



Usability Testing Your Website Interface Report

City of Shoreline

<http://www.cityofshoreline.com>

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Usability Test Report

a) Introduction

The primary goal for usability testing is to better understand how users access and search for information when navigating the City of Shoreline website. In other words, the usability testing will provide us the necessary tools to optimize the information architecture in a way that makes sense for the average user.

The issues that we are going to be testing are basic interactions where the user is looking for specific information about community events, business information and general facts that are relevant to the city of Shoreline.

Once we run the test we will have a better picture for the necessary changes for the City of Shoreline information architecture website.

b) The Research Question

We hope to find answers for the following questions:

1. Is the information architecture intuitive?
2. Is it easy to find information ?

c) Participant Information

The audience is pretty broad since the website is used by different groups of people while trying to access local information about the City of Shoreline. For this usability testing research project we will be testing the component with our classmates at Mike Sinkula's class (ITC 298). No

necessary experience of specific background to conduct the test is necessary.

Based on the pre-test questionnaire, we gathered a total of 10 participants from the class. 60% of the participants consist of female and 40% of them are male. Among the participants, 20% of them are from the 18 - 25 age group, 40% of them are between the age of 26 - 32, 30% are between 33 - 40 and only one is over the age of 40.

None of the participants are resident of Shoreline. 40% of the participants said that they have never been to their city's website. 60% of the participants visit their city of resident's website only when they need information. The reasons why a participant would visit their city's website vary from finding general information about the city, paying utility bills , finding emergency alerts and looking for a specific contact information.

d) Methods

Introduction Process

Our team will perform a usability testing session with participants from our ITC 298 class. The test moderator will greet each of the participants and make them feel relaxed and comfortable before starting the session. Each participant will be handed a pre-test questionnaire to fill it out, so the team will know basic information about them. Also, the participants will be asked to fill out a consent form.

The moderator will start to follow a short script introducing the session and explaining the process. Participants will be informed that the session will be recorded using a Google Hangouts broadcasting application and they will be observed doing the activities.

Usability Testing

The participant will be asked to sit in a room with a computer station. The moderator will give each participant a task card with tasks based from a real user scenario. During the test, the team will be look the time duration of each task, the method the participant used and the result whether the participants completed or not the given task.

Think Aloud Protocol

The participant is encouraged to use a think aloud protocol during the entire session. Each of them will need to express their feelings, impression, opinion, etc. by speaking out loud.

Post-Test Questionnaire

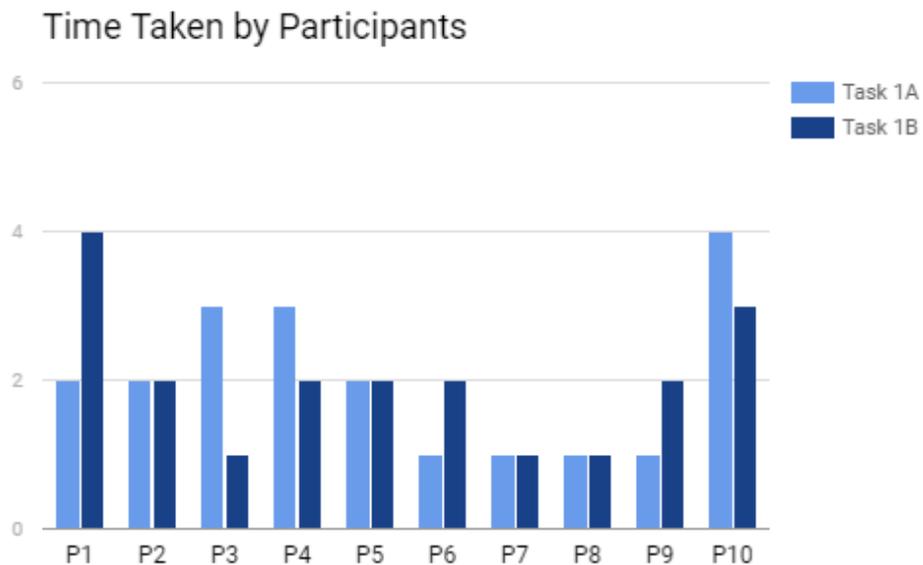
After the test, the moderator will interview the participants about their experiences doing the test. Also, they will be asked to fill out a post-test questionnaire and they will thank for their participation.

e) Logistics

The study will be held in a conference room. In each session the participant will sit at a computer while a test moderator sits nearby recording observations. During the usability test the test moderator will show the participant the task cards and take notes.

f) Results

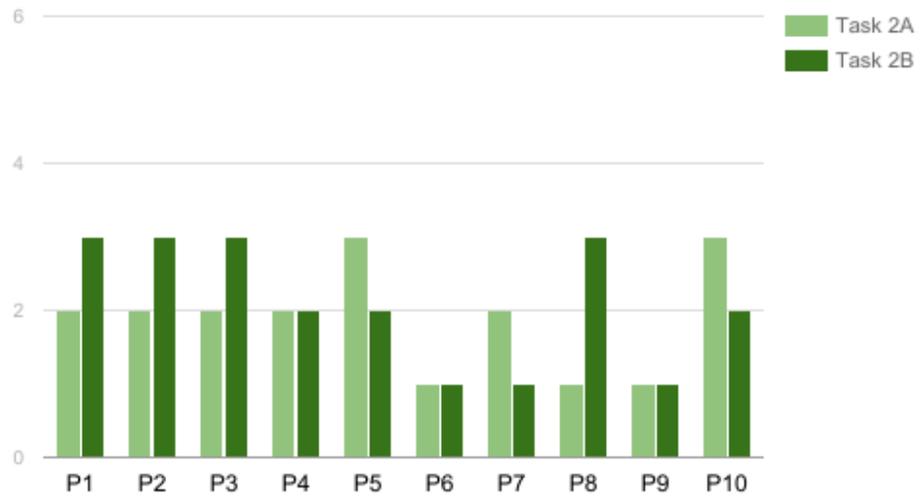
We observed time taken by each participant to complete each task, represented in bar graph format below:



Task 1A: 2 minutes

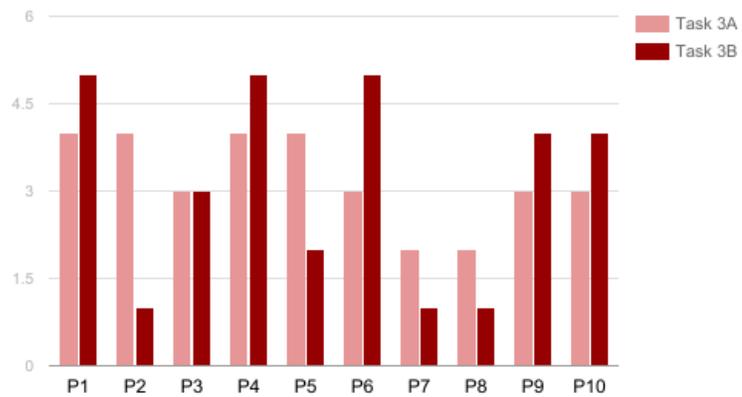
Task 2A: 2 minutes

Time Taken by Participants



Task 2A: 1.9 minutes
Task 2B: 2.1 minutes

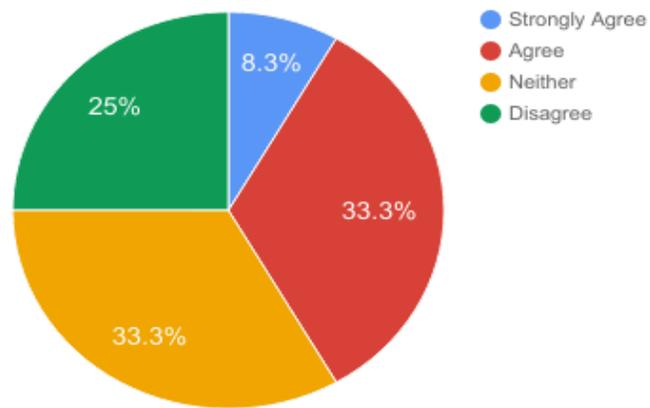
Time Taken by Participants



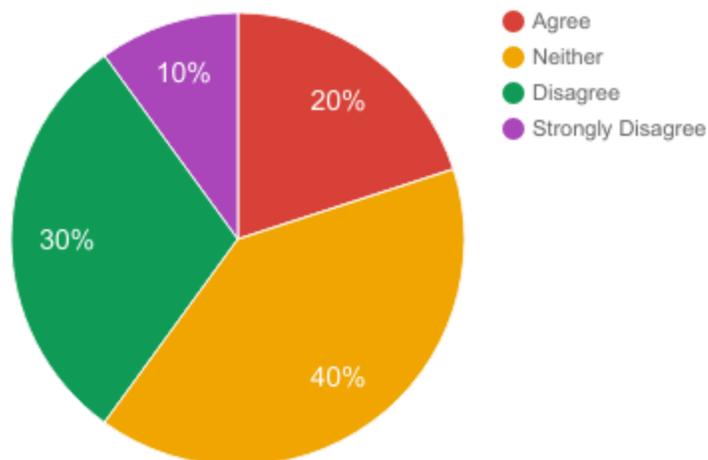
Task 3A : 3.2 minutes
Task 3B : 3.1 minutes

Below are a few responses to a couple of questions asked during the post-test questionnaire:

I would have organized the website's information nav differently



I think the website hierarchy is intuitive

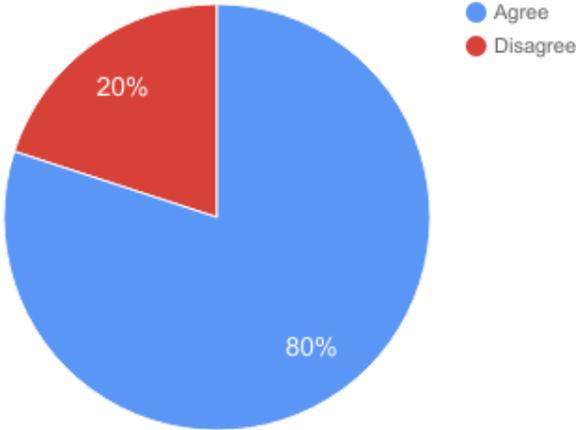


These are the breakdown of the responses by our participants based on our post-test questionnaire:

“Overall I am satisfied with the ease of completing tasks in this usability test.”

P1 Disagree	P2 Disagree	P3 Agree	p4 Agree	p5 Agree
p6 Agree	p7 Agree	p8 Agree	p9 Agree	p10 Agree

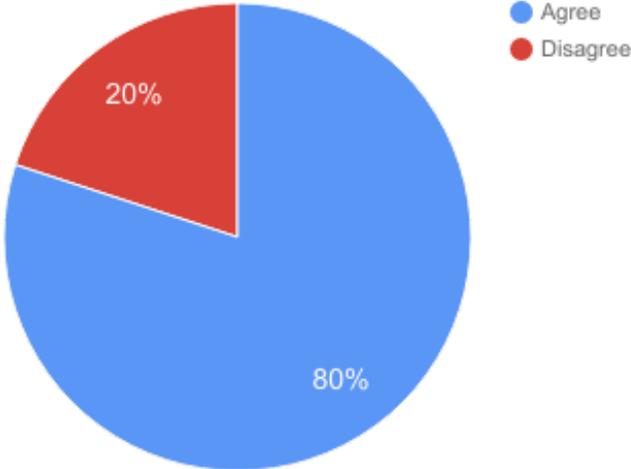
Satisfaction Levels



“Overall I am satisfied with the amount of time I took to complete each task in this usability test.”

P1 Disagree	P2 Disagree	P3 Agree	p4 Agree	p5 Agree
p6 Agree	p7 Agree	p8 Agree	p9 Agree	p10 Agree

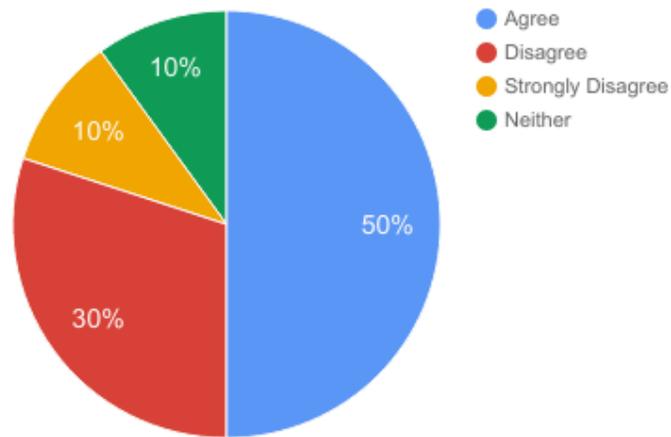
Points scored



“I would have organized the website’s information navigation differently.”

p1 Strongly Agree	p2 Agree	p3 Agree	p4 Agree	p5 Disagree
p6 Agree	p7 Disagree	p8 Disagree	p9 Agree	p10 Neither

Satisfaction Levels



Likes

Liked the Most: Can you please list three aspects of City of Shoreline's website, which you feel already satisfied:

Participants	Comments
Participant 1	"The information that the city offers" "Layout isn't bad" "It doesn't link to another website"
Participant 2	"The calendar on homepage is implemented well"
Participant 3	"The sidebar calendar is kind of nice"
Participant 4	"Color scheme"
Participant 5	"Navigation led to what I was looking for intuitive " "Found what I was looking for quickly" "The left sidebar gave a good overview of the topic area"
Participant 6	"Calendar was easy to find and accessible" "Like graphics" "Categories within main navigation are straightforward "
Participant 7	"Easy to nav" "informative" "straightforward"
Participant 8	"Simple nav / tabs"
Participant 9	"Mostly organized" "Nice colors" "Good text size"
Participant 10	"Nav organization" "Quick Links"

Dislikes

Disliked the Most: Can you please list three aspects of City of Shoreline's website, which you feel need to be improved:

Participants	Comments
Participant 1	"Labels." "Update the current design" "Nav"
Participant 2	"Look bland" "Drop down menu are to cluttered" "Links can be better"
Participant 3	"Repetitive Links" "Larger main nav font" " links from main nav menu dropdown not the same as if I clicked the main nave link"
Participant 4	"Navigation" "Layout"
Participant 5	"Aesthetics" "Avoid needing to use PDF's"
Participant 6	"Cert hard to locate in community or emergency" "move calender from homepage" "make text bigger"
Participant 7	"Labeling" "Aesthetics"
Participant 8	"The spacing of letters + words in drop down menu make it difficult to read" "Too widely space under subheadings"
Participant 9	"Less text" "Better graphics" "Better organization page"
Participant 10	"Add more white space" " make font bigger"

The following are feedbacks given by our participants regarding the site's information architecture, navigation and aesthetics:

Feedback on information architecture	
Participants	Comments
Participant 1	"Hidden too much"
Participant 2	"Too much in drop downs"
Participant 3	-----
Participant 4	"Fine"
Participant 5	"Seem pretty intuitive for my task, I didn't really considered the "I want to ...bottom""
Participant 6	"So many links, wonders if there is repeats. Double nav side by side. Sidebars repeating"
Participant 7	-----
Participant 8	"Seems intuitive"
Participant 9	"All groups of info is in one place"
Participant 10	"Good enough for me"

Feedback on ease of using navigation menus	
Participants	Comments
Participant 1	"It doesn't easy nav "
Participant 2	"Needs improvements"
Participant 3	"Dorp repetitive links, continuity between main nav link and main nav dropdown"
Participant 4	"A little confusing because there are a lot of links"
Participant 5	"The left sidebar navigation was helpful"
Participant 6	"Straightforward, because it is so wordy excessive waste of time to read through "
Participant 7	-----
Participant 8	-----
Participant 9	"More graphic bottoms"
Participant 10	"Overall they are good, they make sense for me"

Feedback on visual appearance and visual appeal	
Participants	Comments
Participant 1	"Not really"
Participant 2	"Bland"
Participant 3	"Larger text, less clutter"
Participant 4	"Color scheme is pleasing to the eye, some pages feel a little clutter"
Participant 5	"Pretty basic and boring but easy to parse"
Participant 6	"Likes background image, good colors, feels traditional 2000's website, dated in terms of structure"
Participant 7	-----
Participant 8	"Nice"
Participant 9	"Less text, more visual navigation"
Participant 10	"Wouldn't add more padding / white space"

g) Usability Testing Finding

Description of Method

Based on our usability testing, the categories that we needed to analyze are in line with our research questions which concerns the navigation, information architecture and aesthetics.

These findings are based on the usability testing that we conducted with our participants. Each moderator from our team engaged with participants by observing their action while performing their tasks via pre-test and post-test questionnaire, tasks notes and by listening to the recording video.

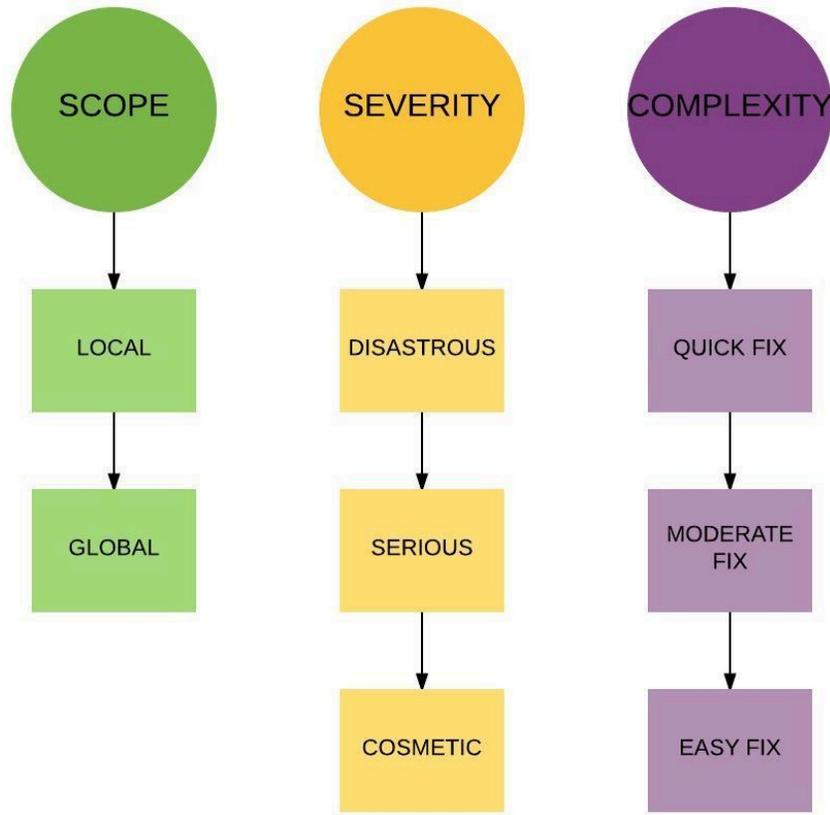
We received a total of three findings that fit the categories stated above. For each finding, we identified the concern/problem that our participants faced within the website, and then made recommendations to improve the website.

We will be using the following system to analyze the data and make recommendations:

Scope refers to whether the problem affects a handful of pages (Local) or a large section of the website (Global).

Severity refers to the impact of the problem: Disastrous, Serious or Cosmetic.

Complexity refers to the amount of effort needed to resolve the problem: Quick Fix, Moderate Fix, or Difficult Fix.



Problem: Website looks dated, and poorly designed. Font sizes are too small and the website is visually cluttered.	Participant # supporting claim: P1, P2, P4, P5, P6, P7, P8, P9, P10
	Scope: Global
	Severity: Serious
	Complexity: Moderate
Direct Quotes: "Make texts bigger" "The spacing of letters and words in dropdown menu make is difficult to read, To widely spaced under subheadings" "The homepage is too crowded visually" "Less texts, better graphics" "I would include more wide space"	

“Update to current design level”
 “Website looks bland”
 “Avoid needing to use PDFs”
 “A lot of information are presented on the same page, Tries your patience in terms of readability”

Recommendations:

Work with a designer to come up with a visual design and stay consistent throughout the entire website. Pay particular attention to typography and how much information to present on each page, so that there’s enough white space to help make the page more readable.

<p>Problem: Navigation (main menu and dropdown menu) is confusing. Navigation lacks consistency and visual organization.</p>	<p>Participant # supporting claim: P2, P3, P4, P6, P7, P8, P9</p>
	<p>Scope: Global</p>
	<p>Severity: Serious</p>
	<p>Complexity: Disastrous</p>
<p>Direct Quotes: “Move calendar from home page” “I had to make a few guesses, but my intuition led me to the right direction” “Navigation trees need to be improved” “Dropdown menus are cluttered” “Repetitive links” “Links from main nav dropdown not the same as if I clicked the main nav link”</p>	
<p>Recommendations: Utilize the information architecture provided by the research team to determine a better structure for the website. Users should not have to guess their way around the website in order to reach a certain page. Consider adding more top-level navigation in order to de-clutter the sub-navigation.</p>	

<p>Problem: Labels are misleading. Some labels are too specific and might not cater to all users.</p>	<p>Participant # supporting claim: P1, P2, P6, P7</p>
	<p>Scope: Global</p>
	<p>Severity: Serious</p>
	<p>Complexity: Quick</p>
<p>Direct Quotes:</p>	

“The labels were confusing a lot”
“CERT is hard to locate. Is it in community or emergency?”
“Some labels can be better”
“I suggests a re-design of the entire website especially the labelling”
“Links aren’t descriptive enough”

Recommendations:

Work with the research team to understand where users are encountering problems in terms of terminology. Consider doing a card sorting study on optimal sort where all of the labels currently on the website are entered in, to discover whether there are repetitions and consistencies. From this study, a new set of labels can be created and be implemented into the website.

h) Conclusions

Overall our research shows that our participants did not struggle greatly to complete each task. 80% were satisfied with how long they took to complete the tasks, and 80% were satisfied with the ease of completing the tasks.

Most participants, however, took more than one minute to complete each task. Considering the tasks were all fairly straightforward, it shows that there is a need to restructure the information architecture of the site. 41.6% of our participants were in favor of reorganizing the information architecture of the site. To do so, our team suggests reorganizing the navigation. The existing top-level navigation has a sub-navigation that contains too many gateway and destination pages. Adding more top-level navigations will give more visual organization to the site.

90% of our participants had feedback on the visual design of the site. The feedback ranged from the typography used, the amount of information presented on each page, and the usage of graphics and images. This shows that improvements can be made in this area. Our recommendation is to work with the designer to come up with a consistent visual design for the website that takes into consideration the issues brought up by the participants.

Several of our participants had a difficult time completing one particular task due to a lack of clarity on the labels used. Some participants found the labels used on the site misleading, and/or too specific. This resulted in a delay to complete the task. We recommend coming up with a new set of labels through a comprehensive card sorting study.

Appendix

1. Consent

You are invited to participate in a usability testing analysis for a research study on the user experience of the City of Shoreline website.

From the research and collected data in this project, we hope to improve our understanding of how users of the City of Shoreline website interact with the site interface to access information about community topics, volunteering opportunities, emergency contacts, business opportunities, jobs and other relevant information about the City of Shoreline.

Procedures:

With your permission, we would like to have you participate in a usability testing session. In this session you will be asked to:

1. Fill out a pre-test questionnaire about yourself
2. Perform a series of tasks on the City of Shoreline website during which we will ask you to “think aloud” as you perform the tasks
3. Fill out a post-test questionnaire about the usability of the website. Video and audio of this session will be recorded using Google Hangouts.

Risks & Benefits:

There are no anticipated risks associated with this study. We cannot and do not guarantee or promise that you will receive any benefit from this study.

Time Involvement:

If you agree to participate, your participation in this study will not require more time from you other than this instance where this study is explained to you. This session will take approximately 45 minutes.

Payments & Compensation:

Participation in this study will be compensated with a satisfactory participation grade in ITC298.

Participant'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. Your identity will not be disclosed in any published and written material resulting from the study.

Authorization to Use Your Survey Results for Research Purposes:

Because information about you is personal and private, it generally cannot be used in a research study without your written authorization. If you sign this form, it will provide that authorization.

This document is intended to inform you about how the video and audio of your usability testing session and survey results information will be used or disclosed in the study. Your information will only be used in accordance with this authorization form and the informed consent form and as required or allowed by law.

Consent Form

Please read the following carefully before signing this authorization form:

1. This research project seeks to improve our understanding of how visitors of the City of Shoreline website use and access topics relating to but not limited to, finding information about the community, business, volunteering opportunities, communal groups, events along with other relevant information.
2. You do not have to sign this authorization form. But if you do not, you will not be able to participate in this research study.
3. If you decide to participate, you are free to withdraw your authorization regarding the use and disclosure of survey results information (and to discontinue any other participation in the study) at any time. After any revocation, your survey results will no longer be used or disclosed in the study, except to the extent that the law allows us to continue using your information (e.g., necessary to maintain integrity of research).
4. If you wish to revoke your authorization for the research use or disclosure of your survey information in this study, you must do so in writing.
5. Your name from this research study will be disclosed to the researcher and research team only.
6. Audio and video from the session will be disclosed to the researcher, research team and stakeholders of the website only.
7. Your survey results from this research study will be disclosed to the researcher, research team and stakeholders of the website only.
8. Post test data analysis will be disclosed to the researcher, research team and stakeholders of the website and be published anonymously on the researcher's website only.
9. The following researchers are authorized to use your survey results information in connection with this research study as described above: Mario Gomez, Marilyn Cabrera, Ethan Nissley, Dini Nadzaruddin and Bella Chen (Usability Research Methods Students at Seattle Central College).

_____ Name of Participant (Please Print)

_____ Signature of Participant / Date

2. Pre-test Questionnaire

Participant # _____

This questionnaire is an opportunity for the facilitator to get to know the participant while also gathering additional data which may or may not be used during data analysis. This questionnaire will be moderated by the facilitator.

1. Gender

- Male
- Female
- Prefer not to answer

2. Age group

- 18 - 25
- 26 - 32
- 33 - 40
- > 40

3. Are you a resident of Shoreline?

- Yes
- No (If no, which city do you currently reside in: _____)

5. How often do you visit your city's website?

- Never
- Only when I need information
- Once a month
- On a weekly basis
- I'm a regular user

6. What's your reason to visit the website? (you may choose more than one option)

- To find general information about the city
- Paying utility bills
- Find emergency and alerts
- Look for a specific contact information
- Other (please specify): _____

7. Would you say your ability to find information is...

- No Experience
- Very Little Experience
- Some Experience
- Average Experience
- A Lot of Experience
- Very Experienced

3. Test Script

Session:

“Good afternoon and welcome to our usability study of the city of Shoreline website. We would like to begin by thanking everyone of you who is taking time out of your day to partake in today’s study. We are looking forward to the feedback as it will greatly enhance our understanding of what needs to be done to improve the experience of future users.”

“My name is [NAME] and I will be the test moderator today. You as the participant will be seated at this computer.”

“I will now take this time to begin to explain the session. I want to start off by making it very clear that we are not testing your abilities. We are testing the usability of the city of Shoreline website. We also want to hear your opinion on every detail of your experience using the website. This includes but is not limited to the organization, terminology, graphics, etc. that are on the website. I would also like to point out that we will be recording all activity and conversation that occurs during your session as this gives us the ability to examine the test in further detail.”

“Before we begin testing it is necessary that all participants have signed the permission form.”
“Read through this form carefully and ask of for help if you need it.”

“There is also a questionnaire that needs to be filled out. It contains questions asking for basic information about yourself that will also be use to our data. Take you time and let me know if you need help.”

“Thank you.”

Getting Started:

“I will begin be asking you to perform certain tasks on the city of Shoreline website. I ask that throughout the entire session you explain what you are doing, looking at, and thinking in your head for the entirety of the session. By asking you to think aloud you will give us a greater understanding of what you are thinking when given a specific task to perform.”

“During a session if you feel the need to clarify anything just ask and we should be able to help you. However we will not be able to answer questions on how to complete tasks.”

“Feel free to stop and end a session at any time.”

“Once we are done with the list of tasks we will ask you a few additional questions in regards to your experience.”

“Thank you.”

Performing Tasks:

“I will be giving you three tasks to perform on the website. Each task is written on these cards.”

“As you perform these tasks, I will be sitting nearby and observing and taking notes. I will also be the one reading each task aloud. Remember we are testing the website’s usability not your ability. Don’t forget to think aloud when performing each of the tasks.”

Post Test Interview:

“I will now take this time to ask you a few questions about your experience using the website.”

(ask the participant questions from post test questionnaire)

“We appreciate your participation in our study. Your feedback will be very helpful in the redesign of the city of Shoreline’s website.”

“Thank you so much!”

3. Moderator Task List

Scenario #1

Participant wants to find local activities for his/her daughter.

Task A - From the Home Page (without using the Search feature), locate the date, time, and location for Tween Night.

1. Hover over “Community” navigation
2. Click “Recreation Programs” under “Parks and Recreation”
3. Click “Teens and Tweens” in sidebar to the left
4. Scroll down to “Tween Nights”

Answer: Sa 1/14 6:30-10:30 p.m.

Sa 2/11 6:30-10:30 p.m.

Sa 3/11 6:30-10:30 p.m.

Location: Richmond Highlands Recreation Center

ETA: 5 mins

Task B - From the Home Page (without using the Search feature), locate the hours of operation for the Shoreline Pool

1. Hover over “Community” navigation
2. Click “Shoreline Pool” under “Parks and Recreation”
3. Click “Pool Schedule” under “Hours of Operation” in sidebar to the right

Answer: PDF of Pool Schedule

ETA: 3 mins

Scenario #2

Participant is looking to start a business in Shoreline.

Task A - From the Home Page (without using the Search feature), find out how much sales tax is in Shoreline.

1. Hover over “Business” navigation
2. Select “Permits, Fees, Utilities and Taxes”
3. Select “Taxes” in sidebar to the right

4. Scroll to "Sales Tax"

Answer: Tax rate is 10.0%

ETA: 3 mins

Task B - From the Home Page (without using the Search feature), find out if your business site needs a permit by locating the "Does your project need a permit?" page.

1. Hover over "Business" navigation
2. Select "Permits, Fees, Utilities and Taxes"
3. Select "Permitting and Development Information" from sidebar to the right
4. Scroll down to "Development Process"
5. Select "Does your project need a permit?"

Answer: Arrive at "Does your project need a permit?" page

ETA: 5 mins

Scenario #3

Participant wants be prepared in the case of an emergency.

Task A - From the Home Page (without using the Search feature), locate the "Flood Preparedness" page.

1. Hover over "Emergency" navigation
2. Select "Prepare for an emergency" under "Emergency Management"
3. Scroll down to "Be Storm Ready"
4. Select "Flood Prevention and Preparation" link

Answer: Arrive at "Flood Preparedness" page

ETA: 5 mins

Task B - From the Home Page (without using the Search feature), find out how to get involved in the "Community Emergency Response Team (CERT)" by locating the "CERT Class Brochure."

1. Hover over "Emergency" navigation
2. Select "Get Involved" under "Emergency Management"
3. Select "Community Emergency Response Team (CERT)"

Answer: Arrive at “Community Emergency Response Team (CERT)” page

ETA: 3 mins

Participant Task Card

Scenario 1 - Task A

From the Home Page (without using the Search feature), locate the date, time, and location for Tween Night.

Scenario 1 - Task B

From the Home Page (without using the Search feature), locate the hours of operation for the Shoreline Pool.

Scenario 2 - Task A

From the Home Page (without using the Search feature), find out how much sales tax is in Shoreline.

Scenario 2 - Task B

From the Home Page (without using the Search feature), find out if your business site needs a permit by locating the “Does your project need a permit?” page.

Scenario 3 - Task A

From the Home Page (without using the Search feature), locate the “Flood Preparedness” page.

Scenario 3 - Task B

From the Home Page (without using the Search feature), find out how to get involved in the “Community Emergency Response Team (CERT)” by locating the “CERT Class Brochure.”

4. Post-Test Questionnaire

A. Please rate the City of Shoreline's website by checking off the level of your agreement with the statements provided:

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Overall, I am satisfied with the ease of completing tasks in this usability test.					
Overall, I am satisfied with the amount of time I took to complete each task in this usability test.					
Overall, I found information was easy to find.					
I think the website hierarchy is intuitive.					
I would have organized the website's information navigation differently.					
I thought the website was consistent in terms of navigation.					
I felt very confident determining the pathways to find specific information.					
I think that most users would quickly learn to find specific information in this website.					
The interface of the website is pleasant.					
Terminology was clear and precise.					

B. Using the following scale, please circle the number nearest the term that most closely matches your feeling about the City of Shoreline's website:

Difficult	2	1	0	1	2	Easy
Frustrating	2	1	0	1	2	Satisfying
Wonderful	2	1	0	1	2	Terrible
Easy to Navigate	2	1	0	1	2	Hard to Navigate
Confusing	2	1	0	1	2	Clear
Pleasing	2	1	0	1	2	Dull

C. What is your overall opinion to the website?

D. In the future, would you use or return again to this website? Why or why not?

E. Would you recommend the website to others who might be interested to visit or to know about Shoreline?

F. Is there any suggestion you want to share to improve the website? Please tell us below:

G. Can you please list three aspects of City of Shoreline's website, which you feel need to be improved:

i.

ii.

iii.

H. Can you please list three aspects of City of Shoreline's website, which you feel already satisfying:

i.

ii.

iii.

I. Can you please add any additional feedbacks regarding to the three topics below that will help us improve the user experience on the City of Shoreline's website. We would especially appreciate your input:

i. Information Architecture

ii. The ease of using navigations

iii. Visual appearance and visual appeal