## **Usability Study Kit**

#### **Product to be Studied**

We are conducting a usability test of the University of Washington staff/student parking customer portal that is a part of the Transportation Services website.

### **Overview of Test Plan**

We want to understand students' ability to access and use the portal to purchase parking passes. The goal of this study is to identify usability issues that students face when navigating the portal to purchase parking permits by collecting performance and preference data that will aid in determining potential errors and design inconsistencies in the interface. We also want to establish a baseline for user satisfaction levels during this test that can be used in future evaluations and improvements.

This study will be a Moderated Usability Test to collect summative data. It will be held in a private room at the University of Washington. The total number of participants is eight (8). We will be testing two different groups, new users and experienced users, with four participants from each group. We will also enlist a surplus of participants to use in a pilot or as a backup.

In this usability test, participants will attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible, and to provide feedback regarding the usability and acceptability of the user interface. The participants will be directed to provide honest opinions regarding the usability of the application, and to participate in post-session subjective questionnaires and debriefing.

The participant's interaction with the interface will be monitored by the Facilitator seated in the same location. A Data Logger will assist with data collection and an Observer will also be present to assist the Data Logger and preserve test integrity.

This test will consist of:

- Facilitator briefing and introduction on interface evaluation
- Pre-test demographic and use questionnaire
- Scenario and task presentation with post-task question (ASQ) on ease of use
- Post-test questionnaire addressing overall experience and session debriefing

## **Participant Criteria**

Participants must:

- Be currently enrolled as a student at the University of Washington.
- Have a valid driver's license and access to a vehicle.

We will use a <u>recruitment screener</u> to ensure our participants meet the above requirements.

## **Logistics & Schedule**

## Monday, February 13th, 2023

Participant #	Time	Activity
Pilot	<10:30-11am>	<setup environment="" test=""></setup>
	<11-12pm>	<run session=""></run>
	<12-12:30pm>	<debrief></debrief>

## Wednesday, February 15th, 2023

Participant #	Time	Activity
1	<1:30-2pm>	<setup environment="" test=""></setup>
	<2-2:45pm>	<run session=""></run>
	<2:45-3pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
2	<3:15-4pm>	<run session=""></run>
	<4-4:15pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
3	<4:30-5:15pm>	<run session=""></run>
	<5:15-5:30pm>	<debrief></debrief>

## Thursday, February 16th, 2023

Participant #	Time	Activity
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4	<1:30-2pm>	<setup environment="" test=""></setup>
	<2-2:45pm>	<run session=""></run>
	<2:45-3pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
5	<3:15-4pm>	<run session=""></run>
	<4-4:15pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
6	<4:30-5:15pm>	<run session=""></run>
	<5:15-5:30pm>	<debrief></debrief>

## Friday, February 17th, 2023

Participant #	Time	Activity
7	<1:30-2pm>	<setup environment="" test=""></setup>
	<2-2:45pm>	<run session=""></run>
	<2:45-3pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
8	<3:15-4pm>	<run session=""></run>
	<4-4:15pm>	<debrief></debrief>
Break	<15 mins>	<reset +="" care="" environment="" for="" self="" test="" time=""></reset>
TBD	<4:30-5:15pm>	<run session=""></run>
(If Needed)	<5:15-5:30pm>	<debrief></debrief>

Note: If participants can't make any of the above slots we will run additional sessions over the weekend or the following week to accommodate them and their schedule.

# **Setup Checklist**

Book room for session on UW campus
Send session time & location reminder to participant
Decide on roles (facilitator, note taker, observer)
Print out tasks, forms, script, and other required documents
Compile necessary equipment / paperwork and assign who is bringing what (usability study kit, laptop for participant, clipboards, 4 pens, dummy Visa card, participant incentives)
Bring water for all attendees
Check into reserved room before session start time
Arrange room in ideal configuration for participant, moderator, and observers
Set up device for filming/recording and ensure it functions properly
Check internet connection on all devices
Turn off any unnecessary notifications/software and silence phones/devices
Open the web browser of participant laptop to neutral starting page
Note important details about participant (name, new or experienced user, etc)
Make sure facilitator, observer(s), participant have pens as necessary
Welcome participants and read session script
Ensure consent form is completed
Begin recording
Give participants introductory questions
Read the first task/hand to participant
Give participant post-task SEQ
Repeat prior steps for all tasks
Give participants post-test SUS and ask open-ended questions to debrief
Thank participants and offer them their incentive
Debrief with observers
Reset the room
Take a break

## **Consent Form**

#### **Understanding Your Participation**

We are asking you to participate in the evaluation of the University of Washington's online interface for reserving on-campus parking. By participating in this study, you will help us improve the overall experience.

During this study you will be asked to:

- Do tasks with the interface we are studying
- Think out loud

Thank you!

- Answer interview questions
- Fill out questionnaires

While doing these tasks, we will observe you and record information about your experience.

By signing this form, you give us permission to observe you and to use your voice and video recording for the purposes of evaluating the product and sharing the results of these evaluations.

evaluations.	
I agree to participate in the I agree to video recording	e session
	s. You may withdraw from this study at any time. If you have any or after the study call or text Kayda Norman at (570) 856-7851.
If you agree, please sign here	:
Signature:	
Please print your name:	
Date:	

## **Study Script**

First off, thank you for participating today. I'm [NAME] and I'm the facilitator of this usability study. This is [OBSERVER NAME/s] and they will be observing and taking notes during the study.

We're going to start off by briefing you on what we'll be doing and then asking you to answer a few questions that help us get to know you and your preferences. Then, we will ask you to perform a series of tasks with the University of Washington's online interface for on-campus parking purchases. These tasks are representative of what a typical user would accomplish with this system if they needed to pay for parking on campus.

While you do these tasks, our role is to act as observers of your experience. I may be silent, or I may ask you some questions to get clarity about your experience and what you are thinking or feeling. What will help me the most of all is if you "think aloud" while you are using the interface.

Thinking aloud means describing everything you're thinking and feeling as you're doing it. The reason this is so helpful is because while I can see the actions you're taking, I can't know what your experience is like unless you share your thoughts and feelings. This doesn't come naturally to everyone, so I may remind you or ask for clarification. Keep in mind that nothing you say can hurt my feelings, and both positive and negative comments are absolutely welcome and totally helpful. The more honest you are, the better.

With that, here are a few more important things to keep in mind:

- 1. I'm a neutral party. I don't work for UW or Transportation Services, and I have no stake in this interface and have not been involved in its design at all. When I say you won't hurt my feelings if you have negative feedback, I definitely mean it!
- 2. We are not testing you! There are one hundred percent no right or wrong answers. The one thing that interests us is your honest experience and how that demonstrates the strengths and weaknesses of this interface.

Are there any questions I can answer for you before we get started?

Finally, we'd like to record the events here today so we can review them later. Is this ok with you?

## **Pre-Study Questionnaire**

Before we start exploring the interface, we want to learn a little more about you, your preferences, and your experience. Please answer the following brief questionnaire to help us collect information that can aid us in our study.

#### **ABOUT YOU:**

Age:	17-24	25-29	30-34	35-39	40-44	45+
Gender:	Male	Female	Non-Binary	Other	Prefer not to say	
Pronouns:	He/Him	She/Her	They/Them	He/They	She/They	Other (please specify)

#### ABOUT YOUR EXPERIENCE WITH CAMPUS PARKING:

How often do you drive to campus?	Never	Rarely	Sometimes	Often	Always
When you drive to campus, where do you park?	Street parking	Off-campus lot	UW garage	UW lot	Other (please specify)
Have you ever purchased parking for an on-campus lot online before?	Yes	No			
Have you used any other method to secure parking in an on-campus lot?	Pay by phone	On-site electronic parking meter	Gatehouse	None	Other: (Please specify)

If you use a method other than the online interface, how easy do you find this method?	Very easy	Somewhat easy	Neutral	Somewhat difficult	Very difficult
How likely would you be to purchase on-campus parking online?	Very likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Very unlikely
How tech-savvy would you say you are?	Very	Somewhat	Neutral	Not much	Not at all

If you have never used the UW parking permit interface before, please share why:	
If you have used the UW online parking interface before, when did you last use it?	
If you have used the UW online parking interface, do you prefer it over other methods? Why or why not?	

#### Scenarios & Tasks

I will now give you a series of different activities to do on the UW's on-campus parking website. For each activity, I'll give you the instructions on a piece of paper that you can reference in case you need a reminder.

Some of these tasks will be short, and some will be longer. Please try to imagine you're doing this in real life, and I'm not there. Try to do whatever you would do normally. If there's a point where you would stop, ask for help from someone, or go elsewhere, please let me know. Once you've finished an activity, please say "I'm done" or "I would stop here."

If you have questions during the session, feel free to ask, but I might not be able to answer them right away. I will be taking notes and I'll mostly be staying silent, but I may stop you to ask a question now and then.

Remember to think aloud as you do these activities and explore the interface.

**OUR SCENARIO**: Imagine that you are a student attending an evening class at the University of Washington. Next week only, you need to park in a UW campus lot for your class in the Paccar Building and must purchase parking in a campus lot using the University of Washington's online customer interface.

Task#	Task	Testing goal	Starting state	What success looks like
1	You want to drive to your evening class next Friday and park in a campus lot. Where would you go to purchase parking online?	To determine if participant can easily locate entry point for UW parking portal	Browser starting/search page	Locating parking portal login page and entering credentials
2	You want to reserve parking in a lot close to the Paccar Building for your evening class next Friday. Walk me through how you would do this.	To determine if a participant can start the purchase process for a new permit, add a vehicle to the pass, and select the correct parking pass from a table of many potential choices, using linked reference material if required.	Landing page of logged in UW online customer parking portal	Participant selects "purchase new pass" option, selects date, links the vehicle provided with the pass, and successfully chooses a "Daily/Night" type parking pass and the lot closest to the scenario building using the resources provided in the parking portal, and finalizes the permit
3	Confirm your	To determine how	View Cart Screen	Participant correctly

	purchase details and show me how you would continue as if you were going to pay for the permit (using this sample Visa Card).	easily the participant can navigate the confirmation and prepayment steps and interstitial pages in the portal and determine if there are barriers to the participant entering payment information		selects payment method and "next" to check out, then "next" on the Payment Confirmation screen to proceed to Payment Information Screen, enters debit card information and associated details
4	How would you look up the details of parking you had previously purchased?	To determine if there are usability challenges in locating and utilizing the View Your Permits Page of the Parking Portal	Parking Portal Landing Page or any Page within Parking Portal	Participant is able to use the navigation menu to locate the PERMITS drop-down and access the View Your Permits page, then successfully views saved permit information
5	You want to cancel a previously purchased permit. How would you do that?	To determine if the participant can locate the Permit Cancellation Policy information in the User Guide (or reference it if they viewed it when it was visible in a prior step) and relay the correct method of cancellation (in person, not online)	View Your Parking Permits Page	Participant is able to locate or reference the Permit Cancellation Policy and relay the correct information to the facilitator
6	You recently got a new car. What would you do to include it on your next purchase?	To determine if there are any challenges impeding users from using navigation to locate the Vehicles Page and adding a Vehicle	View Your Parking Permits Page or any Page within the Parking Portal	The participant will use the navigation menu within the Parking Portal to access Vehicles and select the Add Vehicle button
7	You recently moved. How would you update your address?	To determine if there are any challenges impeding users from using navigation to locate their account information and add a new vehicle to the account	Manage Your Vehicle Page or any Page within the Parking Portal	The participant will use the navigation menu within the Parking Portal to access Manage Your Account Information in the drop-down menu under their name and select "add new" under "address"
8	Imagine you have	To determine if the	Account	The participant will

run into some difficulty in purchasing parking and your class is starting soon. How would you get assistance?	participant can locate and use the User Guide, support contact information, or other help functions of the online Parking Payment Portal	Information Page or any Page within the Parking Portal	identify the User Guide and/or hours and contact information for the Transportation Services Department from one of several possible locations
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# Post-Task Question - SEQ/Single-Ease Rating

	Very Easy	Easy	Neither Easy nor Difficult	Difficult	Very Difficult
How challenging was the task you just completed?	1	2	3	4	5

# **Post Test Questionnaire (SUS)**

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I felt very confident using this interface.	1	2	3	4	5
I think that I would like to use this interface frequently.	1	2	3	4	5
I found the interface unnecessarily complex.	1	2	3	4	5
I needed to learn a lot of things before I could get going with this interface.	1	2	3	4	0.7
I think that most people would figure out how to use this interface very quickly.	1	2	3	4	5
I think that this interface was easy to use.	1	2	3	4	5
I think this interface provided sufficient help/supportive information when needed.	1	2	3	4	5

I thought there was too much inconsistency in this interface.	1	2	3	4	5
I found the various functions of this interface were well-organized.	1	2	3	4	5

#### **OPEN-ENDED QUESTIONS**

- How did you feel as you were using the interface?
- Can you tell me about the parts you liked the most? The least?
- What did you find problematic?
- What do you feel would make parking in on-campus lots most convenient and accessible for you?
- What other comments do you want to share about the interface or your experience using it?
- Any final thoughts?

# **Data-Logging / Note-Taking Forms**

**Data Logging Google Sheet** 

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Participant #:	Task #:	Date/Time:		Observer:	
Notes:					
Error Tally: Slips - (					
<i>Mistakes</i> - Interpreta					
Error Severity Tally	: 1 - Irritant	2 - Moderate	3 - Sev	ere 4 - U	nusable
Task Success Ratin	<b>ig:</b> 1- Succe	ss 2 - With Err	rors/Ass	istance	3 - Fail
Single-Ease Rating	: 1 - Very Ea	asy 2	3	4 5-	Very Difficult