Seng 310 Assignment 2

Participant Summary

<u>Person 1 (P1)</u>:

The first participant is a law student in his twenties and he owns a house. He is very familiar with navigation apps on mobile like Google Maps (high knowledge of affordance). Therefore, we expect him to find his way around our UI quickly and easily if our solution is well designed. He represents the user we expect to have the least friction with our solution. Any concern or struggle he encounters will be considered very seriously because if he is having trouble with a feature, there is a high likelihood that the feature will be problematic for all other user types with less knowledge of affordance. P1 represents the typical advanced user who should be able to make use of both Driver and Homeowner functionalities with ease.

<u>Person 2 (P2)</u>:

The second participant is a social studies student in their early twenties. As is the norm according to applicable demographics, this person currently rents a room in suburbs close to their university (by car). This person has recently completed their drivers education course, and intends to gain their drivers license (or, as is more common, already has their driver's license). Due to related population demographic factors, this person is a <u>reasonable</u> subject for this research project as a "Driver"; while this person is likely to own a vehicle, this person will likely not own their own land.

<u>Person 3 (P3)</u>:

Participant 3 (P3) is a second year computer engineering undergraduate student at the University of Victoria, who possesses extensive knowledge and experience with navigational apps across multiple platforms. With a strong understanding of apps like Google Maps, Waze, and Apple Maps, P3 can provide valuable insights into the strengths and weaknesses of such applications. Moreover, P3 has a deep understanding of various parking issues faced in major cities like Vancouver, Calgary, and Toronto. Having owned a car for the past 8-10 years, P3 has relied on navigational apps to navigate these cities effectively. This firsthand experience allows Participant 3 to identify and articulate the specific problems encountered while parking. By addressing these concerns, the parking app can enhance its user experience and usability for all users, regardless of their familiarity with navigational apps. Similarly to P1, it is crucial to take P3's feedback seriously since any difficulties or struggles encountered by an advanced user like Participant 3 may indicate potential challenges for other users with less knowledge of app functionalities. By incorporating P3's input, the app can be refined and optimized to cater to the needs and preferences of a wider user base. Their feedback can contribute to a comprehensive understanding of the app's strengths and weaknesses, enabling us to make informed decisions about improvements and feature enhancements.

Person 4 (P4):

Participant 4 is a fourth year psychology student at the University of Victoria. This person owns a vehicle and commutes to the University of Victoria daily, but finds the high cost of parking a significant barrier for arriving to the university by car. As our concept application could significantly change this participant's commuting experience, this person represents a typical highly motivated user. Participant 4 is also new to the experience of vehicle ownership, and as a result is somewhat unfamiliar to mapping and other car service apps. Therefore, Participant 4 should also represent a typical new user, which should provide unique insight on what someone may experience if someone were previously unfamiliar with a map based UI. We may not expect Person 4 to use all functionality of this app, but Person 4 should be able to operate the fundamental driver features. Any issues we experience with Person 4 would represent fundamental issues experienced by a large portion of our potential user base. Therefore, this user is critical to our general understanding of the app's design.

Summary

To summarize, we have 4 participants in our study, each of them being key to understanding how a certain user type might interact with our solution. {enumerate them} This will allow us to design a UI which enables advanced users to complete tasks quickly and new users to complete tasks without trouble.

Research Methods

To conduct our research we used a combination of both ethnographic and interview processes. We believed this was the best option available to us, as given the time constraints these two options would still provide rich data. Furthermore, as this is initial research, an ethnographic method is critical to understanding the background for this concept. The interview afterwards is intended to complement this.

While there was a numerous amount of information we gathered from the ethnographic portions of our study, a few pieces stuck out as particularly interesting. Firstly, when asked to attempt renting out a parking space, Participant 2 had concerns with the ethics regarding the concept of renting property. This is not something we had yet considered, and as the concept of being a landlord becomes more controversial, is certainly a concern we should pay close attention to. Secondly, when attempting to search for long term lease parking through conventional means, Participant 1 could not find a single result. This implies that our concept is perhaps even more unique than we initially thought, as some users may not even have an inferior version of our product available to them. All other participants managed to find some results on various marketplace platforms, but these were sparse. Overall, the ethnographic portion of our study resulted in several pieces of unique information.

The interview portion of our study also provided some interesting information. For one, Participant 2 had a couple of interesting potential features. One of these ideas was a report button for scam listings. Any application which handles real money should be extra vigilant to prevent their platform from becoming a hub for crime, and this would offer an easy implementation for this. Furthermore, Participant 4 had a similar idea, except from the perspective of a homeowner. Participant 4 had concerns regarding if someone were illegally

parked in a spot they were trying to lease. While more egregious cases of this could likely be solved through local law enforcement, smaller instances such as a user overstaying in a spot by a few hours could be a concern. This could possibly be solved with a report button on every listing, including your own. The other idea given by participant 4 was to have an option during listing creation to describe the accessibility of the given spot. This could be incredibly useful for some of our users, who would benefit from knowing if a given spot is accessible to them before arriving. Participant 3 had some intriguing suggestions concerning the inclusion of ratings for listings within our application, highlighting the significance of ensuring one's vehicle remains secure and well-maintained. These insights raised important considerations about the insurance aspects associated with rented parking spaces, which had not been previously explored by our team. When asked about concerns of our app, Participant 1 said something particularly interesting. This participant pointed out that potential scammers could actually cause users to face real repercussions, as users would be parked on some unaware property owner's land. This makes the report button even more important, and puts into question if we need more measures against this type of misuse. While there was much more we learned from the interview portion, these key ideas stood out.

Beyond this, for both the interview and ethnographic portions, many things we were expecting were confirmed through research. For one, it is clear that the main competitors for an application like ours would be Facebook Marketplace and Craigslist, as all of our participants gravitated towards these platforms. It is also clear that there is no easy to use alternative for our application, as all users struggled to find any reasonable parking for sale. Altogether, while these findings did not change our plans, it was still important to confirm them.

Our research was overall a positive experience, resulting in our team learning about many unexpected concerns and ideas. A particular positive point was the concept of shaping the interview questions to ask about experiences from the ethnographic portion of our study. This resulted in maximizing the information gained from an otherwise limited ethnographic study. More generally, the study resulted in a significant gain in our understanding of the issue our project is attempting to solve. While our research excelled in most areas, there was some potential for improvement, which should be employed in future research. For one, some of the questions asked differed slightly between participants, and this resulted in potentially different answers unrelated to differences in the participants themselves. Other than this, a lack of a functioning prototype meant interview questions were limited. Overall, while there were some issues to resolve, the study was an overall success.

Task Management

Users (Driver or Homeowner) will:

1. **Create a listing**
   Homeowners will attempt to create a listing to rent out their parking spot. This process includes setting price, hourly based or lease based rental type, or both. Many lease durations can be offered by the homeowner simultaneously at varying rates. At the end of this process the homeowner is presented with a dashboard of all their active listings, and their income history. From this dashboard, they can also manage (edit/delete) listings.

2. **Use Hourly-Based Parking**
   Driver will attempt to book an Hourly-Based Parking. This process includes selecting from a Hourly-Based Parking list a spot, taking into account start/end times (duration), and location.
   Upon leaving the parking in their vehicle, the user will be notified that the payment has been processed with the automatically calculated cost.

3. **Subscribe to Leased Parking**
   Driver will attempt to subscribe to Leased Parking. This process includes selecting from a Leased Parking list an entry (parking spot), taking into account start/end dates (duration), and location.

4. **Unsubscribe from Leased Parking**
   Driver will attempt to unsubscribe from Leased Parking. This process includes selecting from their list of leases, and unsubscribing ("canceling") from the parking spot. The driver will be prompted if they wish to cancel and receive a refund immediately and pay related fees, or cancel at the end of the lease.

Journey Maps

CUSTOMER JOURNEY MAP

Michael D.

Scenerio: Michael needs to create multiple listings for his properties across Vancouver

Expectations:
1. Creating listings is quick
2. Managing listings is easy
3. Recieving payments is seamless and secure

DECIDE	SETUP	WAIT	MANAGE
1. Decide which lots to rent out 2. Decide the offered rental types (hourly/lease based) and their rates	3. Navigate the application and understanding how it works 4. Creating the listing with appropriate settings decided on the previous steps	5. Wait for a driver to book the parking	6. Monitoring the parking's income from the application dashboard 7. Possibly edit or delete the parking from the dashboard

"Hmm... what do I want?"

"How do I create this listing?"

"I wonder how long before someone books my spot"

"Oh nice! Someone just booked my listing!"

"Wow! the parking earned me $37 in the past month!"

OPPORTUNITIES
- Show market statistics to help choose a rate
- Allow users to create new listing as a tamplate to save time

INTERNAL OWNERSHIP + METRICS
- Track Market Statistics for internal use (Average Rates, Most used rental types, etc.)

CUSTOMER JOURNEY MAP

Joe X.

Scenerio: Joe needs to book an hourly based parking in a pinch because he is late for an event.

Expectations:

1. Finding a nearby parking is quick and easy
2. Payment is reliable, secure and automated

FIND	BOOK	PAY	VERIFY
1. Using the map, easily find an available spot near his location 2. Navigate to the spot using the app's direction	3. Leave his vehicle at the parking, starting the parkometer timer 4. The spot will be marked as last vehicle location	5. Get back to his vehicle and leave the parking. 6. The payment is automatically calculated and processed	7. Joe can view his transaction receipt with the correct parking time, location and price 8. Joe can dispute the transaction in the unlikely event of an error

"What's available near me?"

"This parking has a reasonable rate!"

"Where's my car again?"

"Let's double check..."

OPPORTUNITIES

- Option to show nearby parkings in a list sorted either by cheapest or closest
- Send notification to clearly indicate the user when the transaction is complete

INTERNAL OWNERSHIP + METRICS

- Track Market Statistics for internal use (Average Rates, Most used rental types, etc.)

CUSTOMER JOURNEY MAP

Christina F.

Scenerio: Christina is starting her first term at UBC, she's looking to subscribe to a lease-based parking close to school

Expectations:
1. Finding a parking place that suits her needs easily
2. Price is reasonable and clearly indicated

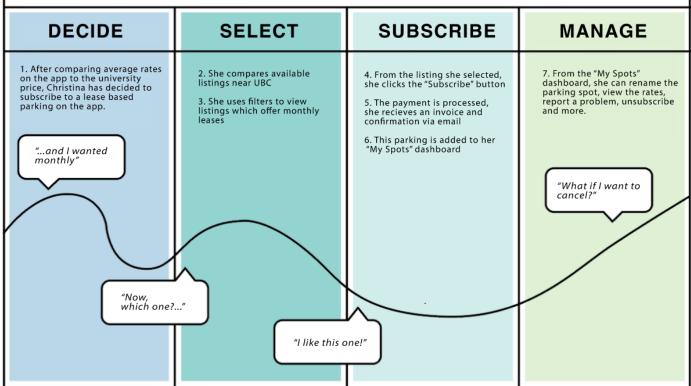| DECIDE	SELECT	SUBSCRIBE	MANAGE
1. After comparing average rates on the app to the university price, Christina has decided to subscribe to a lease based parking on the app.	2. She compares available listings near UBC 3. She uses filters to view listings which offer monthly leases	4. From the listing she selected, she clicks the "Subscribe" button 5. The payment is processed, she recieves an invoice and confirmation via email 6. This parking is added to her "My Spots" dashboard	7. From the "My Spots" dashboard, she can rename the parking spot, view the rates, report a problem, unsubscribe and more.

"...and I wanted monthly"

"Now, which one?..."

"I like this one!"

"What if I want to cancel?"

OPPORTUNITIES

- Option to show listings in a list sorted either by price or distance from the desired location (ex: UBC)
- Send a notification to the user upon each automatic renewal of the subscription

INTERNAL OWNERSHIP + METRICS

- Track Market Statistics for internal use (Average Rates, Most used rental types, etc.)
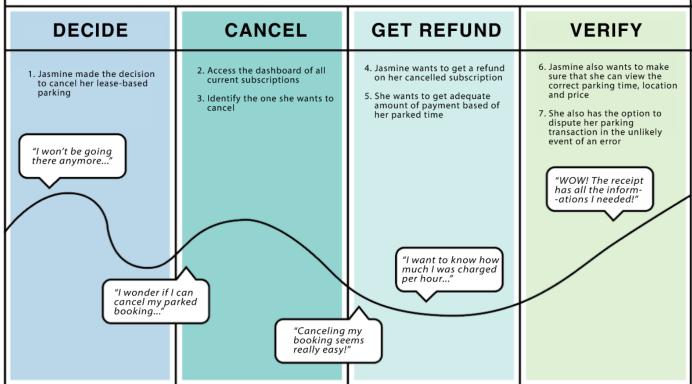
CUSTOMER JOURNEY MAP

Jasmine L.

Scenerio: Jasmine is looking to cancel one of her lease based parking because the parking is close to the residence of her relative's house who recently moved.

Expectations:
1. Subscription cancellation is simple and clear
2. Partial Refund for unused lease time

DECIDE	CANCEL	GET REFUND	VERIFY
1. Jasmine made the decision to cancel her lease-based parking	2. Access the dashboard of all current subscriptions 3. Identify the one she wants to cancel	4. Jasmine wants to get a refund on her cancelled subscription 5. She wants to get adequate amount of payment based of her parked time	6. Jasmine also wants to make sure that she can view the correct parking time, location and price 7. She also has the option to dispute her parking transaction in the unlikely event of an error

"I won't be going there anymore..."

"I wonder if I can cancel my parked booking..."

"Canceling my booking seems really easy!"

"I want to know how much I was charged per hour..."

"WOW! The receipt has all the inform--ations I needed!"

OPPORTUNITIES
- Developing a clear and user-friendly partial refund policy.
- Flexibility to adapt policies to better serve valued high-engagement users

INTERNAL OWNERSHIP + METRICS
- Track Market Statistics for internal use (Average Rates, Most used rental types, etc.)

Design Requirements:

Must:
- Buying and selling a parking space: This is core functionality. This includes browsing, selecting, and creating listings.

Should:
- A list of currently leased spots. This reflects the "Driver" user's interactions with the parking spot listings.
- Dashboard of your currently leased out spots. Similar to the previous, but for the "Homeowner" user's actions of creating new listings.

Could:
- Settings: Styles, Themes, and other non-core functionality customizations go here.
- Report issues: Handling bugs, abuse reports, etc.
- Edge accessibility cases: Similar to Settings/customization. The majority of operating systems already have accessibility features integrated (font size, contrast, text to speech, etc). But for edge accessibility needs, such as hardware integration it could be worthwhile to accommodate these proportionally few individuals.

Interview questions:

https://docs.google.com/document/d/1lvxsI8f4iSAuGsdxlPtllemclBly6S21rhvo457mKJU/

Interview Link:

https://drive.google.com/drive/folders/13MTBQUXmBwHPz5Y2TPvzZbOOWsSX9CGt?usp=sharing