

## 2b: Design Research Plan

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### Targeted Participants & Stakeholders:

While parking suggestions may benefit many different groups, one group that we focus on observing and learning from would be student drivers at the University of Washington. Finding parking around campus is a difficult task any day of the week and an application such as Social Parking may be the most beneficial for this group of users in terms of saving time and money. In any case, being able to successfully find a place to park depends on many factors such as time, day, and location. In order to gather data, we can interview and survey student drivers about what factors they consider when it comes to deciding where they will park.

### Primary Design Research Method:

Our primary design research method will be interviews. We will ask questions based on both their real experience and hypothetical situations to sort out what factors, tools, or strategies are involved in finding parking. We can ask about their recent or worst experience of finding parking, and use their description of the incident in the case that it might help us to get some contextual information. Since the proposal contains sensitive issue of tracking individual vehicle, we will also want to know if interviewees are willing that their vehicles are GPS tracked by us/ they frequently share parking spaces feedback.

### Secondary Design Research Method:

Since it may be difficult to follow people as they are driving around, a research method that we can consider is fly on the wall observation. By using this method, we can observe a variety of drivers and how they react in different situations when it comes to finding an available location. As a result of not knowing that they are being observed, we can capture the drivers' real time decisions as they complete this task as well as their general strategy for it.

## Interview Protocol

### Study Introductions

- Introduce our study objectives
- Remind them we can stop at any point
- Ask for permission to record

### Background

- How many years have you been driving?
- What models of car (modes of transportation) do you drive now?

### Questions in scenarios

### *When driving to the university*

Do you park at school parking lot? Why or why not?

<if yes>

- How much do you spend on parking for school per quarter?
- Which part do you usually park? Why?
- Do you find spots easily?
- How long does it usually take for finding a spot in school?
- Do you like it?
- How will you want the school parking service to be improved?
- Why do you not consider other parking (street, public parking renting)?

<if no>

- Where do you start to find parking? (streets, surrounding buildings)
- If you can't find a spot in the first searching area, do you have a second choice area? If yes, where is it?
- Is there any area you will definitely not take into consideration?
- On average, how long does it take you to find an available spot?
- Do you use any tools to find a parking space? (Google maps, Waze)
- Do you get help from others for finding a parking space? If yes, what kind of help and who are they? (Students with previous experience, friends)
- Why do you not consider the school parking lot?

### *How would you imagine a Social Parking app save your efforts*

- Where do you get the application to start to find you parking? (streets, surrounding buildings)
- If you can't find a spot in the first searching area, do you find it comfortable to contact a friend to help you find one (on the app itself) ?
- Do you analyze on the add-on of parking time within the transit time?
- Would you be interested in paying for your parking through the app?

### **More Exploration**

Describe a time where you were unable to find a spot within a reasonable time.

Potential questions:

- When and where did it happen?
- Where did you start the parking search?
- What happened and what steps did you take afterwards? (ex. continue looking around, leave the area)

### **Wrap up**

- Any parking problems you would like to improve on?
- If it can improve the parking circumstances, will you be okay that your vehicle is tracked? (like the existence of your vehicle, but not which car it is)