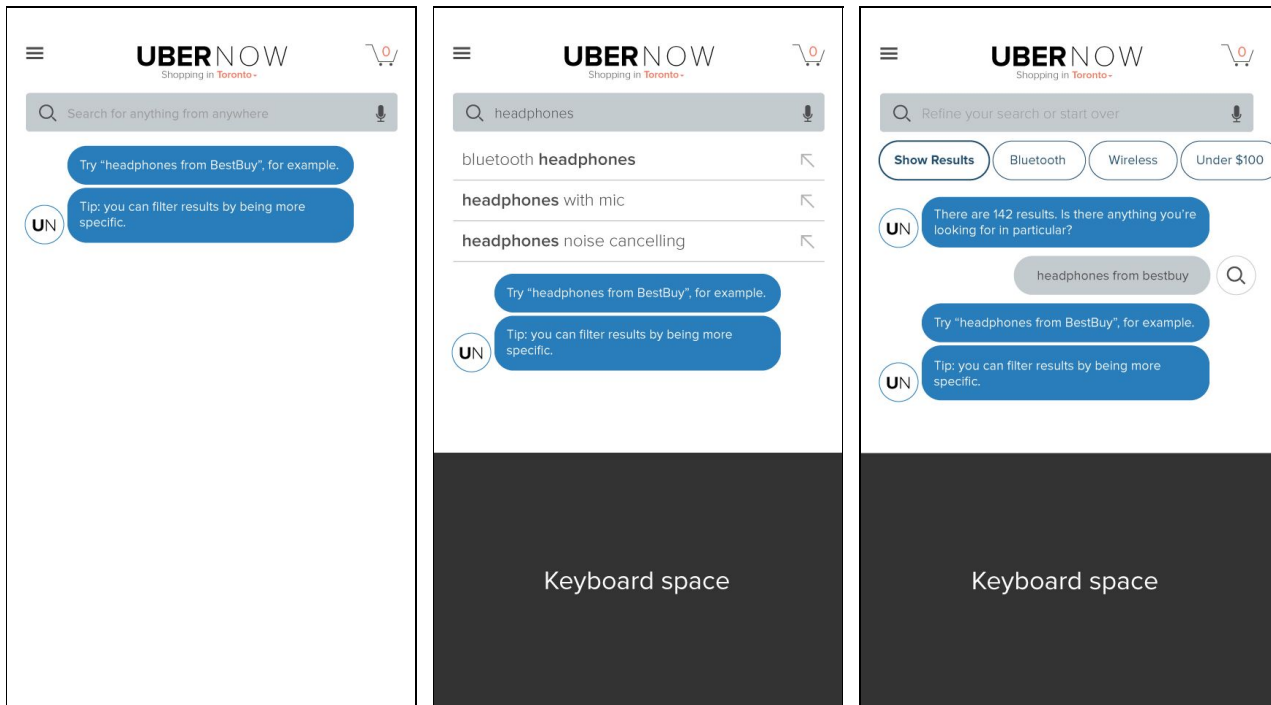


Figure 6: The text search with predictive results and in a conversation-like format.

5.5 Search by categories

Searching with categories involves filtering down results until a list is created. Looking at the categories in Figure 4, an example filter selection could be:

Groceries > Sobeys > Produce
or
The Home Depot > Appliances > Vacuum

There are several complexities when filtering results like this, for example the application can prioritize filtering by businesses first and then individual items, or the other way around - the former of which would make it easier for pickup and delivery, while the latter would allow for better price comparison for the user. The search pattern is visible in a breadcrumb trail, shown in Figure 7.

5.6 Results List

The results list is what the user sees after a query from either text search or category filters. Filters can be easily seen, added, and removed, and the results list is easily sorted. Once a user scrolls down, the filters and other options are compressed into a single line until the user either scrolls up or taps on the buttons.

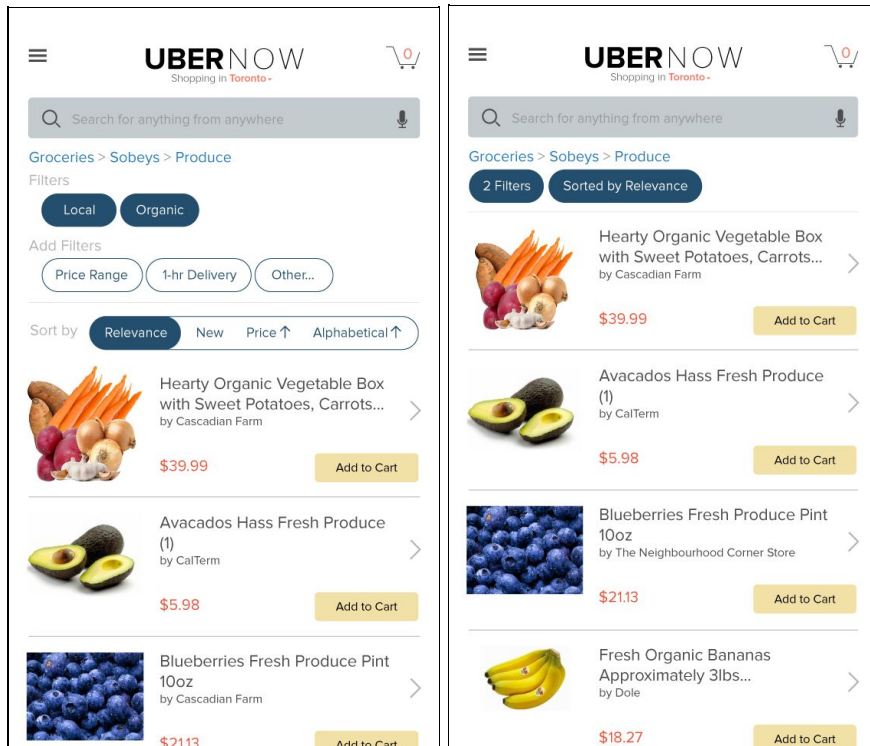


Figure 7: The results page with applied filters and a sort option. The filters are compressed once a user scrolls down.

5.7 Ordering and Delivery Settings

After adding items to the cart, the user proceeds to the checkout. Here they may review the items again and can make changes to the quantity ordered. If the user is not yet logged in, they are now prompted to log in. The login is purposefully postponed until this point in order to allow users to experience and play with the app, reducing the onboarding friction.

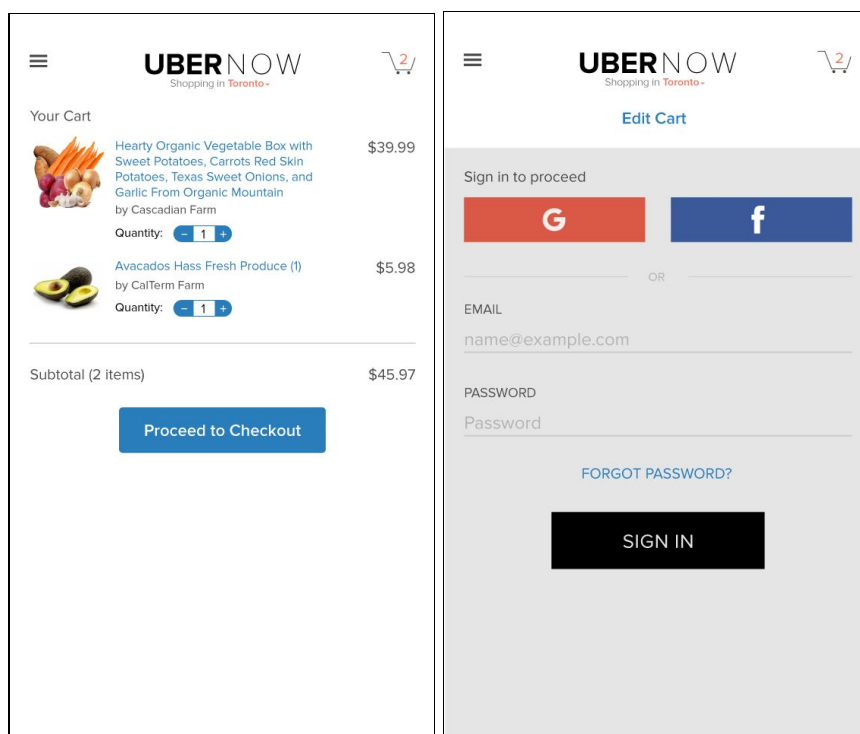


Figure 8: The checkout page and its login screen for users that have not yet logged in.

Once the cart is confirmed, the user can edit the delivery address, time, payment, and tipping options before finally confirming the order.

The figure displays two versions of the Uber Now 'Edit Cart' interface. The left version shows the 'Shipping Address' section with a map and address '1 King St W, 555 Toronto, Ontario M5H 1A1 Canada', a 'Delivery' section with time slot options (Within one hour for \$7.99, and three 1-hour slots for FREE), and a 'Payment' section showing a credit card ending in 6789. The right version shows the 'More Options' section, an 'Add special instructions' field, an 'Environmentally friendly option' message, a 'Payment' section with a credit card and a tip of \$6.90 (15%), and a 'Summary' table showing Subtotal (\$45.97), Tax (\$5.98), Delivery (\$7.99), Tip (\$6.90), and Total (\$66.84). A 'Place Order' button is at the bottom.

Figure 9: The confirmation page where users can edit the order options.

If the user placed an order with the “Within on hour” delivery option, they are presented with a map of the Uber courier and an estimated time of arrive, not unlike the Uber App.

5.8 Business App

After a business has registered with Uber Now, they need to have it integrate with their point-of-sale and inventory system. The easiest way to do this is to have a clerk prepare the order manually. To notify the clerk, a notification system would be set up by text message or web app.

5.9 Courier App

A courier who has registered and completed the onboarding process can start the Uber Now Courier app at any time and toggle his or her *active* state. On the screen, there are tabs to switch between pages, a settings option on the top left and a button to toggle traffic congestion. There is an overlay on the map showing how much demand there is in a certain area. Once online, the courier can see businesses that have open delivery bounties.

After tapping on a business, a courier can review the bounty and choose to accept or reject it. There is a queue for which bounties are displayed to different couriers to distribute load and to prioritize different deliveries.



Figure 10: An offline and online view of the courier app

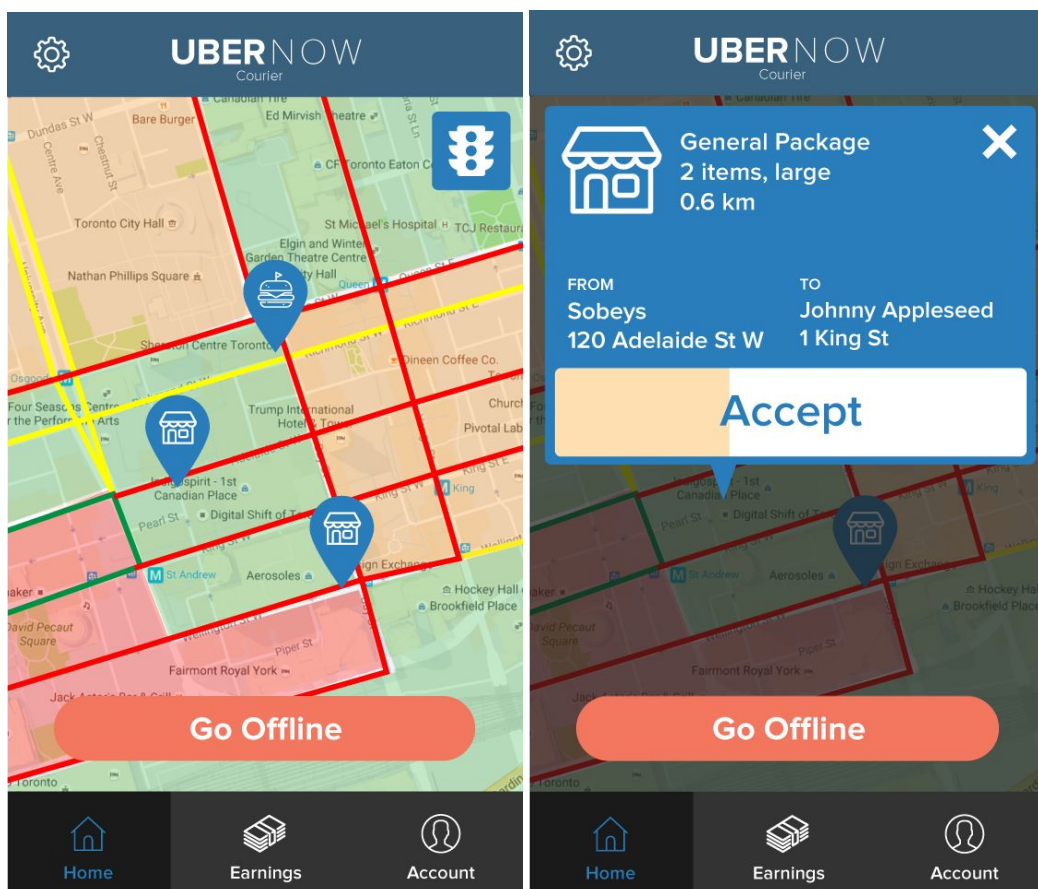
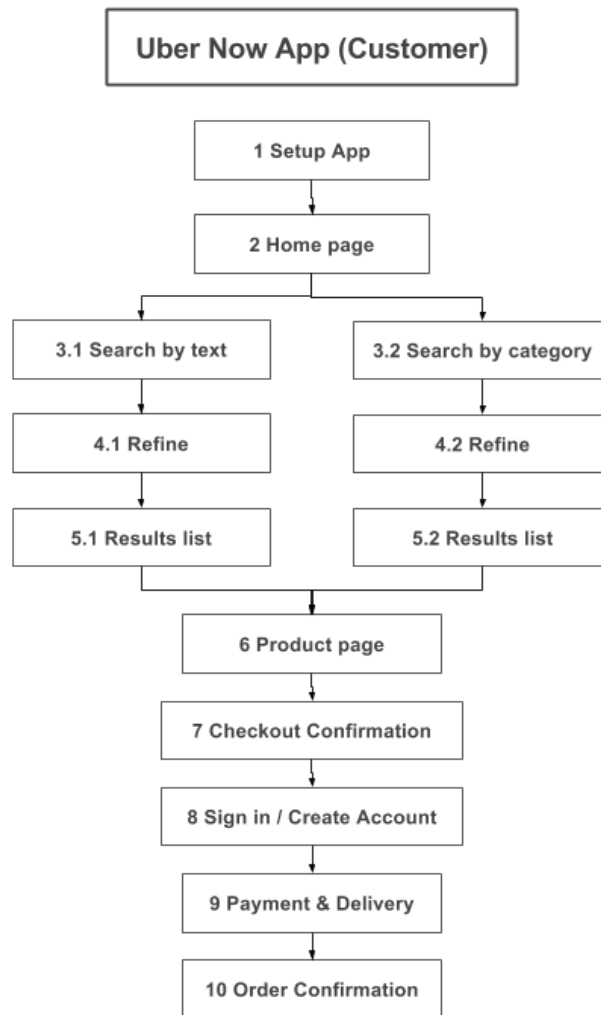


Figure 11: The app with traffic congestion on, and opening an order request

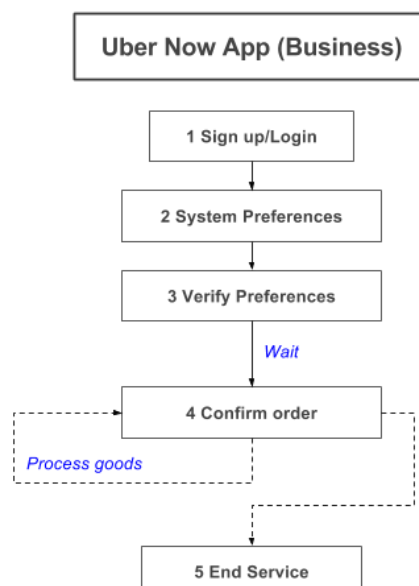
6 Conclusion

The app is similar to an online store, but there are many optimization problems that need to be solved in the back end to make this successful. Besides from that, the biggest foreseeable problem would be getting a large enough business-base to integrate with Uber now. I took many liberties and assumptions in the design of this project for simplification and time purposes, but the general idea should be clear. In the future when air-drone deliveries become more integrated with society, Uber Now can become much more efficient and profitable.

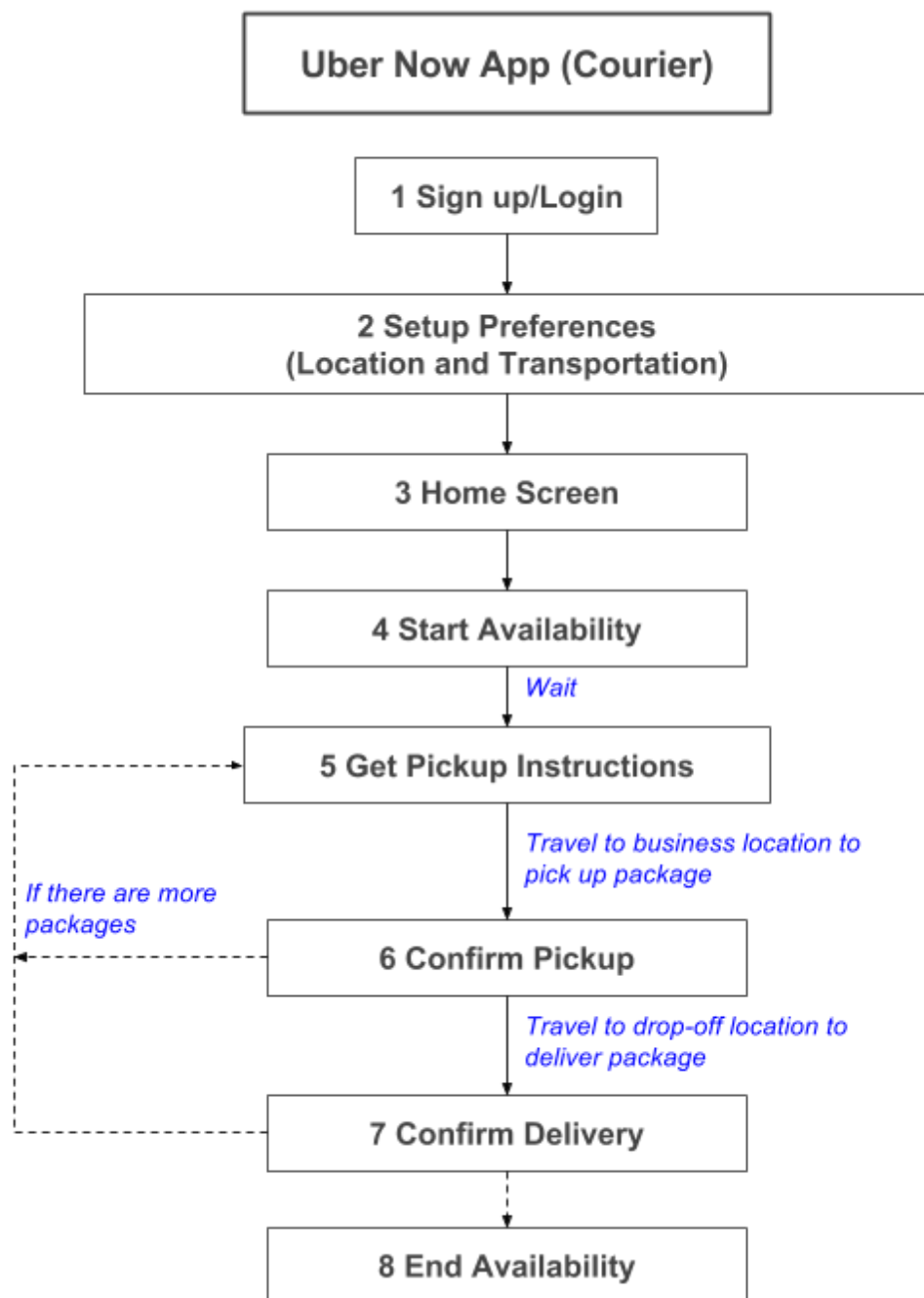
Appendix



A1: Information Architecture for a regular Uber Now customer.



A2: Information Architecture for a business: user actions are indicated by blue text, dashed lines are optional actions.



A3: Information Architecture for the courier: user actions are indicated by blue text, dashed lines are optional actions.

References and Notes

Icons in designs are from [Freepik](#), [Madebyoliver](#), [Gregor Cresnar](#) from www.flaticon.com, as well as from Google.

Mockups were designed by Charles Wu in Adobe Illustrator.