

# Hungry Huskies Mobile App Study Results Summary

Team Jalfrezi (3) 11/30/2015

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## Introduction

We ran our study from Nov 29, 2015 through Nov 30, 2015. The goal was to evaluate the mobile app prototype, Hungry Huskies, paying particular attention to navigation and ease of task completion.

We tested six subjects, three of whom are current or former University of Washington students. Since we were unable to arrange for all three team members to be present at any test sessions, Abhishek and Bill each tested two participants in person and Erika tested two participants via FaceTime. Abhishek took notes on his sessions, and Bill took notes and recorded his sessions. Erika also took notes in addition to making video recordings using LookBack software.

To help us run the tests as consistently as possible, we wrote a script containing introductory information and instructions, as well as a task list and follow-up questions. We also created a consent form for test subjects to sign.

Subjects were given a scenario, then asked to complete five tasks using the prototype while talking aloud as they performed the test. After testing, we asked five follow-up questions.

## Key Findings

### **Severity 1:**

We did not find any breaking issues that warranted a Severity 1 ranking

### **Severity 2:**

- Navigation is confusing, inconsistent, scattered. For example, there is no back button.
- Hours of operation information is omitted on key screens (e.g., restaurant profile pages).
- The hours listings on the main restaurant list page is not as actionable as it could be.

### **Severity 3:**

- Users did not see the need for different map sizes.

### **Severity 4:**

- Users did not understand why they could not select grayed out list items

### ***Issues discovered during testing but not experienced by participants:***

- The Menu screen map button leads to the expanded map screen instead of returning to the small map with restaurant details.

## Proposed Changes to the Prototype

1. \*Remove large map, and add directions on the restaurant profile map.
2. \*Indicate that restaurants are either open or closed, possibly with "...closing in [n] minutes..." rather than showing the hours on main list page.
3. \*Add a Directions button to the home screen (list of restaurants) and to restaurant profile pages.
4. \*Add Back buttons to all pages except home screen.
5. \*Add operating hours to the restaurant profile pages, and anywhere else other restaurant details are shown.
6. \*Add a way to close the text directions (probably a conventional "X")
7. Enable all list items, even grayed-out restaurants.

(List items with \* have been corrected.)

## Detailed Results

Table 1. The following are usability issues, sorted by Severity. Issues were derived from participant statements and direct observations.

### Key to Usability Severity Ratings:

- Severity 1:** An issue that blocks a substantial number of users from using the application. E.g., Users are unable to start a game. Nearly impossible task during the initial experience.
- Severity 2:** An issue that blocks a substantial number of users from making use of an important feature or accomplishing an important task. E.g., Unclear solution. Undiscoverable feature.
- Severity 3:** An issue that hinders some users from accomplishing a task or goal. E.g., Inconsistent or misleading text. Users don't understand a non-essential aspect of the application or feature. Delays.
- Severity 4:** An issue that causes some users to become mildly frustrated or express minor complaints about a feature element. E.g., Suggested Feature. Minor or infrequent complaint.

Findings, Evidence, Recommendations, Fixes	Severity	UI Area
<b>Issue</b> There's no way to close the text directions box, and no Home page link on that screen (only 1 user found it, but it's broken functionality)	2	Map screen, directions
Users can become stuck when viewing the text directions because there's no control to close the directions box once it's open.		
<b>Recommendation</b> Tap box to close, probably add a conventional "x", add Home button to page.		
<b>Issue</b> Navigation is confusing, no easy way to go back one step. (Four of six users found this.)	2	General
A majority of users indicated difficulty navigating between screens and a lack of conventional and consistent navigation controls. Moderators also observed users struggling to return to previous screens.		
<b>Recommendation</b> Add a globally-implemented back button, and ensure consistent placement of navigation controls. Find universal icons to use in place of text buttons.		
<b>Issue</b> Users found the hours of operation on the Home screen to be difficult to Parse. (Three of six users found this.)	2	Home screen (restaurant list)
Three of six users exhibited confusion when trying to make sense of the hours of operation listing, indicating that the numbers were too much information in a small space. One user said it would be easier to have "open" and "closed" instead of times for quick affirmation of availability.		
<b>Recommendation</b> Instead of hours of operation show if restaurant is "open" or "closed" (maybe have colors) or show "closes in ...minutes."		
<b>Issue</b> Hours of operation are not shown in places users expected them.	2	Restaurant profile page, menu page
Four of six users said they expected to see the operating hours of individual restaurants whenever there were other details (like a phone number) shown.		
<b>Recommendation</b>		

<b>Issue</b> Too many steps to get directions (two of six users found this).	3	General
Two of six users noted frustration at the number of steps required to get directions, indicating that it should be accessible much earlier in the interaction.		
<b>Recommendation</b> Add directions button to list of restaurants page and to Restaurant profile pages. (perhaps clickable from walk time)		
<b>Issue</b> Not enough difference between small and large map.	3	Details page and expanded map
Five of six users said that they couldn't see a real difference between the small and expanded map views, and that there didn't seem to be a need for both.		
<b>Recommendation</b> Remove the expanded map, make the Restaurant profile page map smaller to make room for additional restaurant information on that page.		
<b>Issue</b> One user was confused when he couldn't select grayed-out list items.	4	Home, list
One user wanted to be able to click on restaurants that were grayed-out because it was after operating hours. He said that it would still be nice to see their details for later use.		
<b>Recommendation</b> Enable selection of closed restaurants to be clickable even when closed.		

## Appendix 1: Participant Profiles

<i>Ppt</i>	<i>Background</i>	<i>UW Status</i>
P1	Early 30s male technology worker, very familiar with mobile app use.	Former UW student
P2	Early 30s male technology worker, very familiar with mobile app use.	Did not attend UW
P3	25 year old female grad student. Moved to Seattle three months ago from CA.	Masters grad student at UW in HCDE
P4	25-35 age range female with full-time job and family.	Certificate student at UW in HCDE
P5	Early 30 Male, Full time High tech professional.	Professional Master Student at UW computer Science
P6	35-40 age range Male, High tech professional.	Prospective Professional & Continuing Education at UW

## Appendix 1: Participant Profiles

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P2	Early 30s male technology worker, very familiar with mobile app use.	Did not attend UW.
P3	25 year old female grad student. Moved to Seattle three months ago from CA.	Masters grad student at UW in HCDE.
P4	25-35 age range female with full-time job and family.	Certificate student at UW in HCDE.
P5		Did not attend UW.
P6		Did not attend UW.

## Appendix 2: Task List

### **Scenario**

It's 9:30pm, and you are at Dempsey Hall on the UW Campus. You've just finished your class, and want to find something to eat before you catch the bus home. You aren't very familiar with the campus, and you're not sure where you can go. So, you use the Hungry Huskies app on your smartphone to find a place to eat that's still open.

*State:* User sees phone app list.

### **Task 1**

Open the app and identify a place to eat that is less than 10 minutes walking distance from your current location.

*State:* at app main screen

### **Task 2**

Use the app to see the hours of operation for a restaurant that you identified in Task 1.

*State:* at details and map page of a restaurant.

### **Task 3**

Find a way to see the menu for the restaurant you selected.

*State:* at details page of a restaurant.

### **Task 4**

You'd like to see a larger view of the map; find a way to enlarge the map.

### **Task 5**

Finally, you want to see exactly how to get to your destination. Find a way to get detailed instructions to get there.

## Appendix 3: Screen shots

Here is the link to our prototype on InVision: <https://invis.io/KE54PQM7G>



**W Hungry Huskies**

Campus cafes and restaurants

Restaurants	Hours of Operation	Walking Time
Pagliacci Pizza	Open	6 minutes
Dawg Bites	Open	12 minutes
Husky Grind	Open	15 minutes
Suzallo Espresso	Open	5 minutes
Starbucks® Coffee	Closed	15 minutes
Etc.	Closed	15 minutes
Cultivate	Closed	18 minutes
Joe Haus	Closed	18 minutes
The 8	Closed	10 minutes
Reboot	Closed	10 minutes
Subway	Closed	10 minutes
Parnassus	Closed	15 minutes

**W Hungry Huskies**

Pagliacci Pizza (in HUB)  
Pizza, salads, pasta.  
206-776-8888

11 am–11 pm

Menu

**Directions**

- From south entrance of Dempsey Hall, and turn right on NE Klickitat Lane.
- Turn right on King Lang NE.
- Follow King Lane NE to the HUB.

**Menu**

**W Hungry Huskies**

Pagliacci Pizza (in HUB)  
Pizza, salads, pasta.  
206-776-8888

11 am–11 pm

Menu

**Menu**

**W Hungry Huskies**

Pagliacci Pizza (located in the HUB)  
Pizza, salads, pasta.  
206-776-8888  
11 am-11 pm M-TH

**Map**

Cheese Pizza	\$15.00
Pepperoni Pizzza	\$17.00
Lobster Pizza	\$20.00
Veggie Pizza	\$15.00
Pesto Pizza	\$15.00
Mushroom Pizza	\$15.00
Sausage Pizza	\$15.00
Garlic Bread	\$4.00
Salad	\$5.00
Coke	\$3.00
Beer	\$4.00
Ice Cream	\$4.00

< X

**W Hungry Huskies**

COMING SOON  
This link not functional yet.

**Back**

**W Hungry Huskies**

**Home**  
(list of restaurants)

**About**

**Nutritional Info**  
(coming soon)

<

## Appendix 4: Research Materials

~Consent forms for two in-person testers. Videotaped testers gave consent on tape, declined to sign, scan, and return forms.

~Scripts/scenarios/tasks/post-test questions

~Photos from work meeting

~app on an iPhone 6+

~notes from team evaluation of first draft of online app

~screen shots of some of the screens on InVision

~screen shots of videotaped user tests

~Spreadsheet of tester-found issues, severity rankings, recommendations

# Informed Consent Form

**STUDY TITLE:** Hungry Huskies mobile app testing

**Protocol Director:** Erika Dillman

*ABHISHEK ANAND*

**DESCRIPTION:** You are invited to participate in a **usability test** for a mobile phone app designed to help users find open dining locations on the University of Washington campus. The goals of the study are: to determine if the app is easy to navigate, to find out if people find the app useful, to find out if there are features that could be added or deleted.

You will be asked to use an online prototype of the app. Some of you will be observed in person or via Skype, and give verbal feedback. In-person and online meetings will be photographed and possibly recorded (audio and video) for the purpose of the assignment. Only instructors and students will see/hear these recordings.

**TIME INVOLVEMENT:** Your participation will take approximately **15 minutes duration.**

**RISKS AND BENEFITS:** The risks associated with this study are: none foreseeable. The benefits which may reasonably be expected to result from participating in this study include: Your feedback is valuable and will help the designer improve the prototype, which might make you feel good. You might learn something. You might enjoy yourself. **We cannot and do not guarantee or promise that you will receive any benefits from this study.** Your decision whether or not to participate in this study will not affect our friendship or anything else.

**PAYMENTS:** You will receive *a bundle of gratitude* as payment for your participation.

**SUBJECT'S RIGHTS:** If you have read this form and have decided to participate in this project, please understand your **participation is voluntary** and you have the **right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate.** You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

**CONTACT INFORMATION:** If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Protocol Director, **Erika Dillman at 206-286-9288.**

I give consent to be audiotaped during this study.

Please initial: SH  Yes  No

I give consent to be videotaped during this study:

Please initial: SH  Yes  No

I give consent for tapes resulting from this study to be used for *instructor and student viewing*:

Please initial: SH  Yes  No

I give consent for my identity to be revealed in written materials resulting from this study:

Please initial: SH  Yes  No

**The extra copy of this consent form is for you to keep.**

**SIGNATURE**

*Han*

**DATE**

*11/30/2015*

**Protocol Approval Date:**

**Protocol Expiration Date:** Dec 15, 2015

## Introduction

Hi. Thanks for helping us today. My name is \_\_\_\_\_ and I'll be facilitating this session, which should take 10 or 15 minutes. The purpose of this study is to test a mobile app designed to help UW students find a place to eat on campus. I'll start by describing a scenario, and then I'll ask you use the app to perform some specific tasks, one at a time.

As you use the app, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us.

Please ask questions if you need to, and go at your own pace. When you feel you have completed each task, please let me know that you're done.

Please note: there are not wrong answers for this test. We are not testing you. We are interested in your feedback on using our app. Thank you!

## Scenario

It's 9:30pm, and you are at Dempsey Hall on the UW Campus. You've just finished your class, and want to find something to eat before you catch the bus home. You aren't very familiar with the campus, and you're not sure where you can go. So, you use the Hungry Huskies app on your smartphone to find a place to eat that's still open.

**State:** User sees phone app list.

## Task 1

Open the app and identify a place to eat that is less than 10 minutes walking distance from your current location.

*Completed Successfully*

**State:** at app main screen

Task 2

Use the app to see the hours of operation for a restaurant that you identified in step 1.

→ Time to find Hour of operation

**State:** at details and map page of a restaurant.

Task 3

Find a way to see the menu for the restaurant you selected.

→ Navigation Scattered

**State:** at details page of a restaurant.

Task 4

You'd like to see a larger view of the map; find a way to enlarge the map.

Two same makes

## End of Test Questions

- Was the information given by the app easy to understand? Why or why not?

No, the App was not intuitive & had involved searching

- Was the information sufficient to complete the given tasks?

Yes

- Did the app give you a good sense of how to navigate to information you were looking for?

No, not that user friendly

- Were you satisfied with the overall experience of using the app? Why or why not?

Yes, but needs to be more friendly.

- Is there anything else you'd like us to know about your experience using this app?

User friendly. Something similar to very less data displayed & displayed only what is necessary.  
Ease of Navigation.

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You will be asked to use an online prototype of the app. Some of you will be observed in person or via Skype, and give verbal feedback. In-person and online meetings will be photographed and possibly recorded (audio and video) for the purpose of the assignment. Only instructors and students will see/hear these recordings.

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Please initial: SR  Yes  No

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Please initial: SR  Yes  No

The extra copy of this consent form is for you to keep.

SIGNATURE S. RAJESH DATE 11/30/2015 3:30PM

**Protocol Approval Date:**

**Protocol Expiration Date:** Dec 15, 2015

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**State:** User sees phone app list.

### Task 1

Open the app and identify a place to eat that is less than 10 minutes walking distance from your current location.

- Successfully found Restaurant
- Moved to next screen.

**State:** at app main screen

Task 2

Use the app to see the hours of operation for a restaurant that you identified in step 1.

→ Selection moved to new Screen

**State:** at details and map page of a restaurant.

Task 3

Find a way to see the menu for the restaurant you selected.

Successfully Completed

**State:** at details page of a restaurant.

Task 4

You'd like to see a larger view of the map; find a way to enlarge the map.

Find larger View of the map - not required

## End of Test Questions

- Was the information given by the app easy to understand? Why or why not?

→ Not all options are at one place.

- Was the information sufficient to complete the given tasks?

Yes.

- Did the app give you a good sense of how to navigate to information you were looking for?

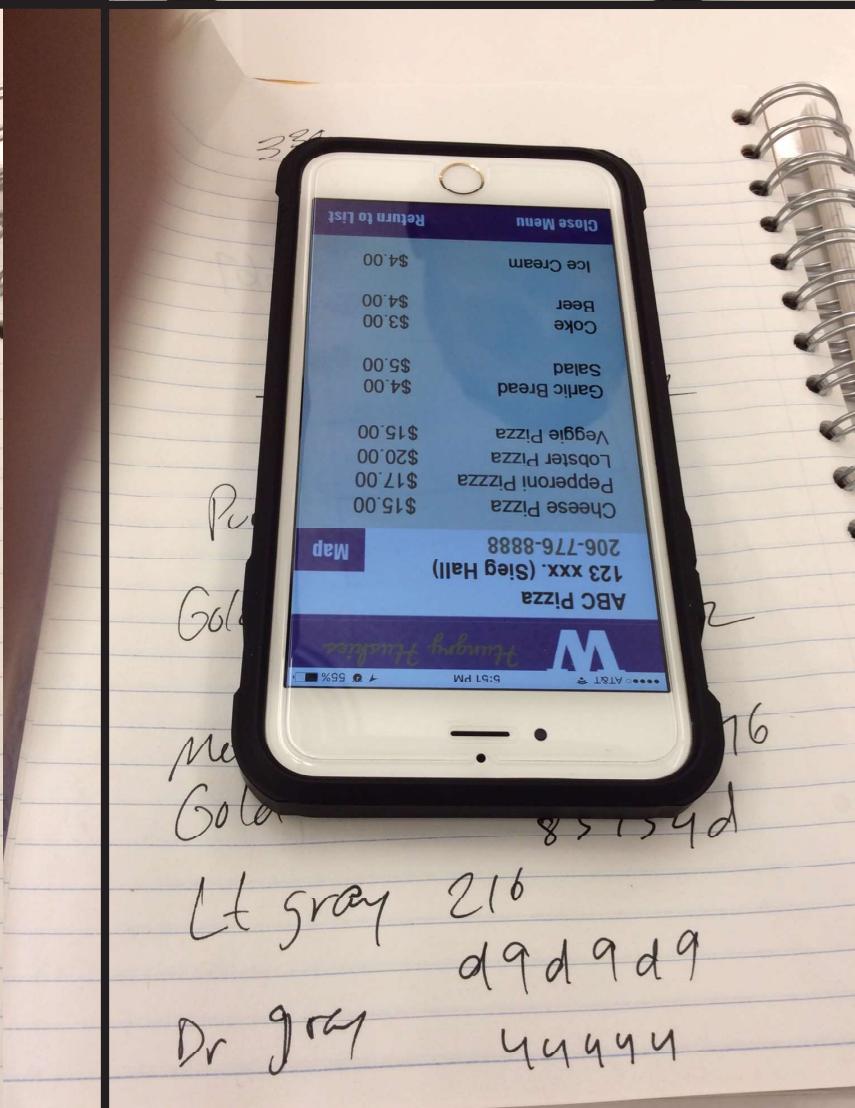
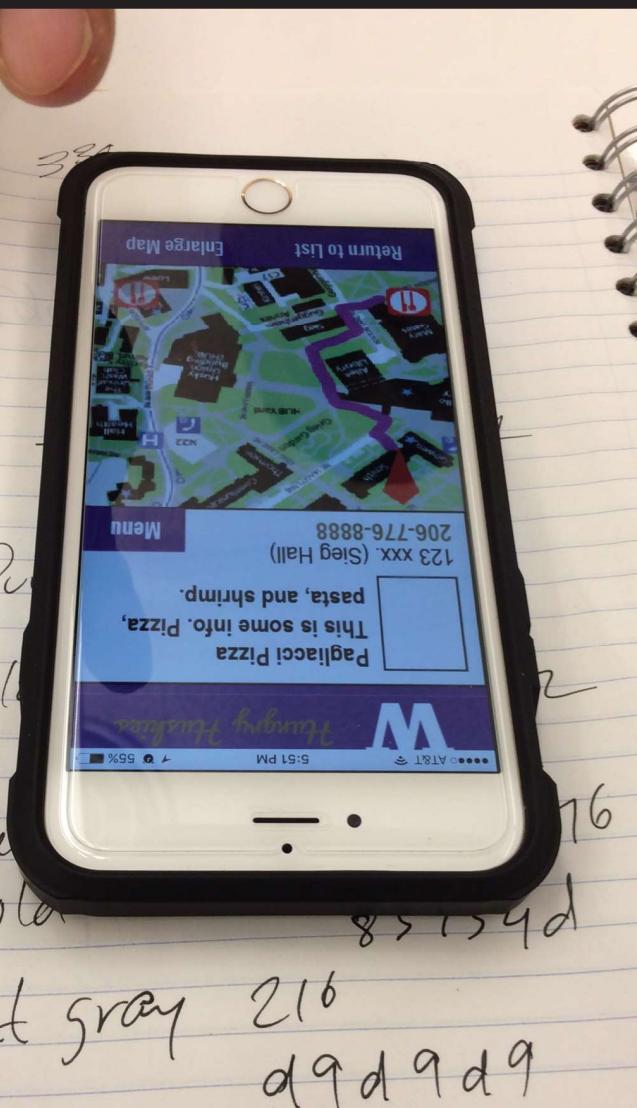
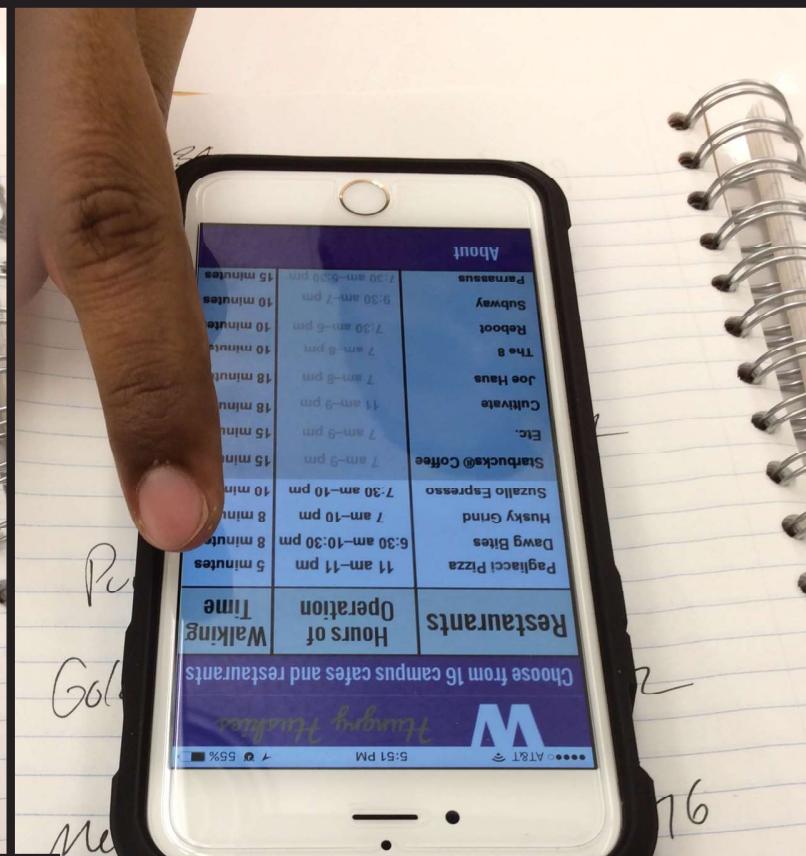
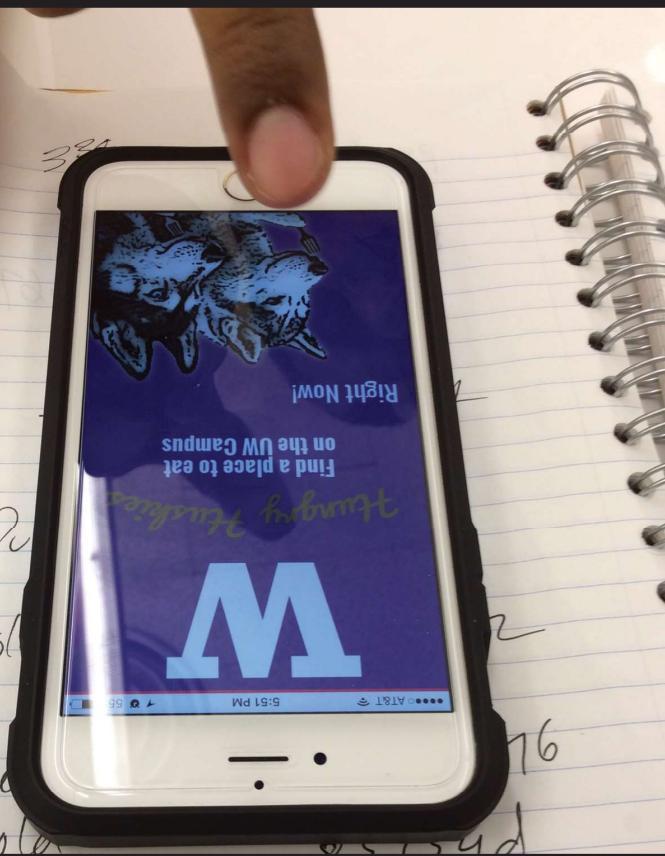
→ Clicked on it, not clear of selection

- Were you satisfied with the overall experience of using the app? Why or why not?

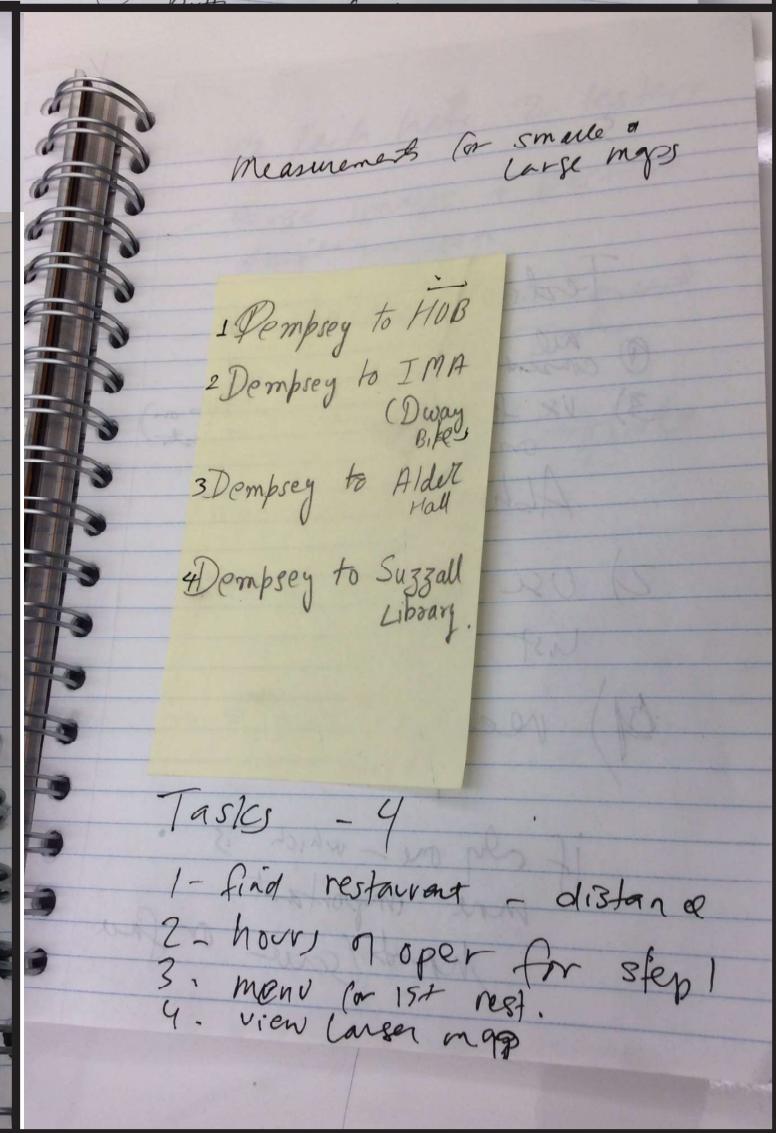
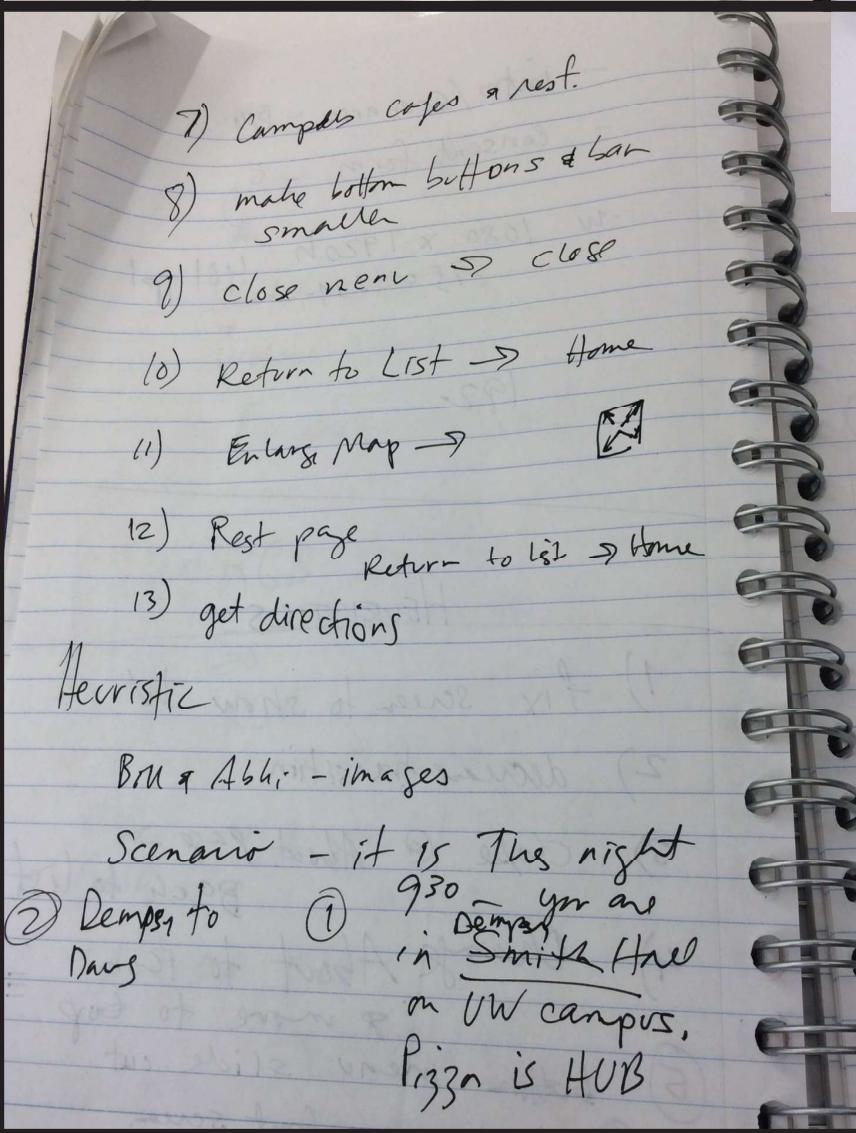
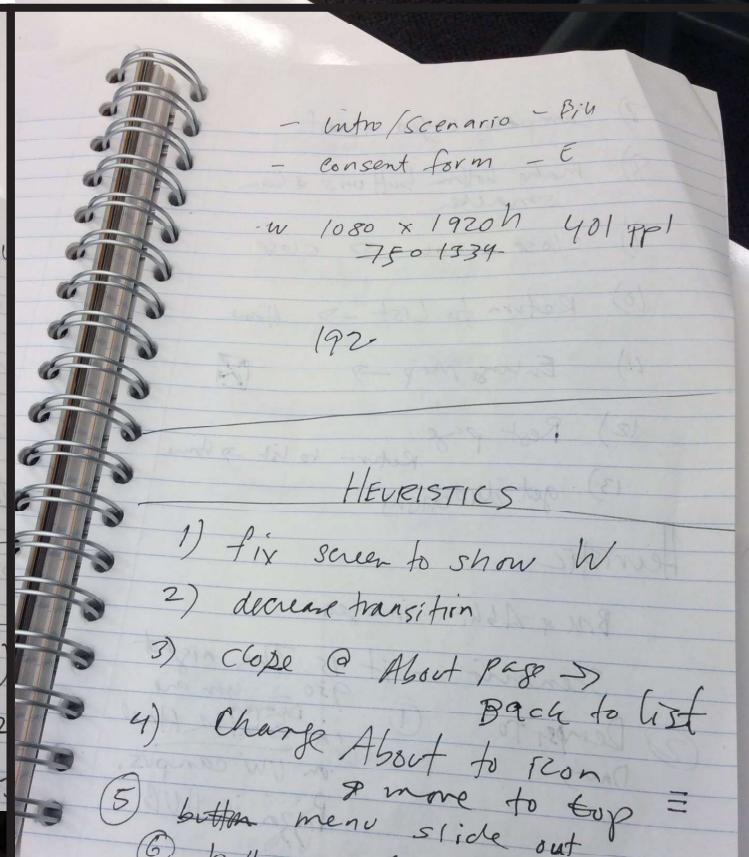
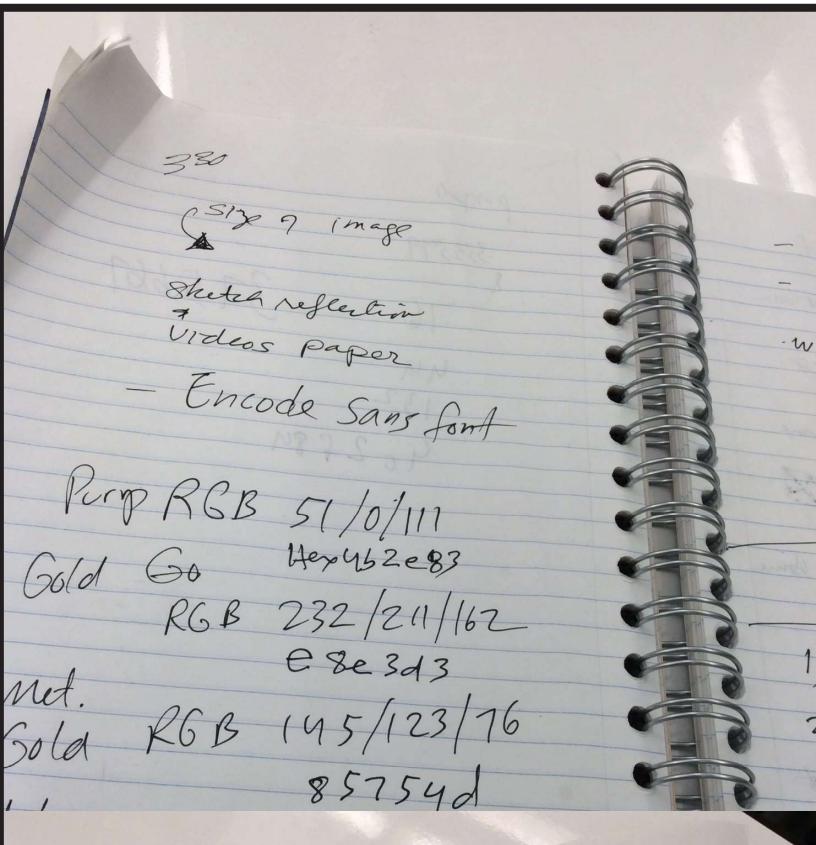
OK, navigation can be made easy

- Is there anything else you'd like us to know about your experience using this app?

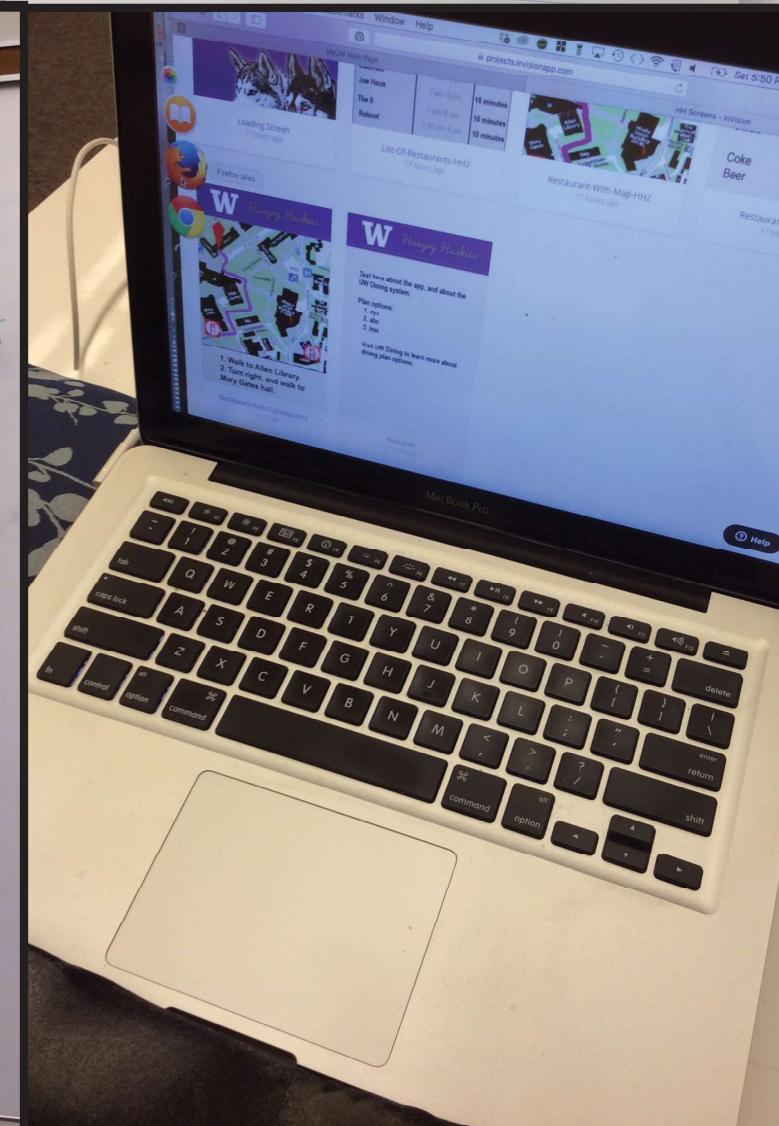
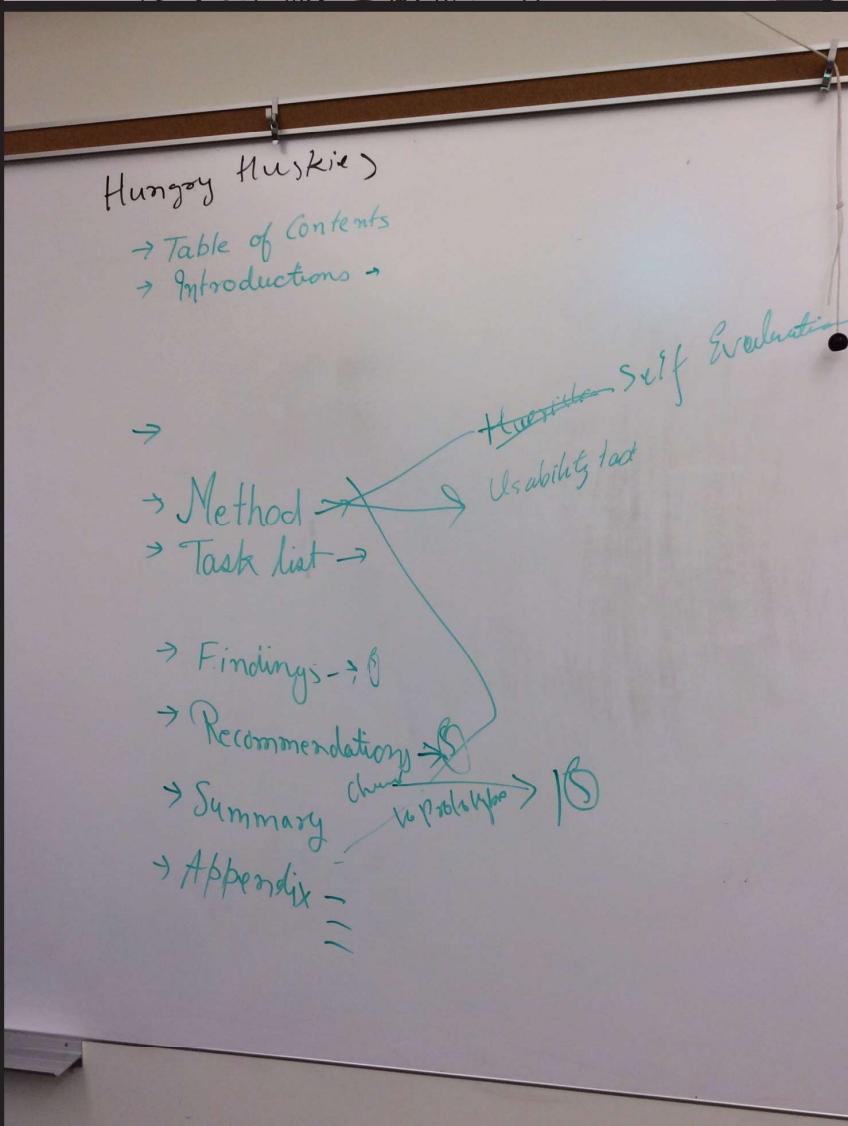
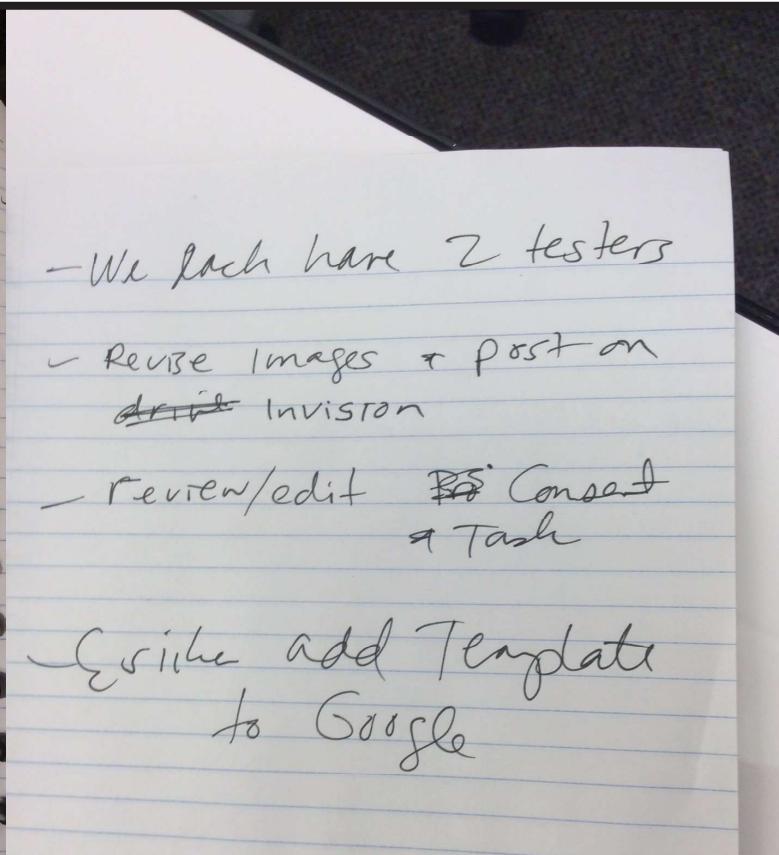
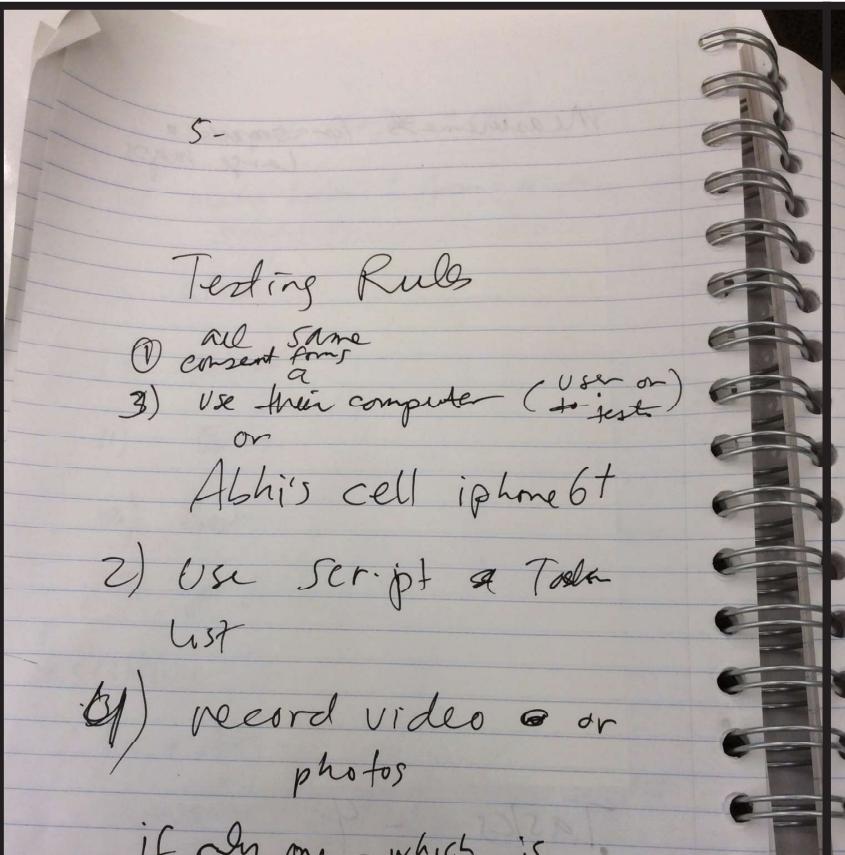
# Testing App at Work Meeting, using iPhone 6+



# Testing App at Work Meeting, finding things to fix on app



# Testing App at Work Meeting, planning testing and outlining report



# Viewing Interactive App on Invision, as testers will see it

HH 29 Nov

Log Into Facebook | Facebook SEAKER - 1st Iteration - UXPin Preview HH 29 Nov Preview Mode

W Hungry Huskies

Campus cafes and restaurants

Restaurants	Hours of Operation	Walking Time
Pagliacci Pizza	11 am–11 pm	6 minutes
Dawg Bites	6:30 am–10:30 pm	12 minutes
Husky Grind	7 am–10 pm	15 minutes
Suzallo Espresso	7:30 am–10 pm	5 minutes
Starbucks® Coffee	7 am–9 pm	15 minutes
Etc.	7 am–9 pm	15 minutes
Cultivate	11 am–9 pm	18 minutes
Joe Haus	7 am–8 pm	18 minutes
The 8	7 am–8 pm	10 minutes
Reboot	7:30 am–6 pm	10 minutes
Subway	9:30 am–7 pm	10 minutes
Parnassus	7:30 am–5:30 pm	15 minutes

HH 29 Nov Loading Screen

Log into Facebook | Facebook SEAKER - 1st Iteration - UXPin Preview HH 29 Nov Preview Mode - InVision

W Hungry Huskies

Pagliacci Pizza  
Pizza, salads, pasta.  
206-776-8888  
(HUB)

Menu

SMS to Mobile

Map

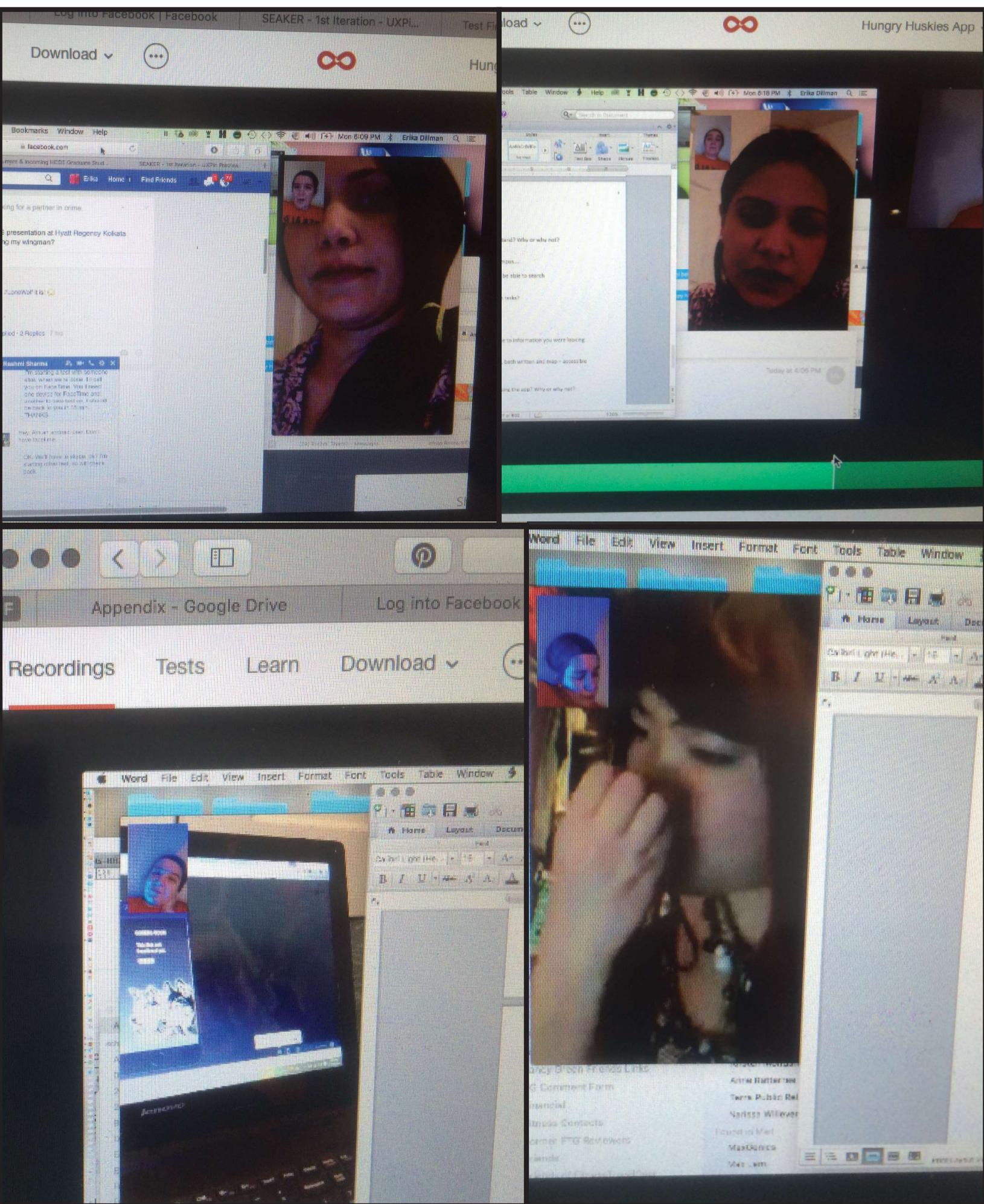
Cheese Pizza \$15.00  
Pepperoni Pizza \$17.00  
Lobster Pizza \$20.00  
Veggie Pizza \$15.00  
Pesto Pizza \$15.00  
Mushroom Pizza \$15.00  
Sausage Pizza \$15.00  
Garlic Bread \$4.00  
Salad \$5.00

Coke \$3.00  
Beer \$4.00

Ice Cream \$4.00

Home

# Usability Testing Via FaceTime, using LookBack recording app



There's no way to close the top directions box, and no icons on the base map to indicate if it's used to show more restaurants.  
The "Search" field is too large, takes up room and could be used to show more restaurants.  
There's no way to sort or filter.

Hours of operation are always visible when restaurant is shown (details and menu page)

The "Sort by" and "Filter" buttons on the Map screen give you the ability to map the impact of the

#### Severity (1-4)

#### Recommendation

#### Tester Notes

	Base	Beta
1 Add direction button to details page	Beta	Beta
2 Add hours of operation to restaurant page	Max	Max
3 Add hours of operation to restaurant page	Max	Max
4 Add hours of operation to restaurant page	Max	Max

The user found the Map button and got used to map via "Sort" button since the additional step to worry the product screen while they were doing the search.

Beta

Max

Max