



# Project 3: Stout Campus Map App & Website

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# Overview/Competitive Analysis

## Project 3



# Overview

The Campus Map project consists of creating a new website and mobile application for the UW Stout campus with a special focus on user experience. The design should include buildings, facilities, parking lots, campus boundaries, etc. The target audience for this redesign is incoming students, new faculty, and staff. The result should be not only aesthetically successful, but easy to navigate for all of its intended users.



# Competitive Analysis

1. University of Wisconsin Stevens Point
2. University of Minnesota Duluth
3. University of Wisconsin River falls





# UW Stevens Point

UW Stevens Point was looked at due to the similarity between campus size and undergrad enrollment when compared to UW Stout. Both universities provide a flat view map along with an interactive “3D” version of their campuses. Many of the same usability features are shared between these as well. The 3D maps can both be navigated by dragging the cursor and provide a slideshow of information and pictures when a building is selected. However, unlike UW Stout, UWSP’s flat view map is a single image while Stout’s still lets the user navigate around the area and click on a location point for the building name and address.

<https://www.uwsp.edu/about/Documents/campusmap.pdf>

<https://stevenspoint.university-tour.com/map.php>



## UWSP, contd.

### Strengths

1. Clicking on interactive map opens more information and images of the selected building
2. Interactive map allows for drag-able navigation
3. Flat view map is color-coded

### Weaknesses

1. No sense of direction on 3D map (no compass, street names, etc.)
2. Users must find location names by searching through a list on flat-view
3. Interactive functions are only present with the 3D map





# University of Minnesota Duluth

UMD was chosen because of its similar enrollment size and because it is not a part of the UW system. UMD does not offer a 3D campus map, but it does have an interactive Google map with “layers” that toggle the display of features such as campus bus routes, walk and bike amenities, and accessibility. Locations that are marked with a “?” icon show contact information when clicked on, along with a short list of the services at that location. UMD also offers a PDF printable map, which has an included key for bus hubs, parking, and types of university buildings.

<https://www.d.umn.edu/maps/>

[https://www.d.umn.edu/maps/specific/campus\\_map.pdf](https://www.d.umn.edu/maps/specific/campus_map.pdf)



## UMD, contd.

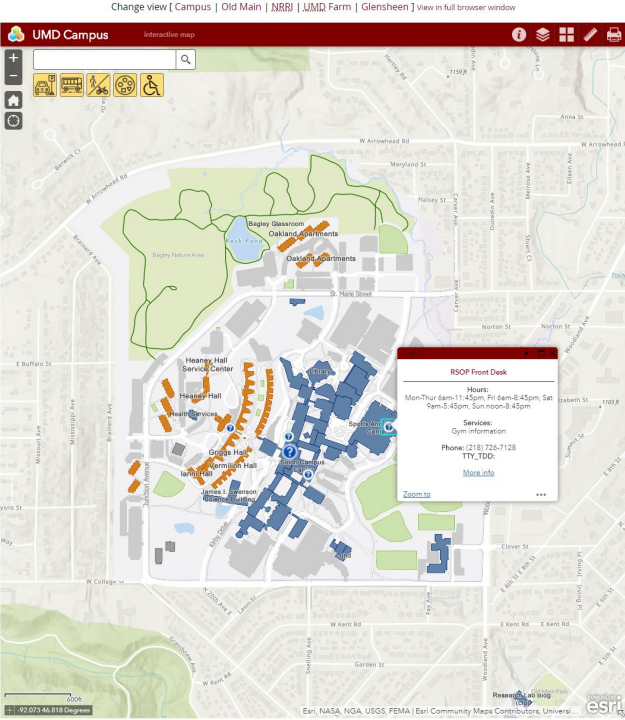
### Strengths

1. Information layers are useful for displaying transportation and accessible locations
2. Map is draggable and can zoom in and out
3. Color coding is identical to printed version of the map

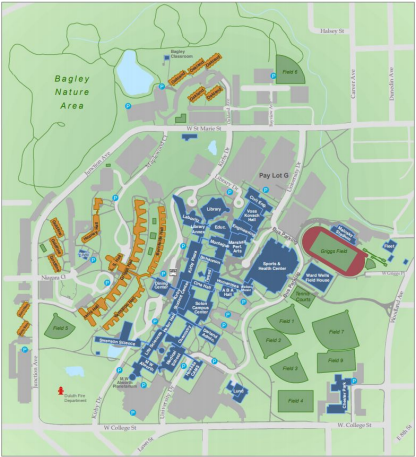
### Weaknesses

1. Contact information and hours is limited to buildings with a “?” icon, not accessible by clicking on the building name
2. Layer buttons are not labeled
3. Parking lots are color coded, but not labeled

Interactive Campus Map



Layer buttons



UMD  
UNIVERSITY OF MINNESOTA DULUTH  
Driven to Discover

- Kitty Bus Hub
- Parking Meters
- Campus Building
- Campus Housing
- Parking Lot



# UW River Falls

UW River Falls was chosen because of similar campus size and enrollment when compared to UW stout. While UW stout uses a flat map and UW river Falls takes advantage of using a 2D map as well as flat map. Stouts map and UWRF 2D map are interactive and provide additional information to each of the buildings. Both maps are used similar with zoom and drag tools. But Stout used numbers to serve as a map key while River Falls does not have a key to each building (you must drag over each building).

<https://www.uwrf.edu/AboutUs/Explore/>

<https://www.uwrf.edu/ANFS/Maps-and-Lodging.cfm>



# UWRF, Contd.

## Strengths

1. Nice to look at, feels cohesive
2. Able to use drag and zoom tools to navigate the map
3. Types of buildings are organized in a manageable way
4. When clicking on buildings, more about its history and floor layout is shown

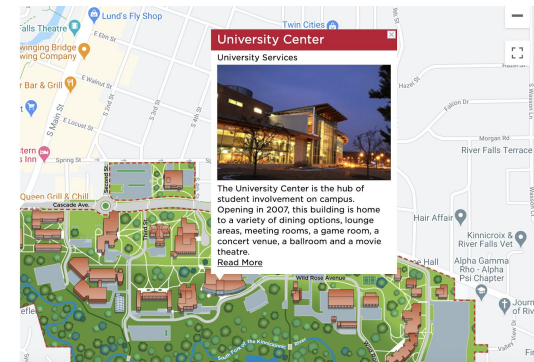
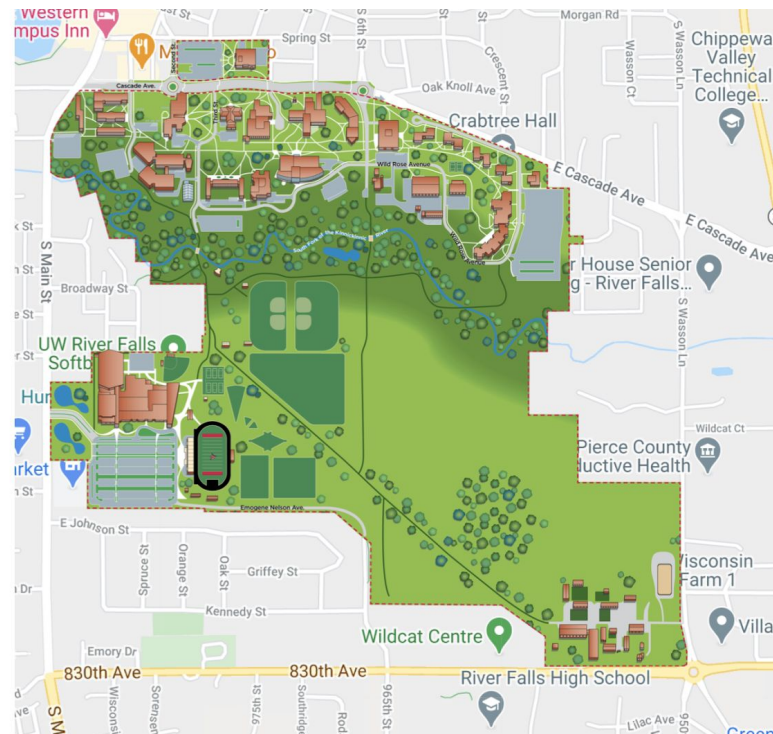
## Weaknesses

1. On the 2D map buildings are not labeled with any sort of key or numbering
2. Contact information of any buildings is hard to find
3. There are some architectural structures mapped but not clickable or labeled



# Explore Campus

- Academic Buildings +
- Residence Halls +
- University Services +
- Athletics And Recreation +
- Parking Lots +
- Printable Map
- Get Directions





# User Research/Personas/ Red Routes Project 3

# User 1

## WORKSHEET TOPIC MAP

Can you show me how you find your way around your college campus?  
What are the main steps you take when trying to navigate a new area?

Do you or have you ever attended class on your campus?

Are you a college student, if so where do you attend and for how long?

Have you ever searched for or used a map of your campus? Why or why not?

How long did it take you to feel comfortable navigating your college campus?

How could your experience navigating your campus been a more enjoyable experience?

If you are familiar with the buildings on campus, in what ways, if any, could a map still be useful to you? Is there anything else about campus you'd like to be more familiar with?

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www.jonathanjones.net

## CONTEXTUAL INTERVIEW HIGHLIGHTS

DATE: 11/18/2020

PARTICIPANT: User 1

JOB ROLE: UW Stout Student

AGE / SEX: 20 / Female

Describe the participant and the environment. What clues do these give us about the goals and priorities of the participant and the organisation?

This participant is a third year, full-time student at Stout. She lived on campus for the first 2 years, and is now living off campus. Due to Covid19, only one of her classes is in-person.

Because of how long she's been at Stout, she no longer feels the need to personally use a campus map.

List the ways in which this participant is similar to other participants

She no longer lives on campus and feels comfortable navigating alone.

Felt concern when it came to first locating academic buildings.

This participant is most similar to:

User 2

List the 3 main themes or learnings that stood out from this observation

As a freshman on campus for the first time, this user felt a lot of worry over learning the buildings and finding her classes.

She tried to use the campus map through the Connect app, however it never worked properly (at least at the time).

Now in her third year, she feels confident in navigating her campus. However, she noted she will still use building-specific maps to find certain classrooms.

List the ways in which this participant is different from other participants

Doesn't currently need a map to successfully find her way around.

This participant is most different from:

User 3

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www.jonathanjones.net

# User 2

## WORKSHEET TOPIC MAP

Can you show me how you find your way around your college campus?  
What are the main steps you take when trying to navigate a new area?

Do you or have you ever attended class on your campus?

Are you a college student, if so where do you attend and for how long?

Have you ever searched for or used a map of your campus? Why or why not?

How long did it take you to feel comfortable navigating your college campus?

How could your experience navigating your campus be a more enjoyable experience?

If you are familiar with the buildings on campus, in what ways, if any, could a map still be useful to you? Is there anything else about campus you'd like to be more familiar with?

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www.jonstef.org.net

## CONTEXTUAL INTERVIEW HIGHLIGHTS

DATE: 11/18/2020 PARTICIPANT: User 2 JOB ROLE: UW Stout Student AGE / SEX: 20 / Male

Describe the participant and the environment. What clues do these give us about the goals and priorities of the participant and the organisation?

This participant is a third year, full-time student at Stout. He lived on campus for the first 2 years, and is now living off campus. Due to Covid19, he no longer needs to go on campus to attend class.

List the 3 main themes or learnings that stood out from this observation

This participant would use Google Maps to find their way across campus.

He stated it only took about a week to become familiar with campus. As he went to a nearby high school, he already somewhat knew buildings coming into freshman year.

Though he no longer feels the need for a map to navigate, he stated a desire to know building hours.

List the ways in which this participant is similar to other participants

Used to live on campus and now lives off campus in Menomonie.

Didn't look to Stout-provided map resources (didn't feel they needed one).

List the ways in which this participant is different from other participants

Felt confident in their skills navigating campus from the start of their schooling.

This participant is most similar to: User 5

This participant is most different from: User 3

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www.jonstef.org.net

# User 3

## WORKSHEET TOPIC MAP

www.uwstout.edu

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Can you show me how you  
What are the main steps you take when

Find a new building  
Planning a visit to campus

What's your experience with finding campus locations?

Have you used a campus map before?

How would you describe your relation to Stout?

What's your experience with parking at Stout?

If one of your classes is in a building you've never been to before, how would you find out where it is?

Do you find the digital campus map more or less useful than the printable map?

Did you know about this campus map?

## CONTEXTUAL INTERVIEW HIGHLIGHTS

DATE: 11/18/2020 PARTICIPANT: #3 JOB ROLE: Prospective Student AGE / SEX: 23F

Describe the participant and the environment. What clues do these give us about the goals and priorities of the participant and the organisation?

The participant is a prospective student for UW-Stout. They are interested in possibly transferring there in the future. They live in Menomonie, and are already somewhat familiar with campus. They were interviewed in their home living room at their desk that they use for school work.

List the 3 main themes or learnings that stood out from this observation

They want guidance, as they aren't always comfortable with being alone in a new situation. They want clarity in campus maps, as they don't like being unsure. They're more likely to contact an employee or student for guidance than use a digital tool.

List the ways in which this participant is similar to other participants

This participant has trouble navigating campus and finding buildings

Lives off campus

This participant is most similar to: User 4

List the ways in which this participant is different from other participants

This participant does not currently attend UW Stout

This participant is most different from: User 1

www.uwstout.edu

# User 4

Can you show me how you  
What are the main steps you take when

Get to the student center?  
you are trying to find a new building?

Has there been a time where  
you had to use a campus map?

Have you had to help others  
with finding their way around  
campus?

Do you always take the same  
route?

Would you rather use a digital  
or physical map? have you had  
to use either before, while on  
campus?

Have you ever suffered the  
consequences of getting bad  
directions? (being late,  
mislead/ misinformed)

Is there a  
building  
trouble fi

Do you have  
parking on

## CONTEXTUAL INTERVIEW

DATE: 11/17/20 PARTICIPANT: user #4 JOB ROLE: UW Stout student AGE: 22

Describe the participant and the environment. What does this give us about the goals and priorities of the participant and the organization?

The participant is a student at Stout, but does not live on campus. Because of this they expressed they feel like they have more difficulty navigating campus compared to others.

The participant also only has one in person class this semester. So does not spend much time on campus.

List the 3 main themes or learnings that stand out to you from this interview.

Although this participant was familiar with the names they had a difficult time getting location.

This participant had little knowledge of (dorms/ cafeteria/ offices).

She admitted that she has a screen lock map on her phone, which she uses often.

List the ways in which this participant is similar to other participants.

Like others she knows the names of most buildings but still has a hard time finding them or knowing the use of each building.

Although she is new to Stout she does not live on campus.

This participant is most similar to: User 3

This participant is most different from: User 1

# User 5

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Can you show me how you  
What are the main steps you take when

Get to the student center?  
you are trying to find a new building?

Has there been a time where  
you had to use a campus map?

Have you had to help others  
with finding their way around  
campus?

Do you always take the same  
route?

Would you rather use a digital  
or physical map? have you had  
to use either before, while on  
campus?

Have you ever suffered the  
consequences of getting bad  
directions? (being late,  
mislead/ misinformed)

Is there a  
building  
trouble fi

Do you have  
parking on

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## CONTEXTUAL INTERVIEW

DATE: 11/18/20 PARTICIPANT: user #5 JOB ROLE: UW Stout student AGE:

Describe the participant and the environment. What does do these give us about the goals and priorities of the participant and the organization?

This participant is a senior at UW-Stout. They have lived on campus before but now lives elsewhere in Menomonie.

They claimed that they are able to get around campus fairly well. But still struggles when trying to find parking/ tell the difference between how different parking lots and meters are payed.

List the 3 main themes or learnings that st

This participant was able to point ou ease, but had a harder time identifyi used ones.

He does not feel like he needs a map not in the past. But does recall asking when he was new to Stout.

They think that having more physical would be beneficial.

List the ways in which this participant is similar to other participants

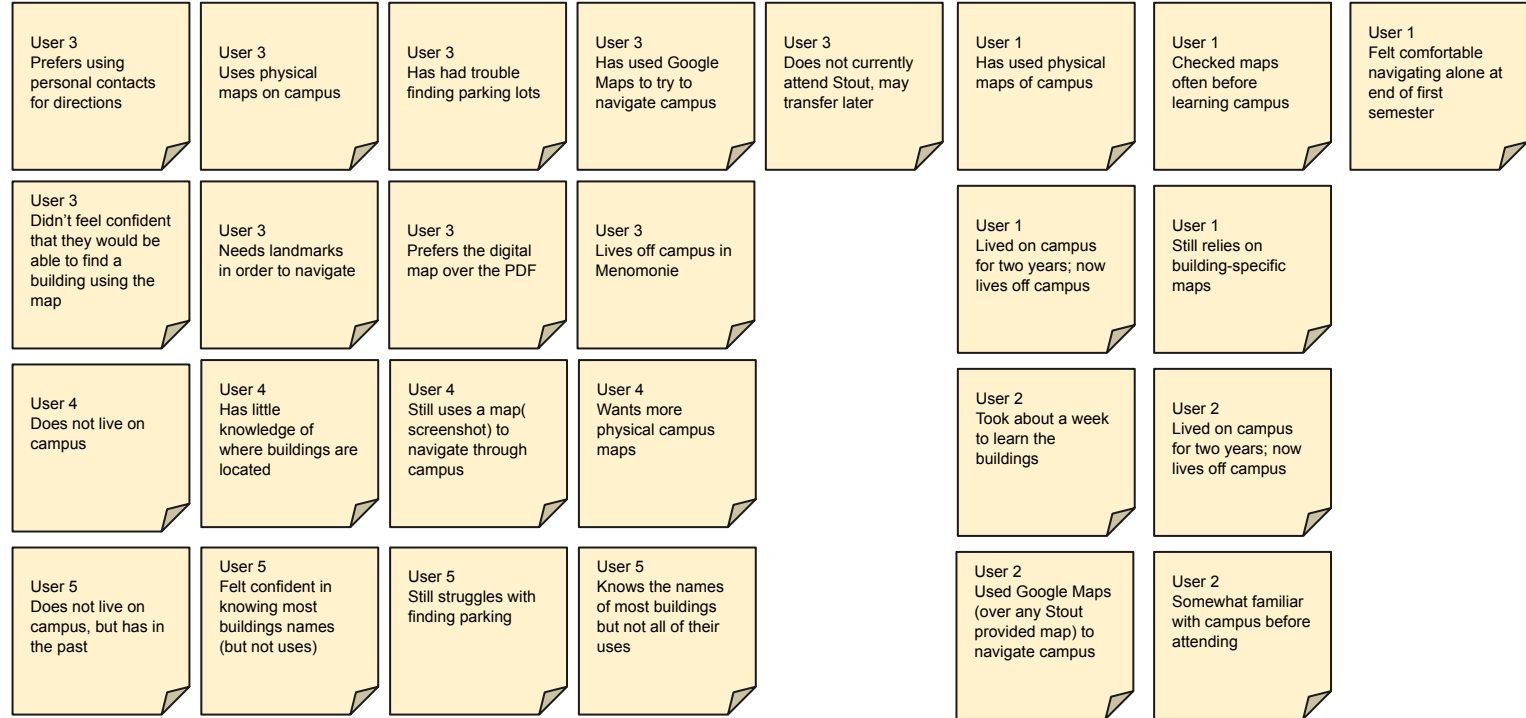
List the ways in which this participant is d

He also still struggles to find parking spaces.

Although this person can tell you the names or most buildings and where they are located they don't have a full understanding of their uses.

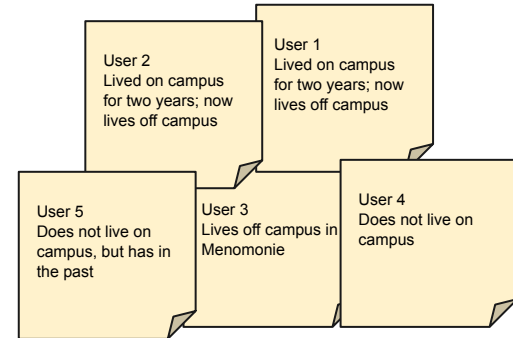
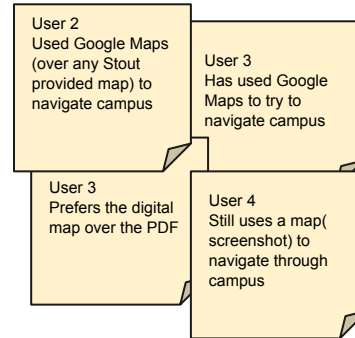
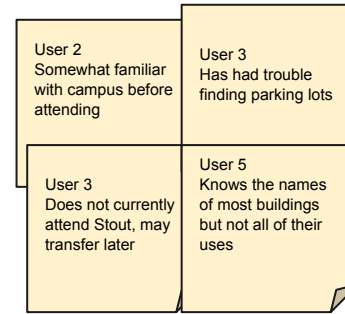
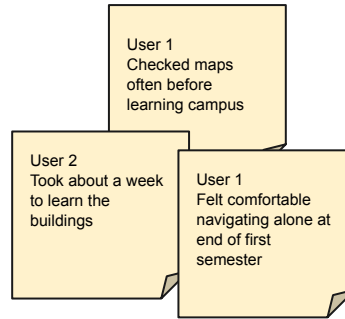
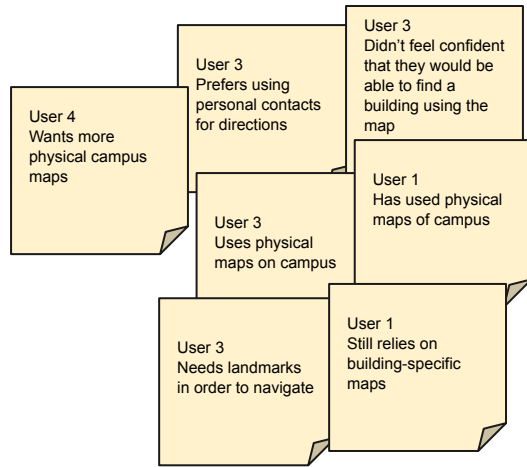
This participant is most similar to: User 2

This participant is most different from:

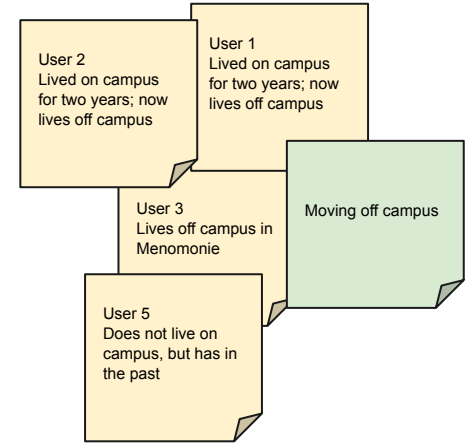
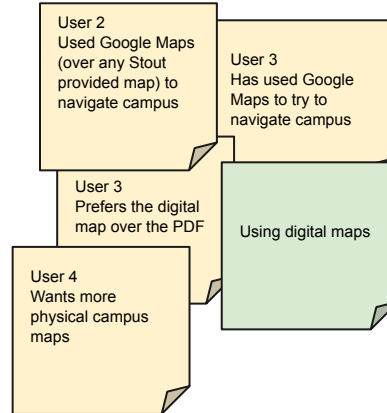
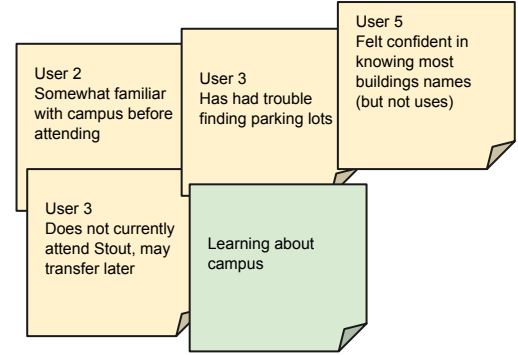
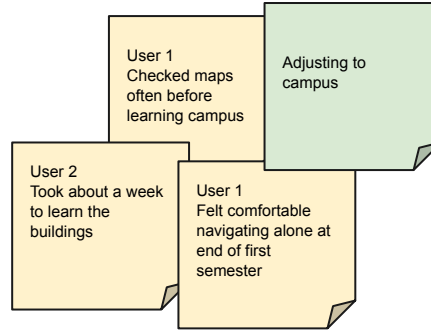
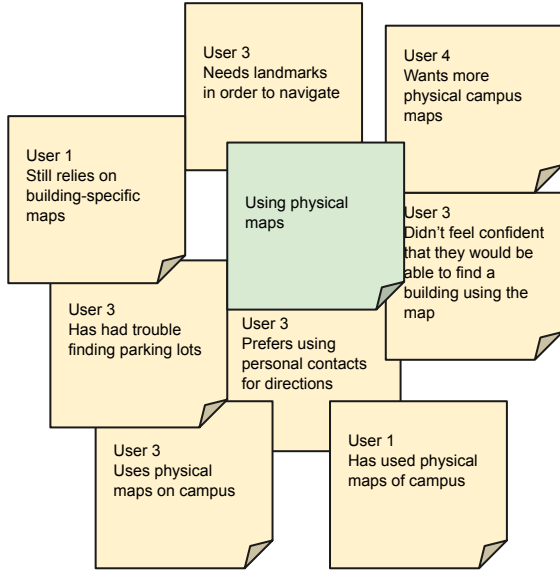


## Affinity Diagramming - Step 1

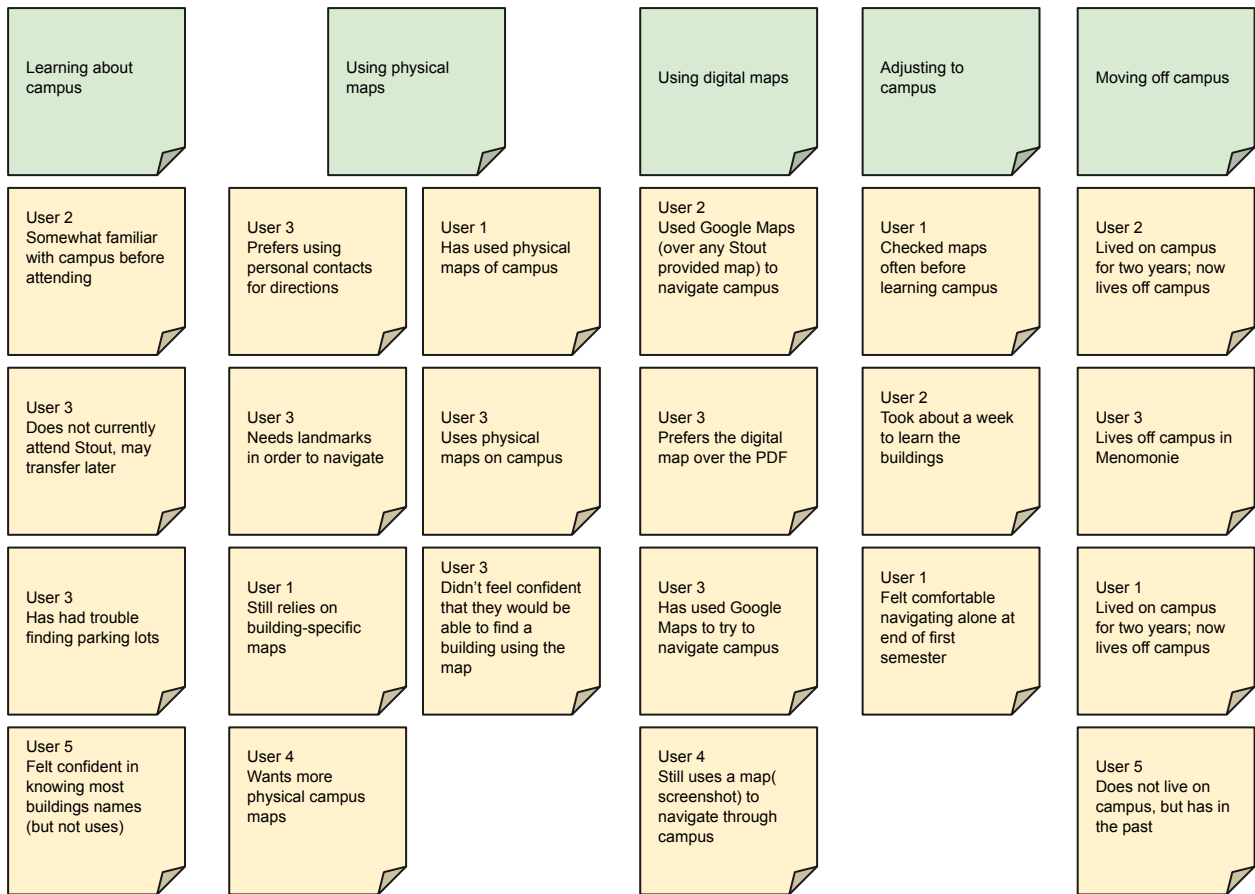




## Affinity Diagramming - Step 2



## Affinity Diagramming - Step 3



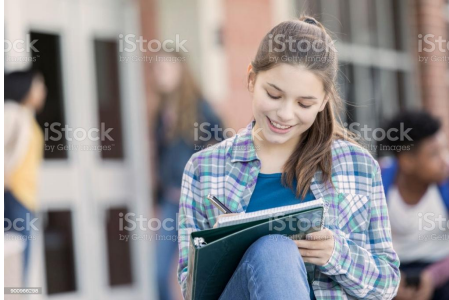
## Affinity Diagramming - Step 4

# User Personas

	GROUP 1	GROUP 2	GROUP 3
<b>GIVE THIS GROUP OF USERS A NAME</b> e.g. 'Telesales support'	Freshmen	Upperclassmen	Prospective students
<b>WHY DO THEY USE THE APPLICATION?</b> Write down the goals as users would express them. Don't simply write down the functions you expect them to use.	<ul style="list-style-type: none"> <li>Find buildings to attend classes</li> <li>Find key locations for living on campus (dorms, cafeteria)</li> <li>Accessibility information</li> </ul>	<ul style="list-style-type: none"> <li>Find parking spaces when commuting to campus</li> </ul>	<ul style="list-style-type: none"> <li>Find parking locations for tours</li> <li>Learn about key locations for campus life</li> </ul>
<b>WHAT INFORMATION DO THEY WANT?</b> In order to achieve their goals, what kind of information, functions or features do they need?	<ul style="list-style-type: none"> <li>Building guide</li> <li>Accessibility guide</li> </ul>	<ul style="list-style-type: none"> <li>Building hours</li> <li>Parking lot information</li> </ul>	<ul style="list-style-type: none"> <li>Parking lot information</li> <li>Campus overview</li> </ul>
<b>HOW DO THEY DIFFER FROM THE OTHER GROUPS?</b> What makes this group a group? Think about usage patterns, job roles, tasks and activities.	<ul style="list-style-type: none"> <li>They are new to campus and do not have as much experience</li> </ul>	<ul style="list-style-type: none"> <li>These students generally live off-campus</li> <li>They have familiarity with academic buildings</li> </ul>	<ul style="list-style-type: none"> <li>These students may have never seen campus in person, their point of reference could only come from online resources</li> </ul>

# Primary Persona

Jane



“Where is the Jarvis Tech Wing?”

- Jane is an 18 year old female freshman who just started at UW Stout. They are new to the college environment, and this is the first time they’ve lived somewhere without their family.
- Jane has a hard time navigating campus, and ends up wandering around buildings looking for her classrooms. She wants an easier way to find her way around campus.

## Secondary Persona

Ben



“Where can I park?”

- Ben is a 21 year old male student at UW Stout. He lived on campus for the first two years, and has since moved off campus.
- He only comes to campus once a week for class and has trouble finding parking. He currently drives around campus until he sees an empty spot. He wants an easy way to locate parking spaces that he can use (clarification between who can park where on the map).



# Red Routes

All the time		Finding parking spaces		Finding academic buildings
Most of the time				
Some of the time	Learn about campus locations	Locating other key buildings (ie dorms, cafeteria)		Finding classrooms
Very little of the time	Accessibility information	Specific building and lab hours		
	Few of the people	Some of the people	Most of the people	All of the people



# User Stories

1. “I’m still finding my way around the academic buildings, and have trouble finding my classrooms each semester. I wish there was an easier way to find them.”
2. “As someone who’s lived on campus, but now only visits once a week, I’m familiar with where to find my classes but I have no idea where I can park. I want an accessible resource to find parking lot information.”
3. “I’m newer to Stout and only have one in person class this semester. So finding some of the buildings is hard for me, I still use a screenshot of the map to get around most of the time. I wish Stout had more physical maps around campus.”





# Sitemap

## Project 3



# Card Sorting Analysis

<https://vmbmbg8n.optimalworkshop.com/optimalsort/3gg01zvu>



# Participant 1

## Items on map

8

Campus garden

Addresses

Sport facilities

Administrative facilities

Campus building

Academic buildings

Residence halls

Parking lots

## Map features

7

Locating parking spaces

Finding specific classrooms within academic buildings

Locating other key buildings (dorms, cafeterias, etc.)

Specific building and lab hours

Accessibility information

Finding academic buildings

Parking regulations

## Types of map

4

Satellite image map

Interactive map

Flat-color map

PDF image map

## Ways to navigate

3

Road names

Compass

Landmarks



# Participant 2

## Campus Map

13

Residence halls

Administrative facilities

Academic buildings

Campus garden

Sport facilities

Campus building

Road names

Compass

Landmarks

Accessibility information

Addresses

Satellite image map

PDF image map

## Classroom Finder

5

Finding academic buildings

Finding specific classrooms within academic buildings

Locating other key buildings (dorms, cafeterias, etc.)

Specific building and lab hours

Interactive map

## Parking Map

4

Parking lots

Locating parking spaces

Parking regulations

Flat-color map



# Participant 3

## Map on campus

10

Flat-color map

Residence halls

Administrative facilities

Accessibility information

Sport facilities

Locating other key buildings (dorms, cafeterias, etc.)

Landmarks

Parking lots

Finding specific classrooms within academic buildings

Campus garden

## Virtual map interactive

12

Parking regulations

Interactive map

Satellite image map

Locating parking spaces

Campus building

Specific building and lab hours

Addresses

Road names

Compass

PDF image map

Academic buildings

Finding academic buildings



# Participant 4

## Map for Students

16

Academic buildings
Landmarks
Accessibility information
Finding academic buildings
Administrative facilities
Campus building
Specific building and lab hours
Campus garden
Locating parking spaces
Parking regulations
Sport facilities
Finding specific classrooms within academic buildings
Interactive map
Locating other key buildings (dorms, cafeterias, etc.)
Residence halls
Flat-color map

## Map for Visitors

6

Satellite image map

Addresses

Road names

Compass

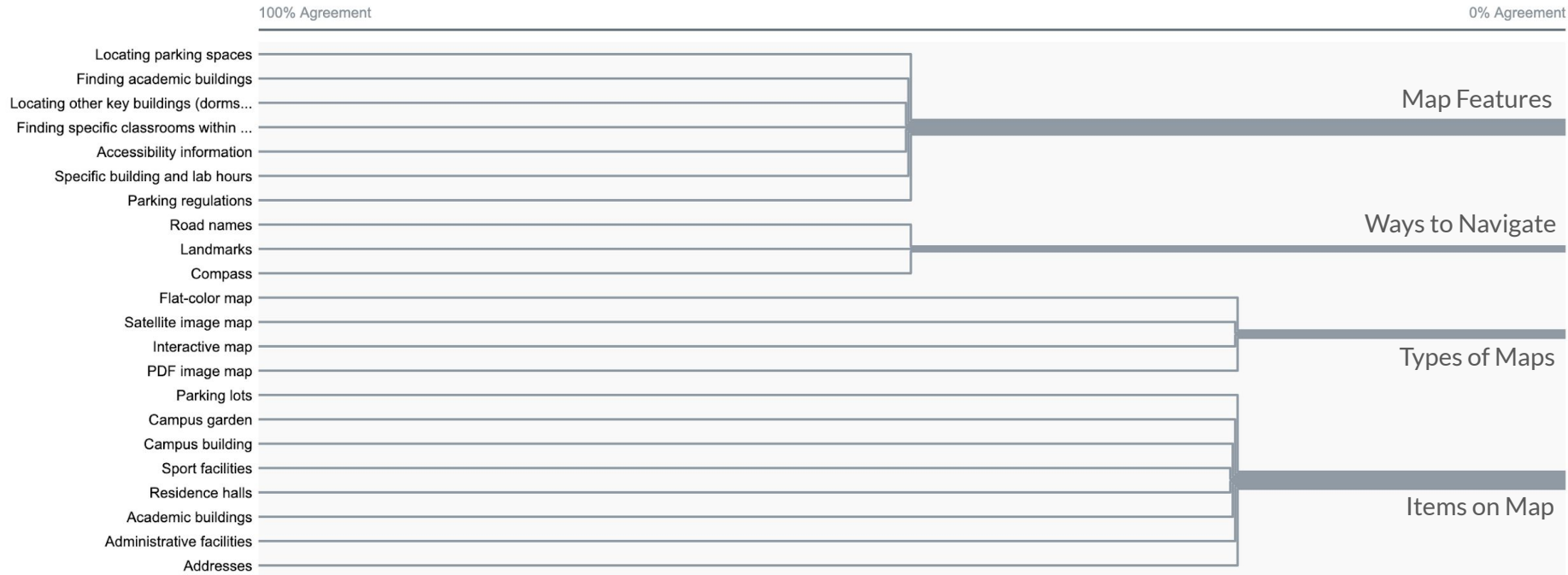
Parking lots

PDF image map

Locating other key buildings (dorms, cafeterias, etc.)

100	Finding specific classrooms within academic buildings																					
75	75	Finding academic buildings																				
75	75	100	Specific building and lab hours																			
50	50	75	75	Locating parking spaces																		
50	50	75	75	100	Parking regulations																	
25	25	50	50	50	50	Campus building																
25	25	50	50	50	50	100	Academic buildings															
50	50	25	25	25	25	75	75	Campus garden														
50	50	25	25	25	25	75	75	100	Sport facilities													
50	50	25	25	25	25	75	75	100	100	Residence halls												
50	50	25	25	25	25	75	75	100	100	100	Administrative facilities											
75	75	50	50	50	50	50	50	75	75	75	75	Accessibility information										
50	50	25	25	25	25	50	50	75	75	75	75	75	Landmarks									
0	0	25	25	25	25	50	50	25	25	25	25	25	50	Road names								
0	0	25	25	25	25	50	50	25	25	25	25	25	50	100	Compass							
0	0	25	25	25	25	50	50	25	25	25	25	25	25	75	75	Satellite image map						
0	0	25	25	25	25	50	50	25	25	25	25	25	25	75	75	100	PDF image map					
0	0	25	25	25	25	75	75	50	50	50	50	25	25	75	75	75	75	Addresses				
25	25	0	0	25	25	25	25	50	50	50	50	25	25	25	25	25	50	Parking lots				
50	50	25	25	50	50	25	25	50	50	50	50	50	50	0	0	25	25	0	50	Flat-color map		
50	50	75	75	50	50	50	50	25	25	25	25	25	25	25	25	50	50	25	0	50	Interactive map	

## Similarity Matrix



Dendrogram



Similar IAs: 2/4

2 groups submitted by participant #5

### Map on campus

#### Similar group labels

Locating other key buildings (dorms, cafeterias, etc.)

Finding specific classrooms within academic buildings

Accessibility information

Flat-color map

Parking lots

Campus garden

Sport facilities

Residence halls

Administrative facilities

Landmarks

### Virtual map interactive

#### Similar group labels

Locating parking spaces

Finding academic buildings

Specific building and lab hours

Satellite image map

Campus building

Interactive map

PDF image map

Parking regulations

Academic buildings

Addresses

Road names

Compass

Similar IAs: 1/4

4 groups submitted by participant #1

### Types of map

#### Similar group labels

Flat-color map

Satellite image map

Interactive map

PDF image map

### Items on map

#### Similar group labels

Parking lots

Campus garden

Campus building

Sport facilities

Residence halls

Academic buildings

Administrative facilities

Addresses

### Map features

#### Similar group labels

Locating parking spaces

Finding academic buildings

Locating other key buildings (dorms, cafeterias, etc.)

Finding specific classrooms within academic buildings

Accessibility information

Specific building and lab hours

Parking regulations

### Ways to navigate

#### Similar group labels

Road names

Landmarks

Compass

Similar IAs: 1/4

3 groups submitted by participant #4

### Campus Map

#### Similar group labels

Accessibility information

Satellite image map

Campus garden

Campus building

Sport facilities

PDF image map

Residence halls

Academic buildings

Administrative facilities

Addresses

Road names

Landmarks

Compass

### Classroom Finder

#### Similar group labels

Finding academic buildings

Locating other key buildings (dorms, cafeterias, etc.)

Finding specific classrooms within academic buildings

Specific building and lab hours

Interactive map

### Parking Map

#### Similar group labels

Locating parking spaces

Flat-color map

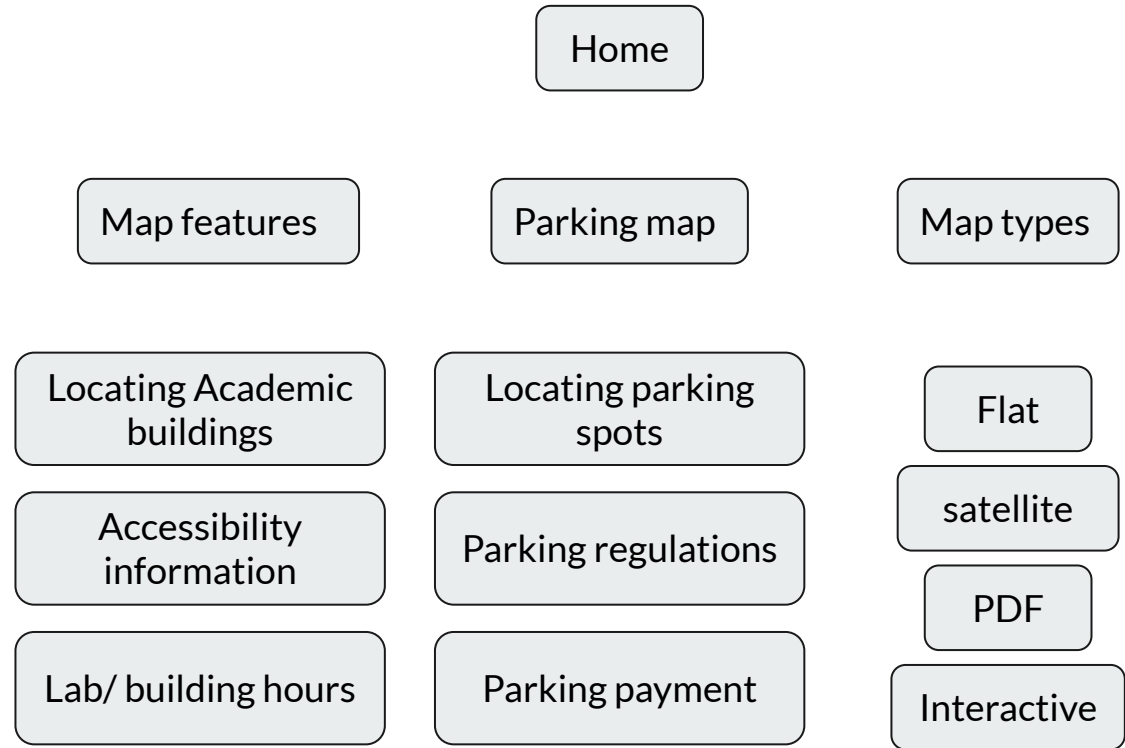
Parking lots

Parking regulations

## Participant-centric Analysis

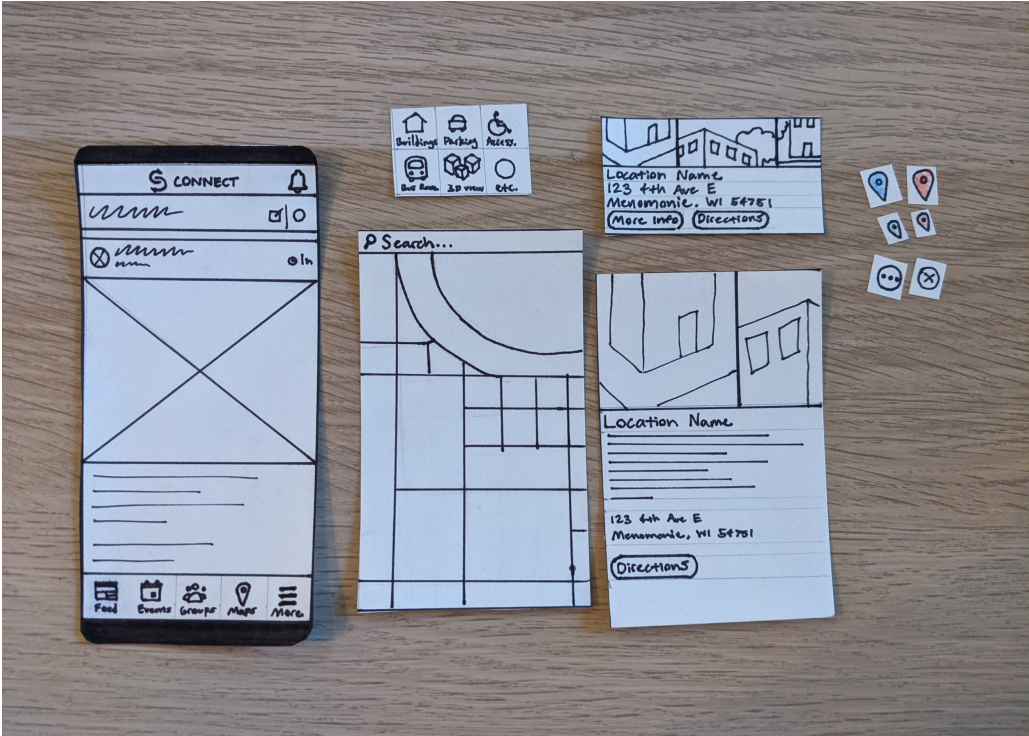


# Sitemap

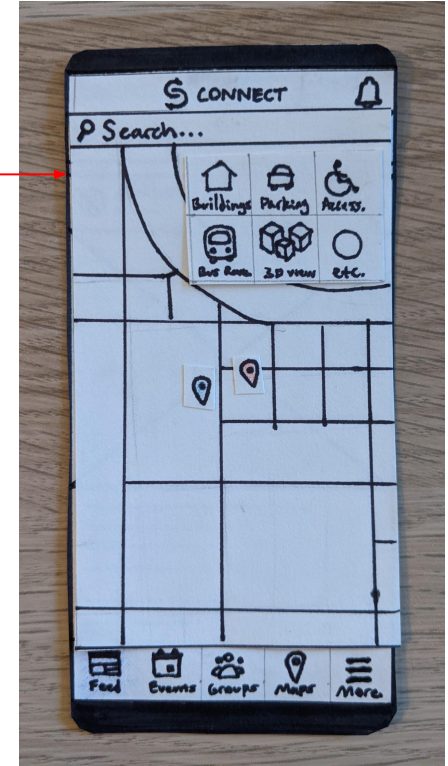
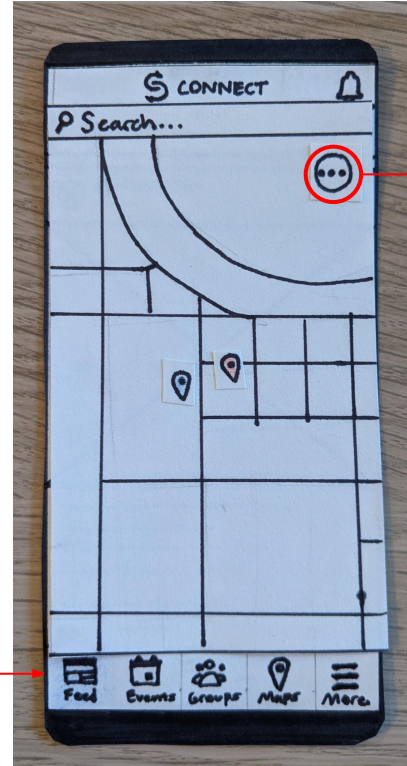
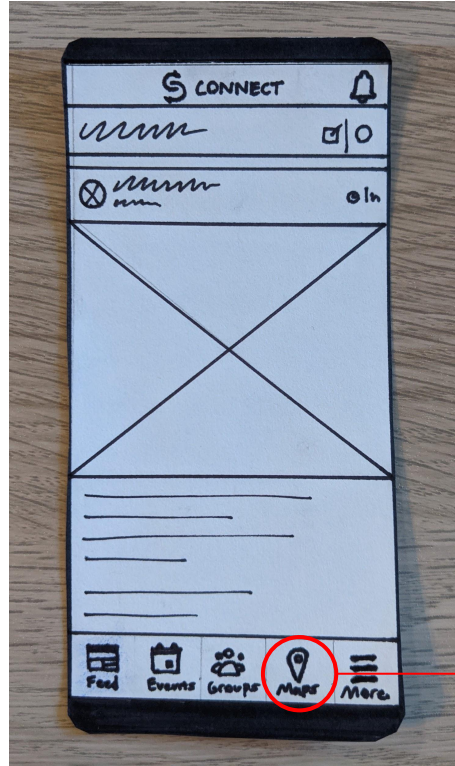




# **Lo-fi Prototype/Lo-fi Usability Testing Project 3**



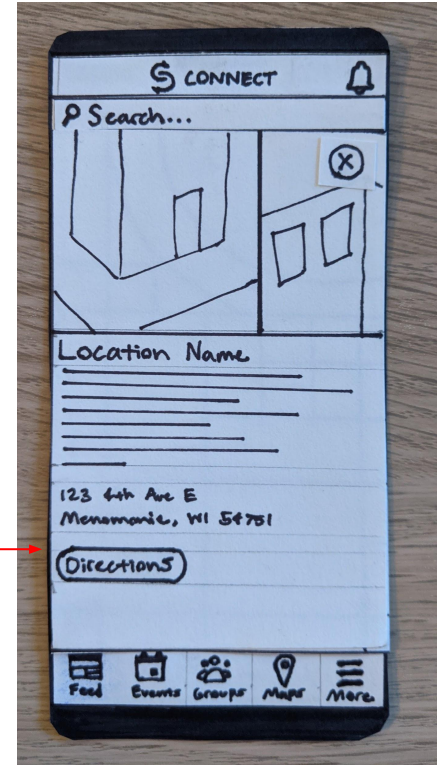
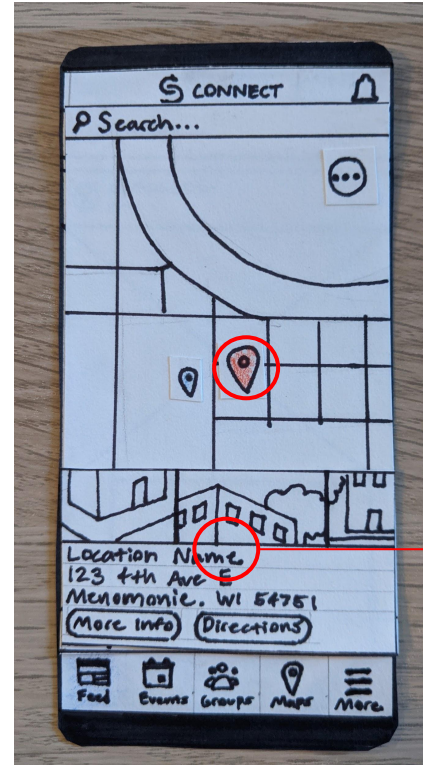
1. User taps on "Maps" tab to open campus map
2. User taps on "... " icon for sorting layers and extra map features
3. User selects desired sorting layer (Buildings, parking, accessibility, transit, 3D view, etc.) or taps on map to close popup



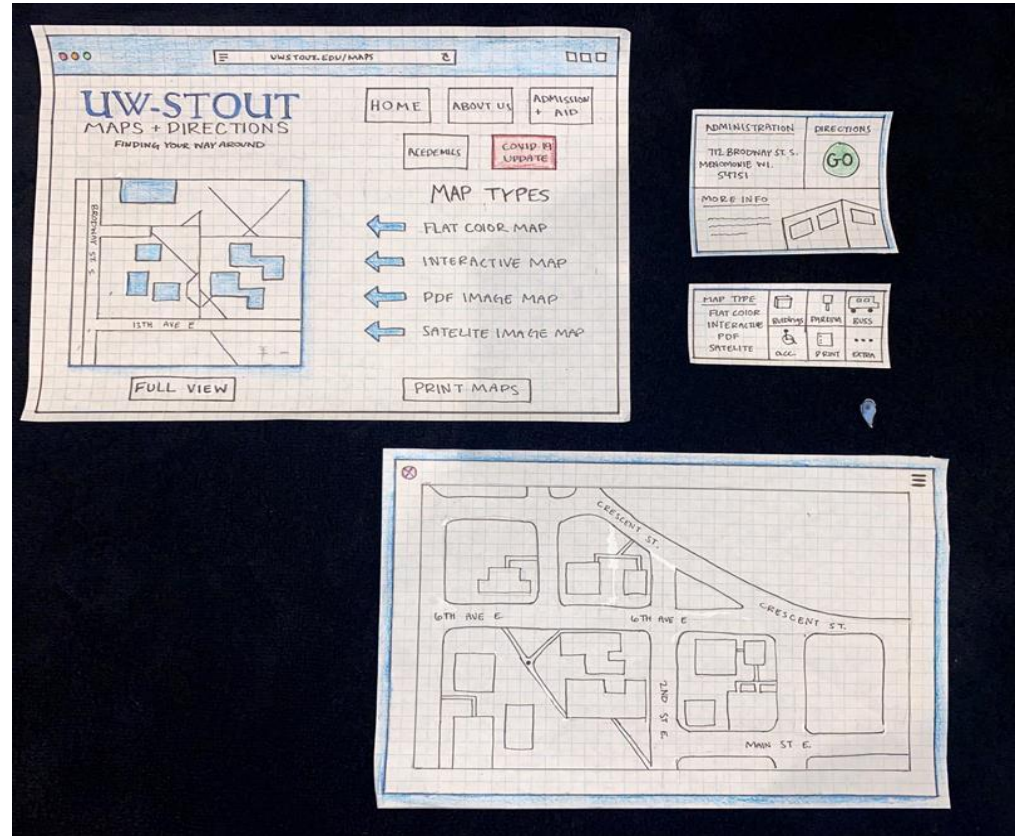
App Prototype



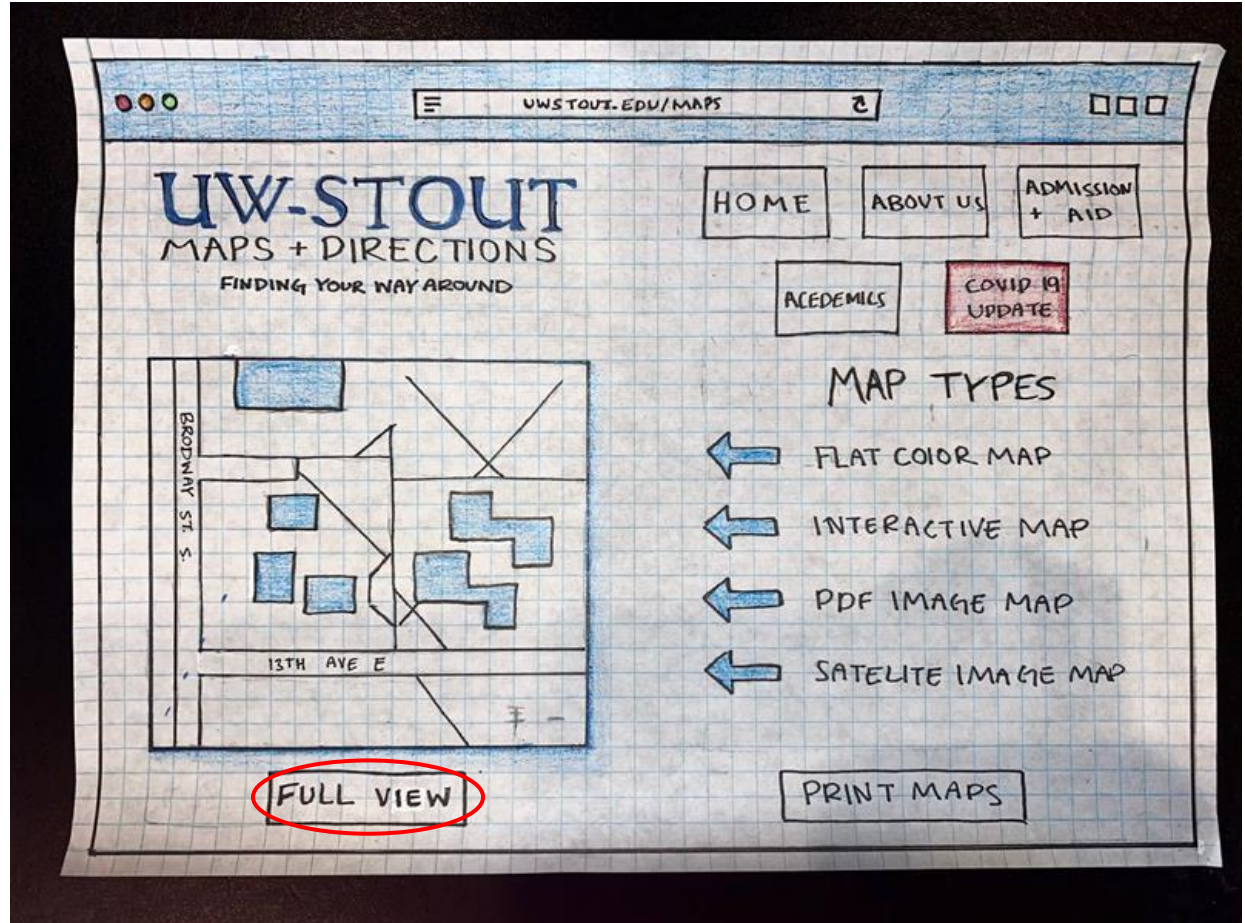
1. User selects blue location (buildings) - more information about that location is shown in the lower section/drawer
2. User selects red location (parking lots) - more information about that location is shown in the lower section/drawer
3. User taps/swipes up on drawer to see more information about that location - user may close out of drawer by tapping the "X" icon or swiping down



# Website Prototype



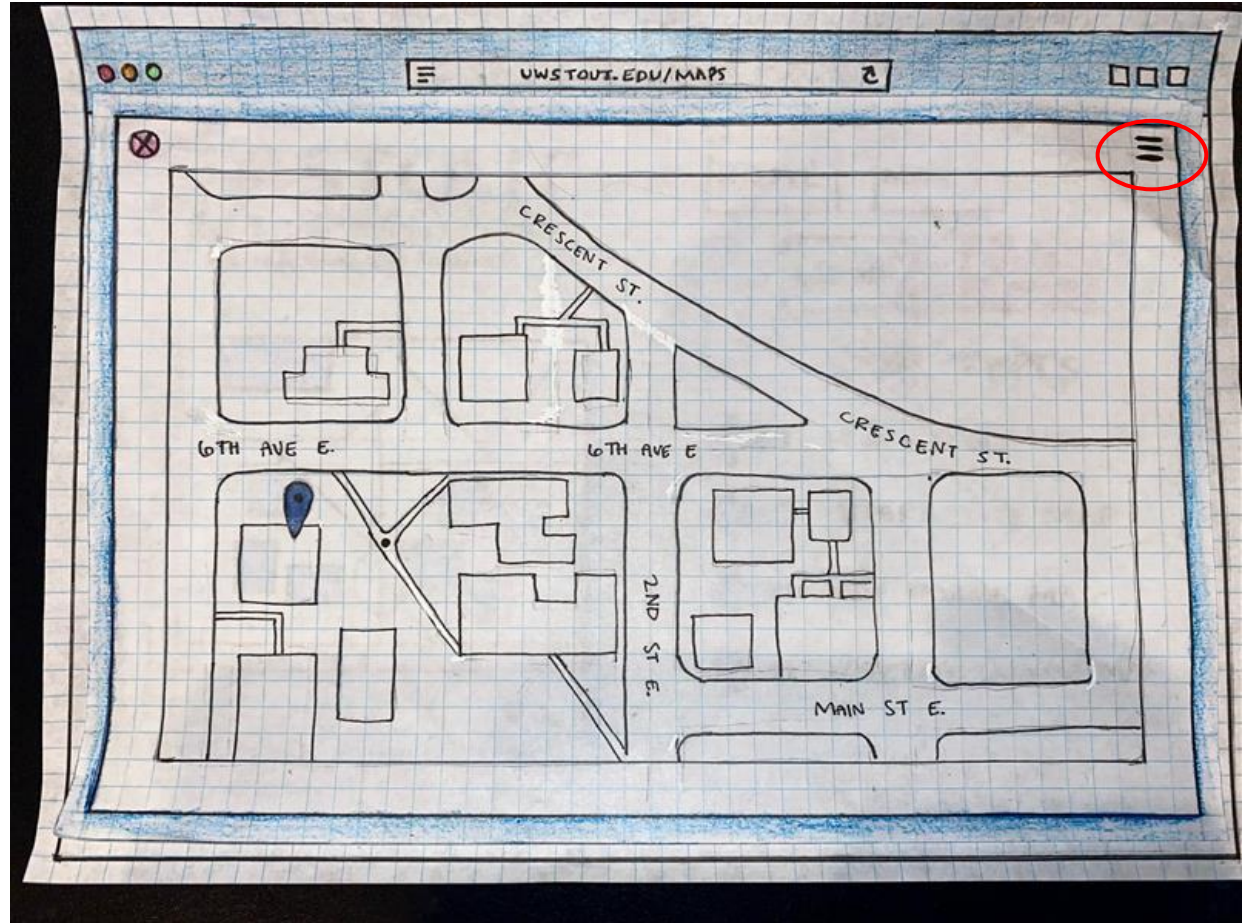
1. User clicks on "full view" button to view the campus map.



Website Prototype

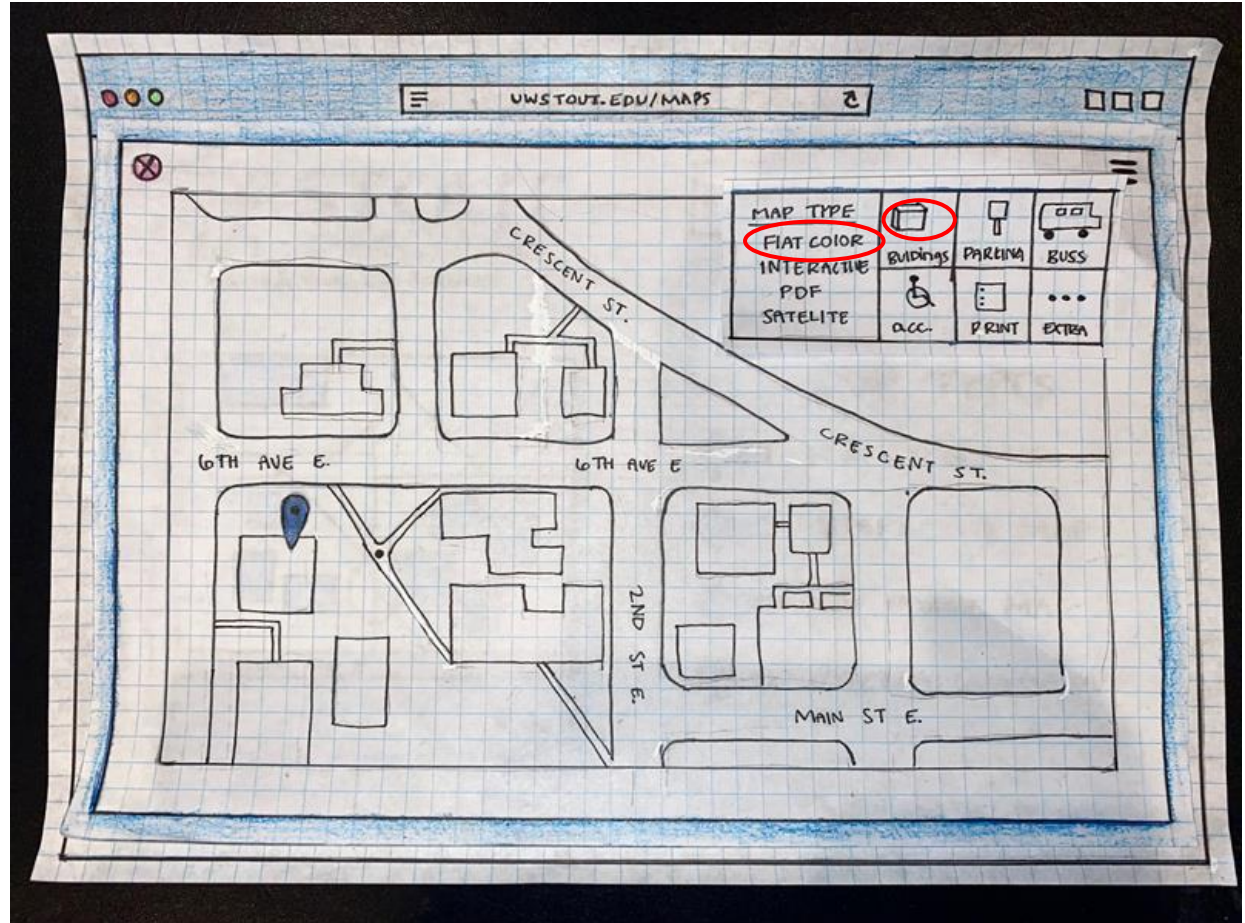


1. User clicks on the three bars in the upper right corner to view the options menu.



Website Prototype

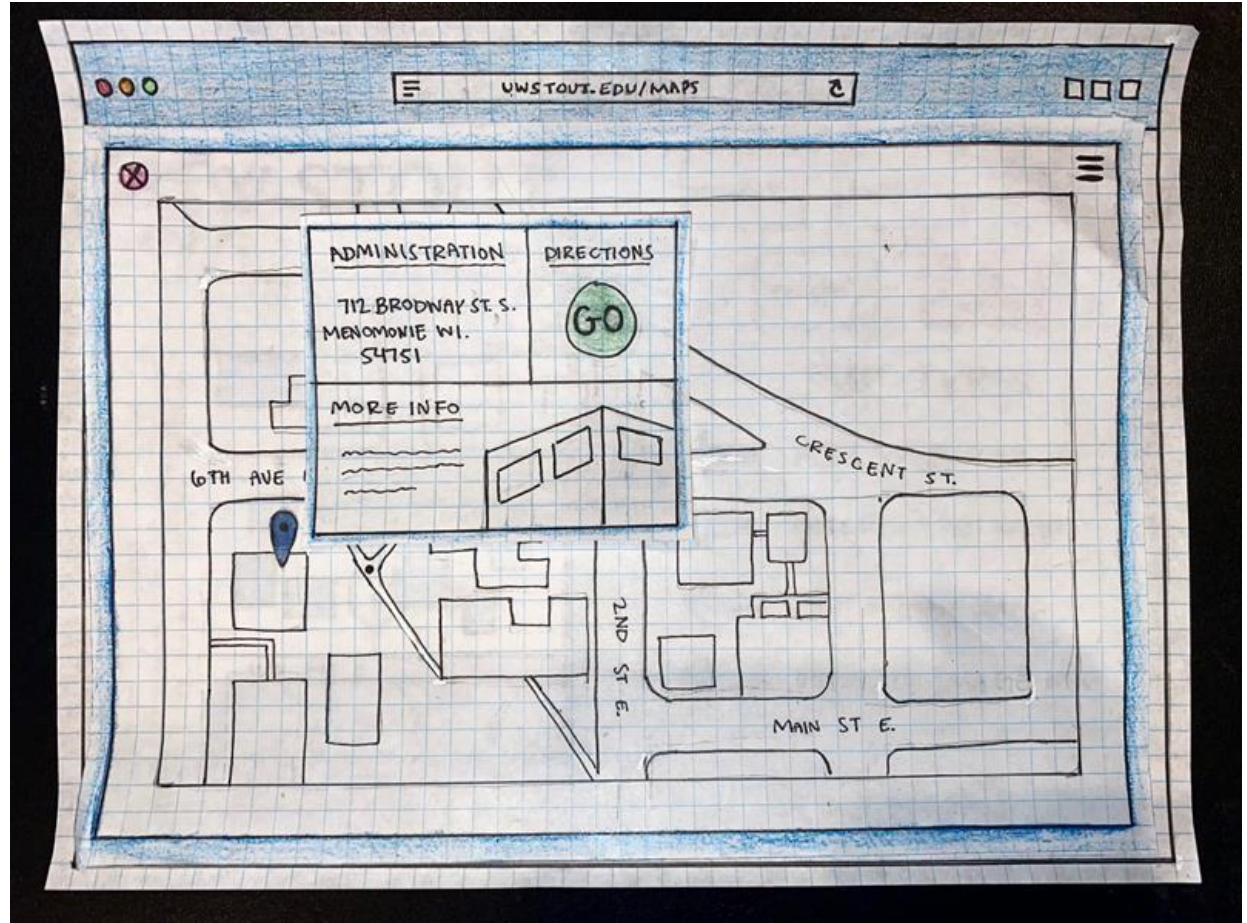
1. User clicks on the type of map they would like to view.
2. User also clicks on the parts of the maps they wish to be displayed. (i.e. buildings)



Website Prototype



1. User clicks on the highlighted building. Here directions, the address and more information of the building is displayed.

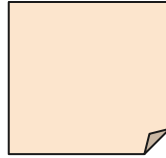
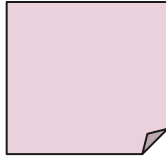


Website Prototype

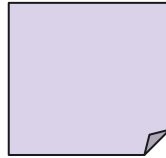
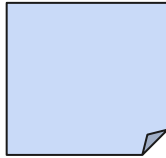


# Lo-fi User Testing

App observations are coded in pink, while web observations are shown in orange.



Groupings are made in blue, analyses are presented in purple.





# User 1

#1  
Located "Maps"  
from Connect  
home page

#2  
Chose "Buildings"  
from Map settings  
menu, viewed  
highlighted building

#3  
Returned to  
Settings menu,  
chose "Parking"

#4  
Clicked on parking  
lot icon, chose  
"More Info"

#1  
Chose "Full View"  
to open map

#2  
Clicked on the  
menu icon, chose  
"Buildings" from  
pop-up

#3  
Clicked on the  
building icon and  
viewed information



## User 2

#1  
Located "Maps"  
from Connect  
home page

#2  
Chose "Buildings"  
from Map settings  
menu, viewed  
highlighted building

#3  
Returned to  
Settings menu,  
chose "Parking"

#4  
Clicked on parking  
lot icon, chose  
"More Info"

#1  
Chose "Full View"  
to open map

#2  
Confused by  
location of "X" and  
the menu icon,  
found and opened  
menu

#3  
Confused by map  
views and features  
shown in menu,  
clicked on  
"Buildings"

#3  
Clicked on  
highlighted location  
to view full info



## User 3

#1  
Clicked on Maps  
icon from Connect  
home page

#2  
Clicked on menu  
icon

#3  
Selected  
"Buildings", viewed  
info of highlighted  
building

#4  
Returned to menu  
and chose  
"Parking"

#5  
Clicked on  
highlighted  
location, chose  
"More Info" on the  
location

#1  
Clicked on "Full  
View" to open map

#2  
Found and opened  
the Map menu

#3  
Selected  
"Buildings", clicked  
on highlighted  
location to view full  
info

Found the Maps page  
on the UW Stout  
Connect App

Located Map settings

Accessed the specific  
location information

User 1  
Located "Maps" from  
Connect home page

User 2  
Chose "Buildings"  
from Map settings  
menu, viewed  
highlighted building

User 2  
Returned to Settings  
menu, chose  
"Parking"

User 1  
Clicked on parking lot  
icon, chose "More  
Info"

User 2  
Located "Maps" from  
Connect home page

User 1  
Chose "Buildings"  
from Map settings  
menu, viewed  
highlighted building

User 1  
Returned to Settings  
menu, chose  
"Parking"

User 2  
Clicked on parking lot  
icon, chose "More  
Info"

User 3  
Clicked on Maps  
icon from Connect  
home page

User 3  
Clicked on menu  
icon

User 3  
Selected "Buildings",  
viewed info of  
highlighted building

User 3  
Clicked on  
highlighted location,  
chose "More Info" on  
the location

User 3  
Returned to menu  
and chose "Parking"

## Affinity Map – APP



Found the Maps page  
on the UW Stout  
Connect App

Located Map menu,  
found "Buildings" filter

Viewed full info of  
highlighted location

User 1  
Chose "Full View" to  
open map

User 1  
Clicked on the menu  
icon, chose  
"Buildings" from  
pop-up

User 1  
Clicked on the  
building icon and  
viewed information

User 2  
Chose "Full View" to  
open map

User 2  
Confused by location  
of "X" and the menu  
icon, found and  
opened menu

User 2  
Confused by map  
views and features  
shown in menu,  
clicked on "Buildings"

User 2  
Clicked on highlighted  
location to view full  
info

User 3  
Clicked on "Full View"  
to open map

User 3  
Selected "Buildings",  
clicked on highlighted  
location to view full  
info

User 3  
Found and opened  
the Map menu

## Affinity Map – WEB



# Analysis

App

Web

Show all location icons muted & small, map menu filters them so the chosen option is larger and more colorful

On homepage → flip the menu and the map

On homepage → no need to list "interactive map" as an option, both satellite and flat color are already interactive

On homepage → list PDF map as a downloadable link

Fullview map → switch location of "X" and the options menu

Fullview map → don't put "map views" in the same location as the features/highlights



# Visual Layout & Interaction Design Project 3

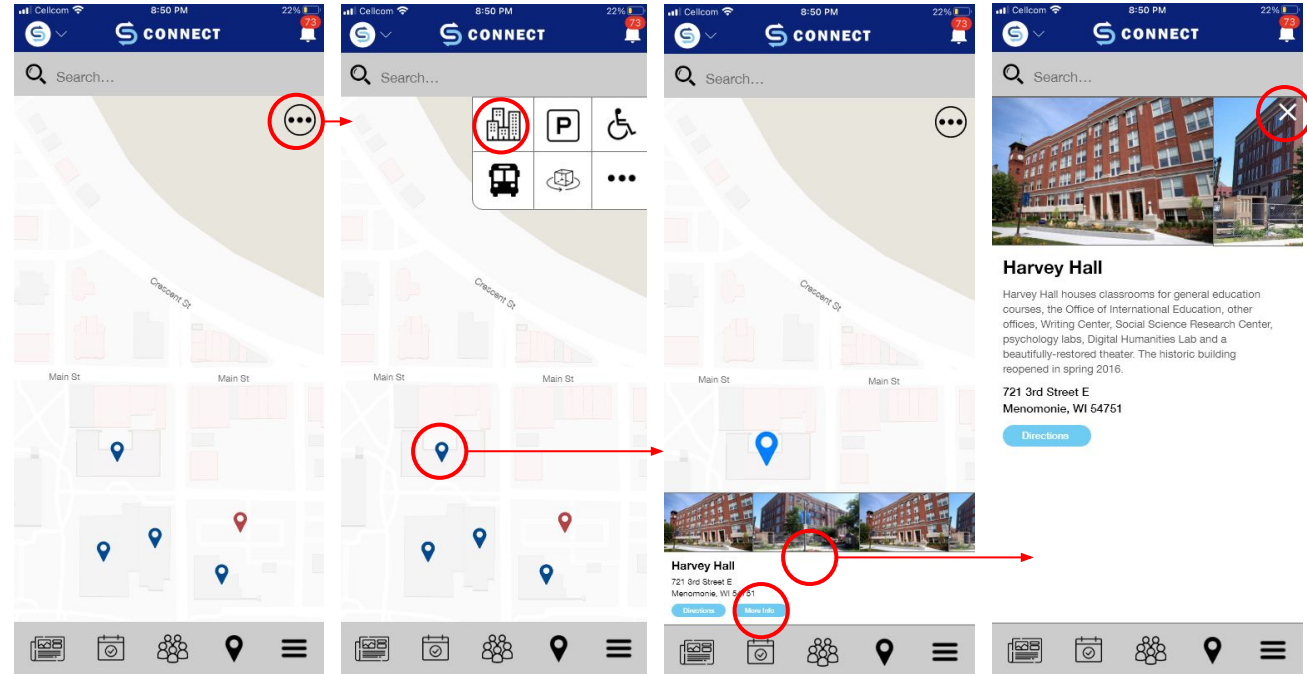


# XD Prototypes

App: <https://xd.adobe.com/view/3757f8cd-5b2d-4cb2-9169-2db206955418-6204/>

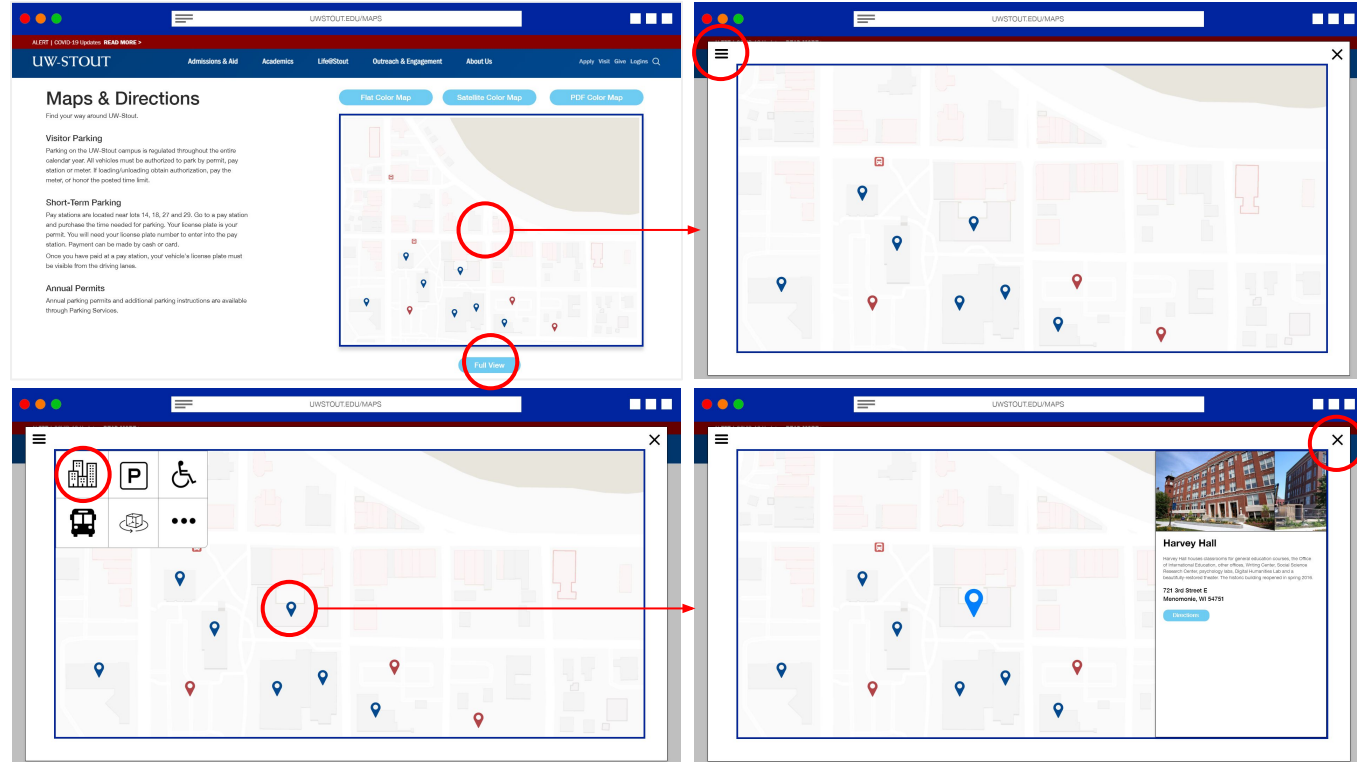
Website: <https://xd.adobe.com/view/7ee535a1-9e20-4af5-8c0b-7a9d333ece5c-2bb6/>

1. User taps on "... " icon for sorting layers
2. User selects sorting layer or taps outside of menu to close
3. User taps on location icon
4. User taps on drawer or "More info" button
5. User closes information window by tapping the "X" icon



App XD Prototype

1. User clicks on small map or "Full View" button to open full map
2. User clicks on menu icon
3. User clicks on sorting layer option or closes menu by clicking outside
4. User clicks on location icon
5. User clicks on "X" icon to close map



Website XD Prototype



# Hi-fi Usability Testing

## Project 3



# User 1

#1  
Tapped on sorting  
options

#2  
Tapped on location  
icon

#3  
Tapped on drawer

#4  
Tapped on  
"Directions" button

#1  
Clicked on "Full  
View" button

#2  
Clicked on location  
icon

#3  
Closed full map

#4  
Tried to view  
another type of  
map for sorting  
layer information

#5  
Needed some  
guidance to find  
the sorting layers





## User 2

#1  
Hovered over  
location pts until  
clicking on Harvey

#2  
Chose "More Info"  
on Harvey Hall

#3  
Tried to click on  
directions

#4  
Clicked off to return  
to the map

#5  
Found the menu  
and clicked around  
on the options

#1  
Clicked on 3 map  
options on top

#2  
Clicked on map to  
open the full view

#3  
Chose Harvey Hall,  
tried to click on  
"Directions"

#4  
Clicked on map to  
close info tab

#4  
Opened menu  
drawer, tried to  
view filtering  
options



## User 3

#1  
Clicked on drawer  
button on bottom of  
screen

#2  
Clicked on sorting  
options

#3  
Clicked on Harvey  
Hall location  
indicator

#4  
Hovered for a  
moment then  
clicked on more  
info button

#5  
Tried to click on  
directions button

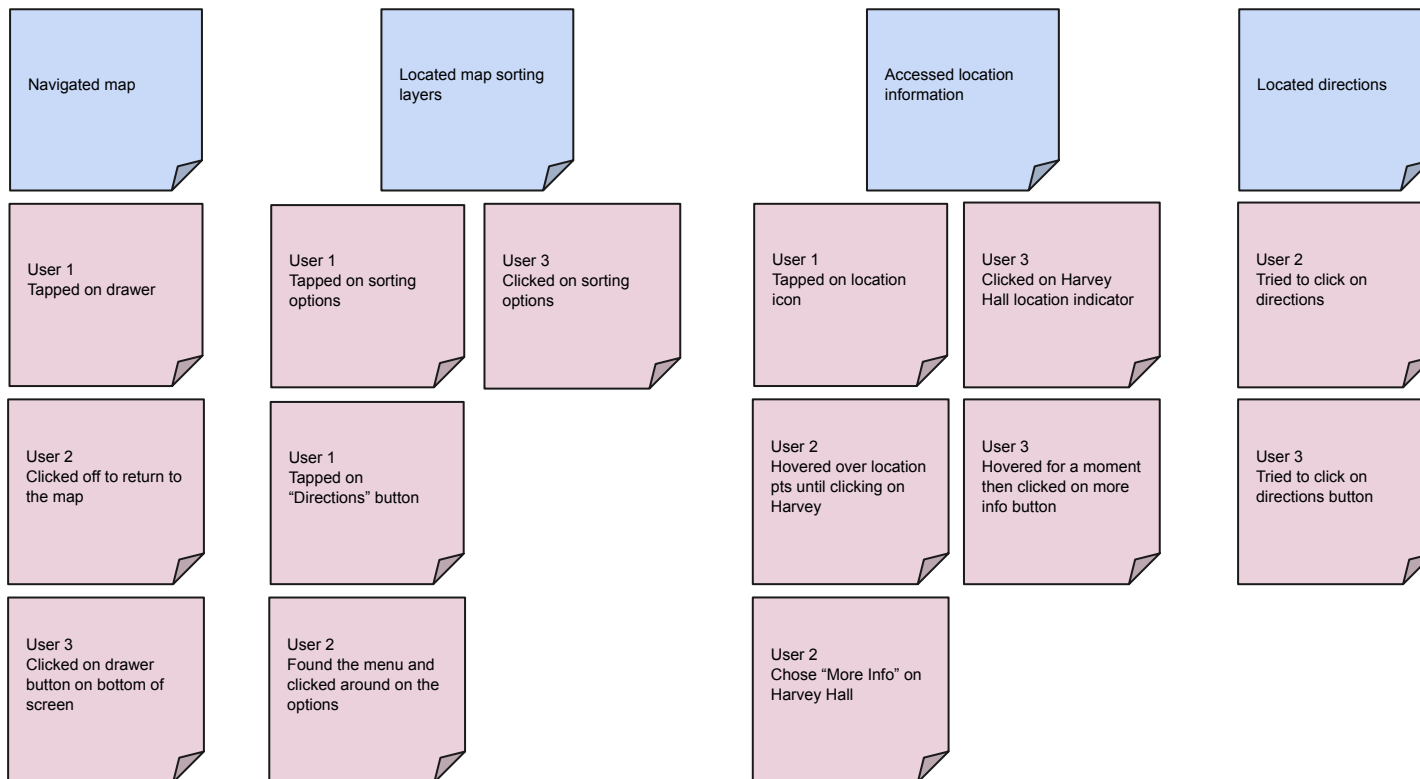
#1  
Hovered over then  
clicked on small  
map icon

#2  
Clicked on full map  
button

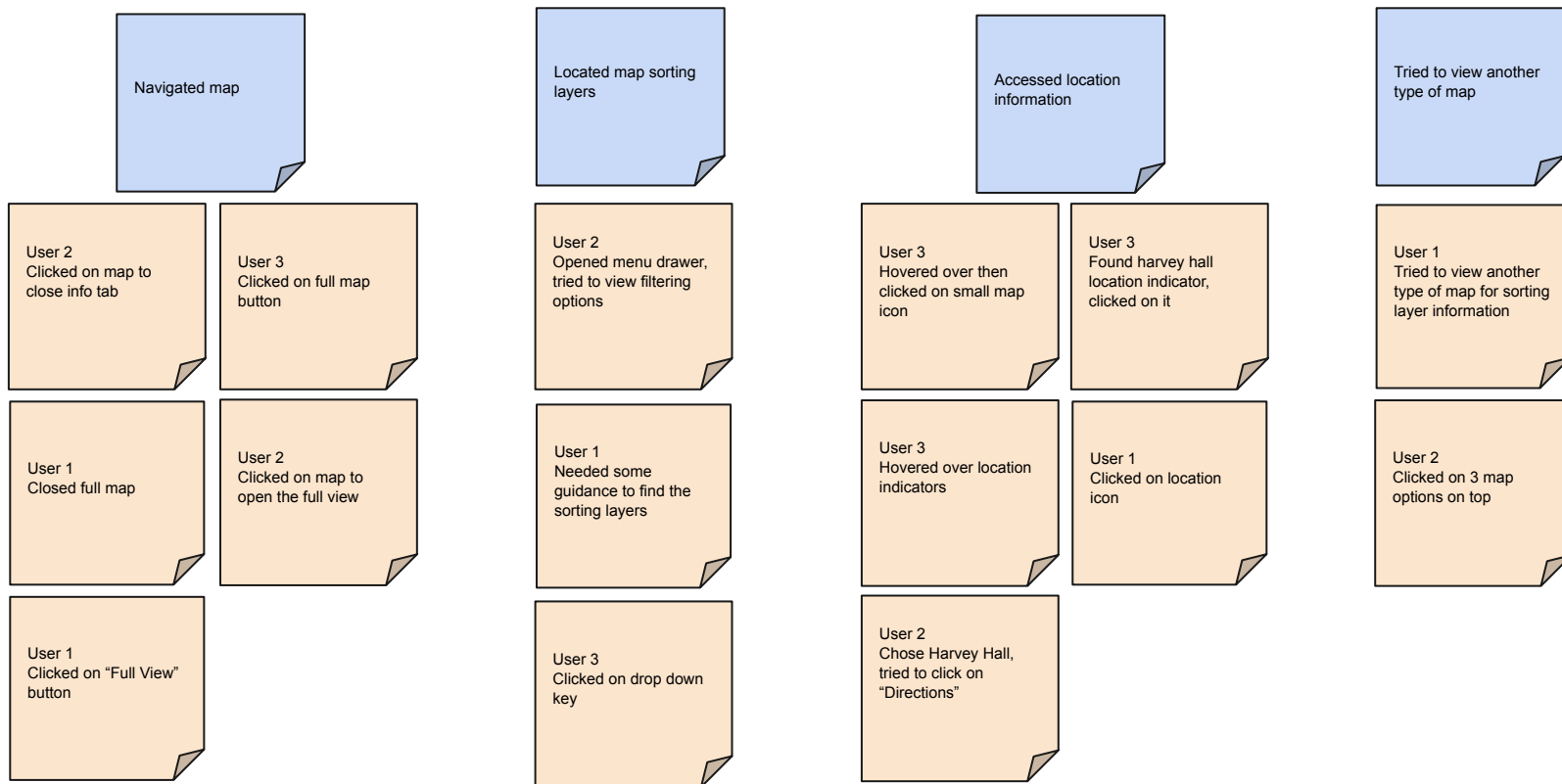
#3  
Hovered over  
location indicators

#4  
Clicked on drop  
down key

#4  
Found harvey hall  
location indicator,  
clicked on it



Affinity Map – APP



## Affinity Map – WEB

Observation	Critical	Serious	Medium	Low
Clicked on “Directions” button		X		
Hovered over all shown location points	X			
Tested all menu sorting options	X			
Clicked on drawer located at bottom of page				X

Usability Problem Prioritization – APP

Observation	Critical	Serious	Medium	Low
Clicked on 3 listed map options on home page			X	
Clicked on “Directions” button		X		
Tested all menu sorting options	X			
Hovered over all shown location pins	X			

Usability Problem Prioritization – WEB



# Outcome

## Project 3

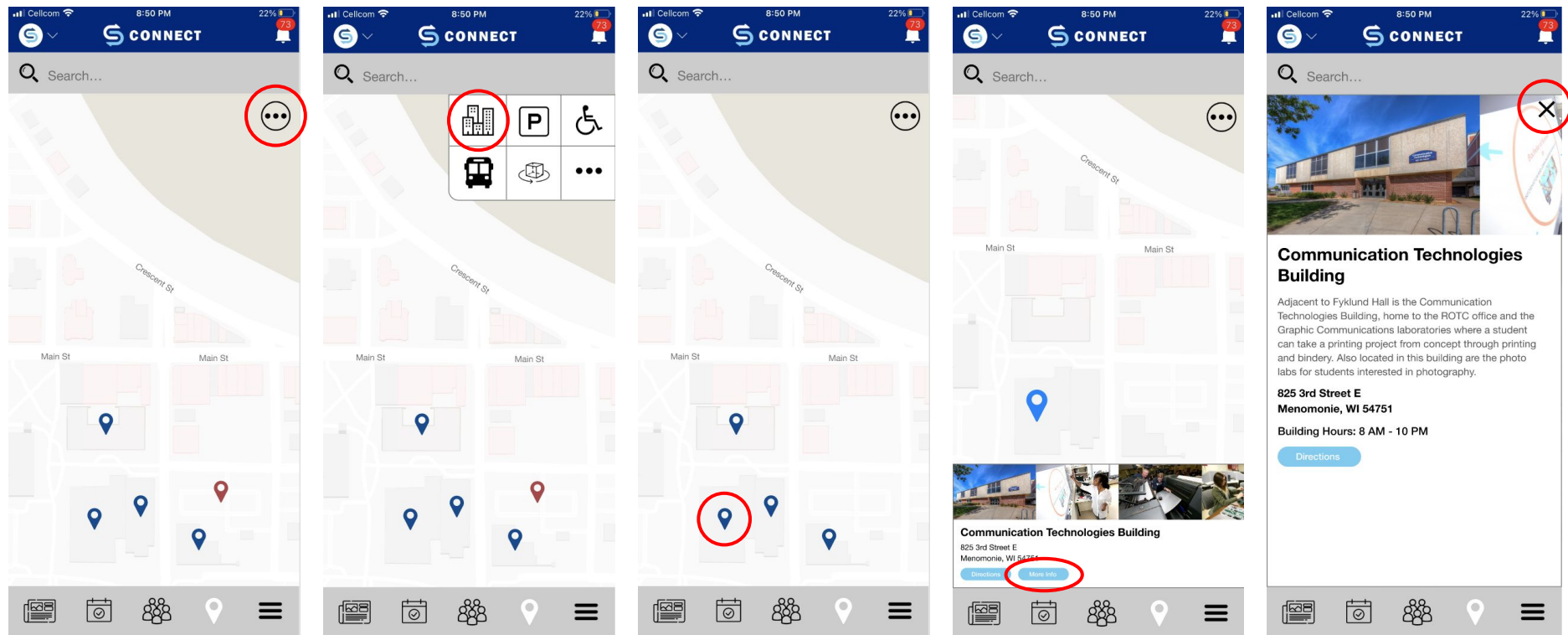


# Updated Hi-fi Prototypes

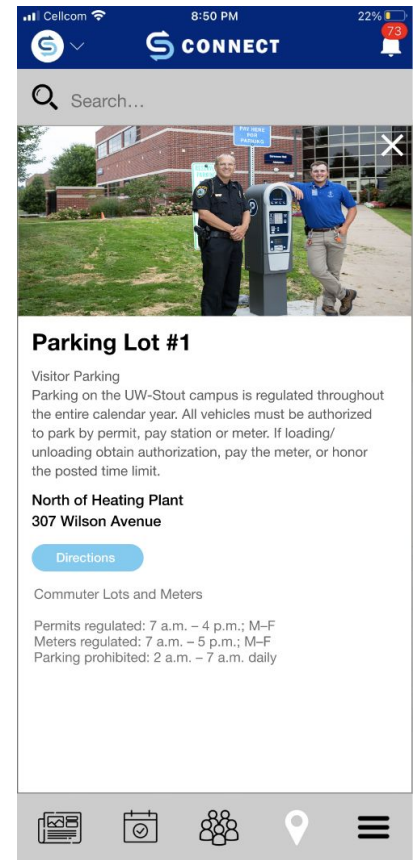
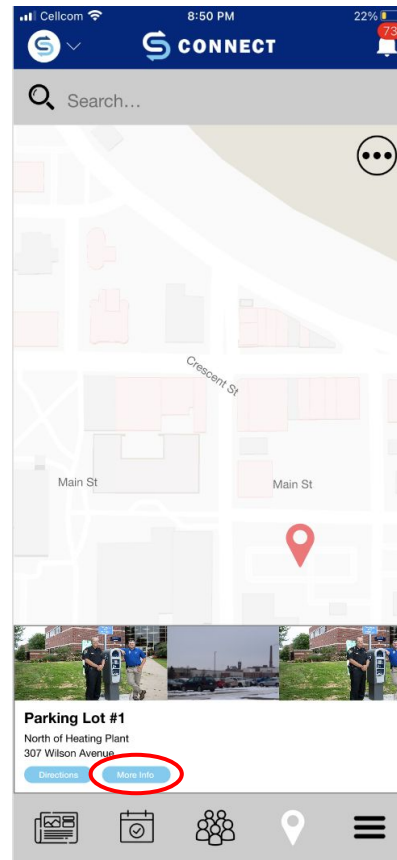
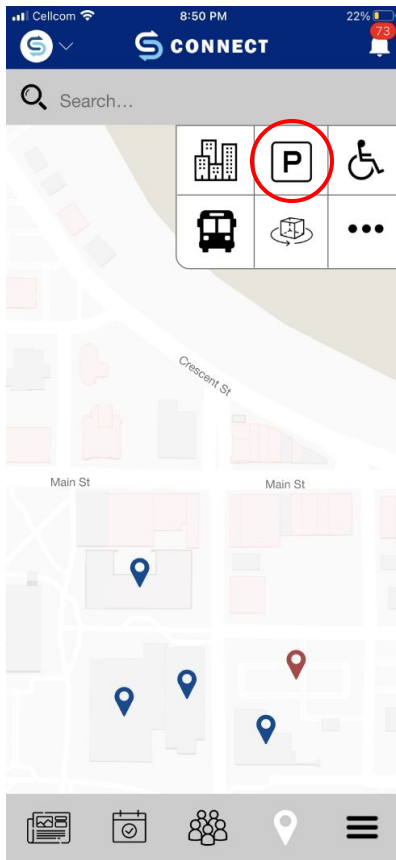
App: <https://xd.adobe.com/view/3757f8cd-5b2d-4cb2-9169-2db206955418-6204/>

Web: <https://xd.adobe.com/view/7ee535a1-9e20-4af5-8c0b-7a9d333ece5c-2bb6/>

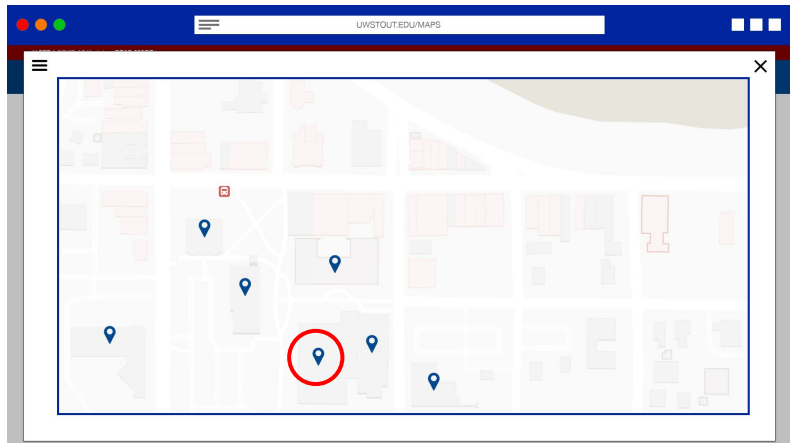
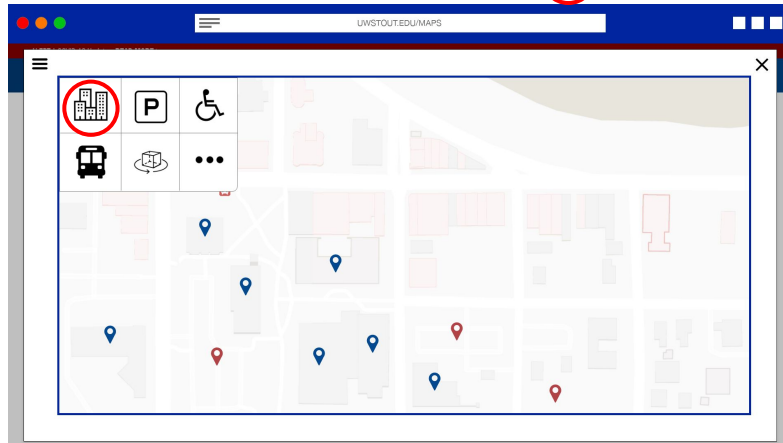
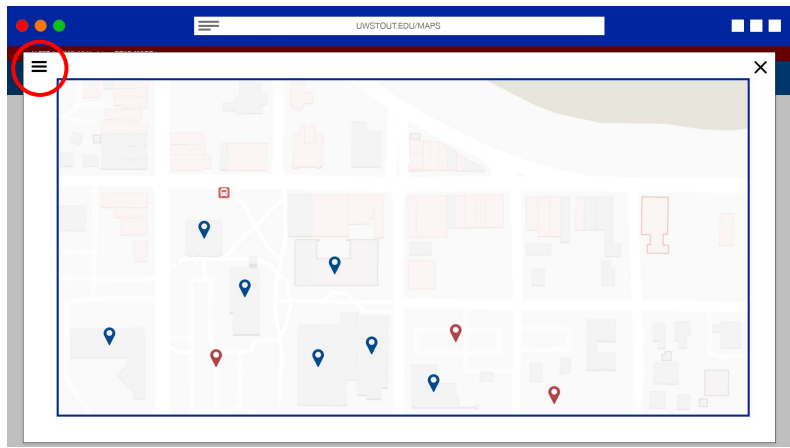
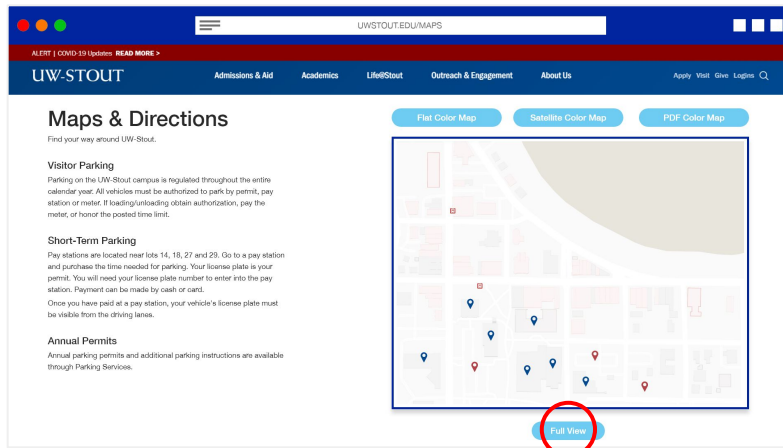




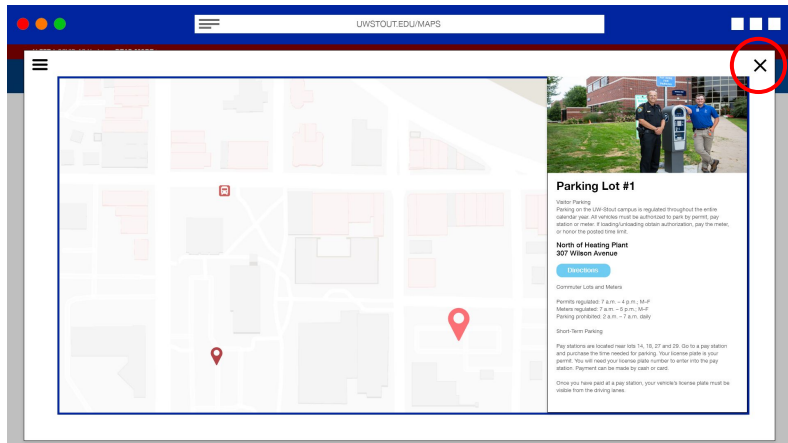
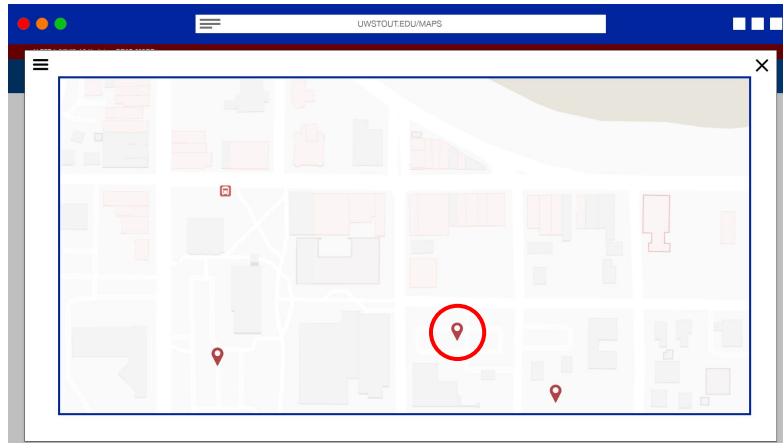
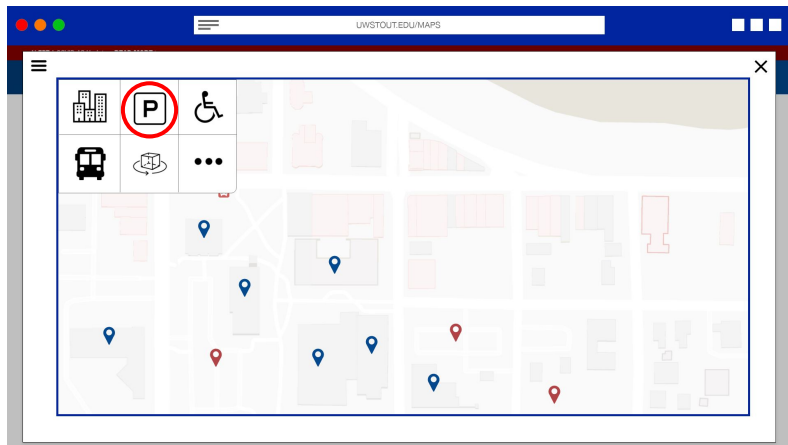
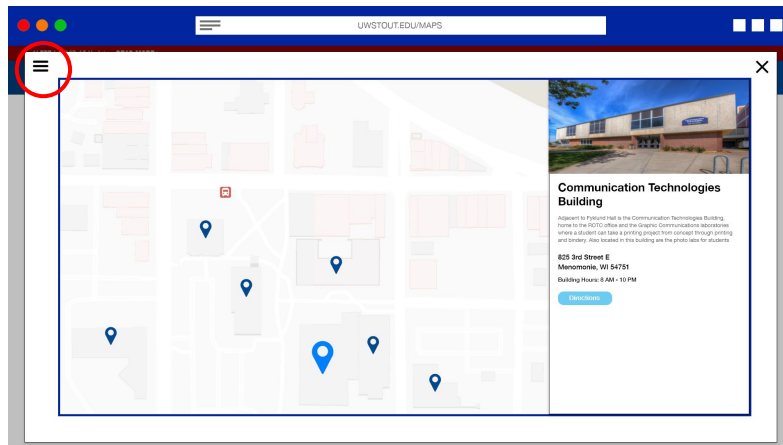
App Screenshots



App Screenshots



Web Screenshots



Web Screenshots



## Summary

Through research and testing, we learned the goals of our user base could be summarized as: locating campus buildings and facilities, having easy access to building hours, and clear specification of parking and those regulations. Our design meets these functions with a clear, simple interface that spans across both the app and web versions. Each building point includes images of the location, a short description, the address, and the hours of operation. The parking pins on the map include the address of the lot, information on who can park there, and its hours of regulation. Our campus map also allows for filtering, so if the user were to choose so they could view campus with only buildings or parking lots shown. This feature allows for the possibility of quick access to only the information they need at the time.