CITY OF BELLEVUE
In Partnership with the University of Washington

USER-CENTERED DESIGN RESEARCH AND RECOMMENDATIONS FOR THE CITY OF BELLEVUE’S PUBLIC WEBSITE

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Livable City Year 2018–2019
in partnership with
City of Bellevue
www.washington.edu/livable-city-year/
ACKNOWLEDGMENTS

We were extremely fortunate and honored to be partnered with Enzhou Wang. Enzhou is the IT Manager for the City of Bellevue, and he was our point of contact for everything related to the City of Bellevue. He provided us with the data we needed to analyze the website with, and gave us the vision and direction that this project needed to go in.
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ABOUT LIVABLE CITY YEAR

The University of Washington’s Livable City Year (LCY) initiative is a partnership between the university and one local government for one academic year. The program engages UW faculty and students across a broad range of disciplines to work on city-defined projects that promote local sustainability and livability goals. Each year hundreds of students work on high-priority projects, creating momentum on real-world challenges while serving and learning from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents, and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion and access. The program’s 2018–2019 partner is the City of Bellevue; this follows partnerships with the City of Tacoma (2017–2018) and the City of Auburn (2016–2017).

LCY is modeled after the University of Oregon’s Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), an international network of institutions that have successfully adopted this new model for community innovation and change. For more information, contact the program at uwlcy@uw.edu.

ABOUT CITY OF BELLEVUE

Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It’s the high-tech and retail center of King County’s Eastside, with more than 150,000 jobs and a skyline of gleaming high-rises. While business booms downtown, much of Bellevue retains a small-town feel, with thriving, woody neighborhoods and a vast network of green spaces, miles and miles of nature trails, public parks, and swim beaches. The community is known for its beautiful parks, top schools, and a vibrant economy. Bellevue is routinely ranked among the best mid-sized cities in the country.

The city spans more than 33 square miles between Lake Washington and Lake Sammamish and is a short drive from the Cascade Mountains. Bellevue prides itself on its diversity. Thirty-seven percent of its residents were born outside of the US and more than 50 percent of residents are people of color, making the city one of the most diverse in Washington state.

Bellevue is an emerging global city, home to some of the world’s most innovative technology companies. It attracts top talent makers such as the University of Washington-Tsinghua University Global Innovation Exchange. Retail options abound in Bellevue and artists from around the country enter striking new works in the Bellwether arts festival. Bellevue’s agrarian traditions are celebrated at popular seasonal fairs at the Kelsey Creek Farm Park.

Bellevue 2035, the City Council’s 20-year vision for the city, outlines the city’s commitment to its vision: “Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past.” Each project completed under the Livable City Year partnership ties to one of the plans strategic areas and many directly support the three-year priorities identified by the council in 2018.
Bellevue is characterized by high-performance government. Our residents live in a safe, clean city that promotes healthy living. The perception of safety contributes to the success of businesses and neighborhoods. Police, fire and emergency personnel are seen by citizens every day, and we ensure that these services reflect high standards and pride.

People are attracted to live here because they see that city government is well managed. Our high quality of customer service ensures that residents realize a direct link between their tax dollar investments and the services they receive. We make public investments wisely, assuring taxpayers that we are living within our means, while also ensuring that we have superb infrastructure to support growing businesses and desirable residential opportunities. We have beautiful public buildings that residents point to with pride. Government plays its role in supporting the careful balance of neighborhoods, commercial and retail growth, diverse residential living opportunities, and amenities that characterize Bellevue. City leadership fosters careful, long-term planning, responsible financial policy, and thoughtful partnerships with businesses, the nonprofit sector, and the region.

We seek input from our residents and businesses, and this input informs city decision-making. We make decisions in a transparent manner. We support public engagement and connectivity. Bellevue does its business through cutting-edge technology. City government uses technology to connect with its residents, giving them voice in their community. Our boards, commissions, and other citizen advisory groups assist the City Council in providing superior leadership by representing the diverse interests of the city and providing thoughtful and creative ideas that assure sound policy direction and decisions.

Our residents care for Bellevue. They speak up and collectively work to address our mutual needs. In Bellevue, our commitment to public service is paramount. Our residents know that their local government listens, cares about, and responds to them.
In the computer-technology age, user-friendly design is increasingly important. Government websites are often the first point of contact between a city agency or department and the residents of a place. Thus, websites are key to cities making a positive first impression and to making it easier for people to access information and city services. For this project, the City of Bellevue engaged students to evaluate the user-friendliness of their current website, and to suggest user-centered improvements. Bellevue’s goals were to characterize “personas,” different types of users who regularly visit the City’s website, and to use these “personas” to inform recommendations for the redesign of the City’s website.

In order to identify areas for improvement, we interviewed and observed real people using Bellevue’s website. We narrowed our focus to specific user-groups. To do this, we formed a set of initial personas, which helped us target particular subsets of Bellevue’s population. These initial personas informed who we reached out to for interviews and observations.

Prior to determining who these personas would represent, we analyzed Google Analytics data related to website use. We looked out for the most-visited web pages and for the most searched-for words. This equipped us with insights about the top reasons people visit the City’s website. With this information, we created four basic personas to represent people who commonly use the City’s website:

“Job Searching Jin”
“Maia the Mom”
“Thomas the Tourist”
“Activity Seeking Anya”

This initial set of personas became the starting point from which we chose people to interview and observe. After conducting interviews and observing different people use the website, we revisited this original set of personas to compare similarities and differences and to refine them before designating a final set of personas.

Bellevue’s goals were to characterize different types of users who regularly visit the City’s website, and to use these “personas” to inform recommendations for the redesign of the City’s website.
This project seeks to build on Bellevue’s user-centered design and improve the usability of the public website for the City of Bellevue.

KEY OBSERVATIONS

After creating our personas and completing interviews, we set out to redesign the home page of the City of Bellevue’s website. Based on results from our interviews, we identified specific aspects of the website that could improve its user-friendliness. Our two primary findings are listed below:

1. There is little traffic below the “fold” of the home page.
2. There are major differences between what the user expects while navigating the website and what the website provides.
The City of Bellevue stands out as one of the most diverse and affluent cities in the State of Washington. Much of its social diversity and economic success can be attributed to the level of educational attainment of its residents and to the types of employment it offers people. Bellevue provides employment opportunities in some of the highest paying job sectors: management, business, science and arts (US Census Bureau 2018). Demonstrative of the sort of employment Bellevue offers, the average household income in Bellevue is $120,000 a year (US Census Bureau 2018). Bellevue is also among the most highly educated cities in the State of Washington, with 68% of its population holding a Bachelor's Degree or higher (US Census Bureau 2018). The city’s diversity is also notable and continuously increasing. According to the US Census Bureau (2018), Bellevue ranks 11th in the United States for the percentage of total population who identify as Asian (for cities with 100,000 people or more).

The City of Bellevue’s official mission statement is to “continually strive to be a leader in innovation and collaboration and to care for the public’s interest while advancing its community towards the future” (City of Bellevue 1999). Bellevue expands on this mission in its goal to be “conscious in making sure the resources they put forth to their residents are helpful, easy to use, and focused on their needs” (City of Bellevue 1999). One of the resources Bellevue provides to the public is its website. To create a website that supports the city’s diversity and promotes inclusion of all, the website must be easy for people of diverse demographics to use. Ensuring this level of user-friendliness is no easy task. In the time we took to complete this project, we aimed to analyze the City’s current website and to discover ways to incorporate a more user-centered approach. We wanted to learn how people of different ages, genders, races, and cultures now use the website, as this would reveal ways to improve their user-experience. This approach to research and design, centered around users and creating better products for them, is called Human Centered Interaction (Zimmerman, et al. 2007).

Human Centered Interaction (HCI), also referred to as research-oriented design, is the practice of creating a product that focuses on the need or needs of the product’s intended users (Zimmerman 2007). Our team employed this approach in our evaluation of the City of Bellevue’s website. To modify the City's entire website so that it corresponds to residents’ wants and needs, we sought to identify particular needs and to pair them with specific user profiles. The challenge we faced was in designing only a few user profiles to represent Bellevue’s incredible diversity. This urged us to dive deep into research to determine the key target groups who make use of the website, as well as reasons they make use of the website and what compels them to return to the website. We also wanted to determine ways their user-experience could be improved. After collecting this information, we formed a set of conclusions related to ways the City of Bellevue can increase the user-friendliness of its website.
Provided to us by the City of Bellevue, Google Analytics data allowed us to view the ways in which people make use of the website, as well as the most searched-for pages and key words. Because the website is dynamic and changes frequently, we focused most of our research on data during the month of October. By narrowing our scope to one month, we could determine specific reasons people visited the website. We were less concerned with what trended on the website during this time, and more concerned with how users navigated the website to access key content. We were also interested in finding out about the characteristics of the people generally searching for that content, and how we could use those identity markers to form a set of initial personas to direct us in our interview process.

Another of our goals from analyzing this data was to come up with specific tasks for interviewees to complete. We generated eight tasks, each related to a commonly visited page or to a key search-word used during the month of October. These tasks would allow us to observe and analyze how people interact with the website, and would indicate areas for the City to improve its website.

After we created tasks for interview participants, we decided on the groups of people we wanted to interview. With limited time and a large population to draw from, we returned to Google Analytics data to look for emerging patterns. We also analyzed a demographic source provided to our team by the City of Bellevue. In analyzing the City’s demographics data, we looked out for significant, growing, and overlooked subsets of the population. We considered significant, growing, and potentially overlooked groups to be those that would primarily benefit from the website’s updates. Although we selected three subsets of the population, we still wanted to account for as much as the city’s total population as possible.

With two months to conduct interviews and produce a set of recommendations for the City of Bellevue, we brainstormed as many user profiles and reasons for visiting the website as we could imagine. This approach helped us to consider more potential users and informed the personas we created. However, we realize also that this method is limited. For example, we mainly considered Google Analytics data during one month: October. This data likely does not capture all people who make use of the website over the course of a year. We also acknowledge that there are most likely several, if not hundreds or thousands, of types of people and reasons why people might access the website not accounted for in our work.

We observed that many of the pages most frequented related to extracurricular activities, utilities, and police.
Google Analytics data for the City of Bellevue’s website was useful to us in our research. Google Analytics is a free tool which allows one to analyze website traffic, as well as general visitor statistics. Google Analytics calculates the number of times users click on a web page, and how many times a web page is landed as a result of a web search. We considered two categories, the top landing pages and the top pages visited, to be especially useful in assessing user patterns for the City’s website. While limiting our focus to the month of October, we observed that many of the pages most frequented related to extracurricular activities, utilities, and police. This finding helped us determine our target audiences and our generation of personas.

**WHEN DO PEOPLE VISIT THE SITE?**

![Users by time of day](image)

Google Analytics data for the City of Bellevue's website was useful to us in our research. Google Analytics is a free tool which allows one to analyze website traffic, as well as general visitor statistics. Google Analytics calculates the number of times users click on a web page, and how many times a web page is landed as a result of a web search. We considered two categories, the top landing pages and the top pages visited, to be especially useful in assessing user patterns for the City's website. While limiting our focus to the month of October, we observed that many of the pages most frequented related to extracurricular activities, utilities, and police. This finding helped us determine our target audiences and our generation of personas.

Another important aspect of Google Analytics data is that it provides real-time information related to people using a website. It also shows the times and days of the week that are most popular to users. We found that the people who visit Bellevue's website most often do so toward the beginning or end of the week (Sunday/Monday and Friday/Saturday), between 8:00 a.m. and 2:00 p.m.

While we found the Google Analytics function which calculates top 10 most searched-for words useful, we quickly realized that this data was also case sensitive. For example, if users insert the search words “jobs” and “Jobs,” Google Analytics, by default, distinguishes those as two separate search words. One interesting finding, which resulted from our analysis of this data, was that four out of the top 10 most popular search words related to finding jobs, yet the website’s “Job Opportunities” page did not show up on any of the top 10 most visited pages. Because of the volume of content on the website and public interest, Bellevue made Search most prominent to maximize efficiency for users. Since the “Job Opportunities” page is nested within other pages of the website, users are more likely to use the search bar than to navigate directly to the “Job Opportunities” page. It is also worth mentioning that the Career link is not prominent on the home page for users to find.

The top 10 most visited pages and the top 10 most searched-for words are key pieces of data our team used to analyze Bellevue’s website. With the top 10 pages visited, we concerned ourselves less with the specific content users searched for, and focused instead on how people used the website to navigate to these commonly visited pages. While Google Analytics revealed to us pathways for how users navigate to certain pages, we found these pathways confusing to review since there appeared to be several dozen, if not hundreds, of different ways users land on a given page. With more time, it would have been interesting to analyze this data further to see how users navigate to each page, and to compare that with how the people we interviewed navigated to each page. We were also interested in the relationship between the top 10 search words and the information shown on the home page, specifically regarding topics related to “jobs.” Eventually, when we recommended updates to the home page, we took commonly searched words and found ways to incorporate them on the home page.
TOP 10 SEARCH WORDS  
(DURING THE MONTH OF OCTOBER, 2018)

1. jobs
2. Business Licenses
3. Job Opportunities
4. staff directory
5. summer camp
6. Robinwood Tennis Center Programs and Fees
7. Jobs
8. business license
9. Robinwood Tennis Center
10. Jobs and Volunteer Opportunities

Note: The Google Analytics search function is case sensitive; accordingly, our “Top 10 Search Words” represent search words/phrases exactly as they are typed.

TOP 10 PAGES VISITED  
(DURING THE MONTH OF OCTOBER, 2018)

1. bellevuewa.gov/search_results
2. parks.bellevuewa.gov/community-centers/kelsey-creek-farm
3. police.bellevuewa.gov/
4. development.bellevuewa.gov/permits-and-inspections
5. utilities.bellevuewa.gov/pay-your-utility-bill
6. parks.bellevuewa.gov/community-centers/sbccc
7. parks.bellevuewa.gov/sports-and-athletics/bellevue-aquatic-center
8. utilities.bellevuewa.gov/
9. parks.bellevuewa.gov/connections
10. development.bellevuewa.gov/zoning-and-land-use

After analyzing the website’s Google Analytics data and identifying the most visited pages and what users commonly searched for, we created four generalized personas:

- **“Job Searching Jin”** – Individuals looking for a job
- **“Maia the Mom”** - Parents looking for extracurricular activities for their children
- **“Thomas the Tourist”** – Short-term visitors looking for things to do in and around Bellevue
- **“Activity Seeking Anya”** – Residents of Bellevue looking for new activities to participate in

SUMMARIZING DEMOGRAPHICS AND DETERMINING TARGET GROUPS

Next, we analyzed the demographics of Bellevue to determine target groups to guide us creating an initial set of personas and in selecting interview participants. We wanted to cover as much as the population of Bellevue as we could, while also focusing on unique population trends. Since building a user-friendly website is all about knowing your users, we also wanted to see if there were any demographic groups at risk of being overlooked.

According to *The Changing Face of Bellevue - Latest Information on Bellevue's Demographics* (US Census Bureau 2017), Bellevue’s largest job markets consist of management, business, and science and arts, with information technology standing out as one of the most prominent industry fields. Almost 40% of Bellevue’s population is represented by people between the ages of 18 and 44; this age range, which is often referred to as the “young workforce” is the city’s largest age demographic. In view of this age range’s role in shaping Bellevue’s future and in contributing to the city’s growing tech industry, our team chose the “young workforce” as one of our target groups.

Our team found that the largest demographic group within the “young workforce” category identified as Asian, representing 41% of this demographic group alone. Taken as a whole city, Bellevue’s Asian populations comprise 34% of its entire population. This surpasses the percentage of Asian populations in any other city in Washington State, and is nearly six times the national Asian percentage. In the United States, among cities with more than 100,000 residents, Bellevue ranks #11 for the percentage of total population who identify as Asian. Expanding on
Among cities in the US with more than 100,000 residents, Bellevue ranks #11 for the percentage of total population who identify as Asian.

### ASIAN POPULATION TRENDS IN BELLEVUE

#### #11 in US for Percentage of Total Population

Out of cities with 100k people or more

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Total Population</th>
<th>Percentage of Total Bellevue Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>10%</td>
<td>19%</td>
</tr>
<tr>
<td>2000</td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>2010</td>
<td>28%</td>
<td>34%</td>
</tr>
<tr>
<td>2017</td>
<td>34%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Three-Fold Increase in Percentage of Total Population Since 1990

Chinese Population, 1990 – 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Chinese Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2,620</td>
</tr>
<tr>
<td>2000</td>
<td>6,745</td>
</tr>
<tr>
<td>2010</td>
<td>11,703</td>
</tr>
<tr>
<td>2017</td>
<td>19,414</td>
</tr>
</tbody>
</table>


GRAPHIC DESIGN: LCY STUDENT TEAM
After analyzing Google Analytics data for Bellevue’s website and reviewing the City’s demographics information, we selected interview participants who represented the three target groups. To summarize, we present a list of our target groups below with the reasons we selected them. Pieces of our rationale reflect findings from preliminary Google Analytics and demographic data research, while other bits reflect reasoning we inferred and sought to test during our interviews and observations.

**Young Workforce**
- Largest age group
- Potentially very tech-savvy, may give a detailed insight into website usage
- Makes up the major tech industries in Bellevue

**Chinese Residents**
- Fastest growing Asian population
- Chinese is the second most spoken language in Bellevue households. Do bilingual residents struggle to use the website in unexpected ways?

**65 and Older**
- Potentially more active and interested in City events since most would be retired
- May be underrepresented in terms of accommodation/user-friendly interface
- Provides insight into how user-friendly the website is to people who may be less tech-savvy

Our team also created a series of tasks for interview participants. A majority of these tasks referred to top visited pages and to top key search words. However, our team wanted to also test a theory we had related to the City’s home page. We hypothesized that the large search bar in the middle of the home page’s screen deters users from scrolling down to see what else the City presents on its home page. Thus, we created tasks to test whether this was so: we asked users to find information about certain topics that were “hidden” on the home page to see if users would scroll down and find them or use the search bar.

### INTERVIEWING TARGET GROUPS

#### EIGHT TASKS FOR INTERVIEW PARTICIPANTS

1. Imagine you are visiting Bellevue for the first time. Show us how you would use this website to find three activities to do this weekend.
   - **Interviewer tasks:** Write down where they click to find activities to do. Do they use the search bar? Do they click around the website? Ask them to describe the tasks they found after they finish.

2. Imagine you need to pay your utility bill. Show us how you would use this website to do so.
   - **Interviewer tasks:** When they get to the “Pay Your Utility Bill” page, they have completed this task.

3. Imagine you have children and are looking for activities for them to do after school. Show us how you would search for activities. Then, come up with three family-friendly activities the City of Bellevue offers.
   - **Interviewer tasks:** There are a few different ways they can complete this task. Write down what they typed in the search bar, what buttons they clicked, etc.

4. Imagine you need to get a fire permit. How would you use this website to find out more about fire permits.
   - **Interviewer tasks:** When they get to the “Fire Permits” page, they have completed this task.

5. Imagine you are interested in Bellevue’s Community Centers. Show us how you would use this website to find out more about Community Centers.
   - **Interviewer tasks:** When they get to the “Community Centers” page, they have completed this task.

6. Imagine you are interested in becoming a police officer. Show us how you would use this website to find out more about becoming a police officer.
   - **Interviewer tasks:** When they get to the “Bellevue Police” page and click on the link that says “Become a Bellevue Police Officer,” they have completed this task.

7. Imagine you are looking for a job in Bellevue. Show us how you would use this website to find out more information about job openings. When they get to the “Job Openings” page, they have completed this task.

8. We are going to ask you to find some articles. Please show us what steps you would take to find these articles.
   - **Interviewer tasks:** DO NOT TELL THE PARTICIPANT THIS. All of these articles are somewhere on the home page. Write down whether they typed the names of the articles into the search bar at the top of the home page, or if they scrolled down to find them.
Due to time constraints of the academic quarter system, and our need to work efficiently to complete this project in a matter of weeks, we recruited interview participants from our established social networks who live or work in the Bellevue area. One of our team members reached out to a Chinese father in his thirties who works in Bellevue. Another team member reached out to two 20-year-old, Chinese-American friends who work in Bellevue. These individuals fulfilled both our “young workforce” and “Chinese residents” target groups. Another team member knew an older Caucasian couple who could fulfill our third category of “65 and older residents.”

We conducted our first interviews with *Su and *Kenny at a local community church cafeteria. Su and Kenny are young, college-aged students of Chinese-American descent. Like many millennials could, they easily completed all eight tasks and successfully navigated the website without much hassle. They resorted to using the search bar only when scrolling on the home page took longer than a few seconds. They appeared confident in their skills and comfortable with the basic layout of the website. This was the case even though neither of them had visited the website in the past.

Next, we interviewed a 30-year-old man named *Ian at a local Starbucks. Like Su and Kenny, Ian is Chinese-American. He is a family man, with a wife and a two-year-old daughter, who works at Microsoft as a designer. He also attends the University of Washington as a graduate student. He represented two of our target groups: young workforce and Chinese residents. He shared observations and critiques of the website, likely guided by his designer point of view. While he navigated the website, he pointed out features he liked and disliked and explained why. He thought that certain icons and drop-down menus could be implemented in a more user-friendly way, and he suggested distinguishing activities and events on the home page more clearly. “Why not use different colors depending on functionality? Like [things related to] activities [could be] red…Use color as a way to [have] better navigation flow.” Ian also pointed out that if images represented some of the city’s upcoming events on the home page, it would provide people with a clearer sense of the event and possibly entice them to explore more of the City’s offerings. Perhaps because English is his second language, at times, tasks confused Ian. We noticed it took him longer to finish certain tasks than it had taken Su and Kenny.

In our last interview session, we interviewed *James and *Sandy, an elderly Caucasian couple who live just outside of Bellevue, but who visit the city frequently. They invited us into their home for our session. Unlike the other interviewees, James and Sandy confessed to us right off the bat that they are not tech-savvy. Although they followed instructions without complaint, they exhibited clear difficulties in navigating the website. For example, at times James and Sandy required that the browser be reformatted in “enlarged text mode” to make the text legible. Once laid out in this way, some of the information became hidden from view, making it more difficult for them to see the contents of each page and complete the eight tasks. James and Sandy relied heavily on the search bar to complete many tasks. In fact, in five out of eight instances, the couple immediately began typing in the search bar, rather than looking elsewhere on the home page. This contrasted with the other interview participants who only used the search bar once or twice, and only after first glancing up and down along the home page.

*Participants names are changed to preserve anonymity.
In analyzing the information we gathered during the interview process, we applied the practice of coding to help us identify key problems. Coding involves transcribing videos of interviews to look for emerging patterns related to key words and to subjects the participant repeatedly mentions. Since coding can be very time-consuming, we only coded one interview (Ian’s). For all other interviews, we took detailed notes to further support our analysis and findings. The first step in the coding process required us to transcribe every sentence spoken during the interview, both words of the interviewer and of the participant. As we watched the videos, we also took notes on actions we observed taking place while each person spoke. We organized this data on Google Sheets. Below is a sample from our initial recorded data.

After transcribing the video, the next step was to identify significant behaviors and actions. To do this, we created a “coding standard,” or, a set of guidelines which help highlight topics of conversation. We read through transcribed data to observe recurrent words and phrases. We reviewed behaviors and actions. To do this, we created a “coding standard,” or, a set of guidelines which help highlight topics of conversation. We read through transcribed data to observe recurrent words and phrases. Transcribing the video requires us to apply the practice of coding to help us identify key problems. Coding involves transcribing videos of interviews to look for emerging patterns related to key words and to subjects the participant frequently mentioned. For all other interviews, we took detailed notes to further support our analysis and findings.

After coming up with this set of coding standards, we coded the transcribed data to observe recurrent words and phrases. We reviewed the video recording several times to observe behavioral patterns, too. We noticed Ian referred to different design aspects of the website frequently, remarking on layout and flow. We also noticed he struggled to understand and complete certain tasks.

Our coding standards included:

- Note anything related to the design aspects of the website, specifically in buttons, icons, or images used
- Note anything related to the layout of site, such as how different sections or web pages are arranged
- Note anything related to how the participant navigated through the site
- Note any response that revealed a certain need that should be addressed
- Note anything related to confusion or to conducting the wrong action

After coming up with this set of coding standards, we coded the transcription from our interview with Ian, sentence by sentence. The code we generated is shown below.

The final step we took in this process was to group together all the coded words, phrases, and sentences in a separate document. This enabled us to compare participants’ responses. To review this document, see Appendix 3.1.

<table>
<thead>
<tr>
<th>Time</th>
<th>Person Speaking</th>
<th>Sentence/Phrase</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:27:00</td>
<td>Jerry</td>
<td>Google news shows relevant topics, website events aren’t relevant to me</td>
<td>Listed events aren’t appealing or engaging</td>
</tr>
<tr>
<td>0:39:00</td>
<td>Jerry</td>
<td>Navigation structure...about us...</td>
<td>Navigational structure/content doesn’t make sense in context</td>
</tr>
<tr>
<td>0:46:00</td>
<td>Jerry</td>
<td>Except the search title...there’s only one actionable title...&quot;more&quot;</td>
<td>Jerry back on the HP looking at the navigational path for events</td>
</tr>
<tr>
<td>0:58:00</td>
<td>Jerry</td>
<td>Oh...But the term &quot;more&quot; is too vague for me</td>
<td>Jerry finds the news page but doesn’t find it to be intuitive</td>
</tr>
<tr>
<td>1:33:00</td>
<td>Jerry</td>
<td>The calendar icons are similar</td>
<td>Having similar looking elements causes information to be easily dismissed</td>
</tr>
<tr>
<td>1:51:00</td>
<td>Jerry</td>
<td>I’m just quickly scanning the structures</td>
<td>Additionally explaining the lack of intuitiveness</td>
</tr>
<tr>
<td>2:15:00</td>
<td>Jerry</td>
<td>I didn’t realize this whole section is about news</td>
<td>News &amp; events blend together when page is quickly scanned</td>
</tr>
<tr>
<td>2:24:00</td>
<td>Jerry</td>
<td>If I go there, I can find that article easily</td>
<td>Opening “more stories” and browsing through city news</td>
</tr>
<tr>
<td>2:56:00</td>
<td>Jerry</td>
<td>Highlight the “see more” so the user can easily find the action</td>
<td>Button blends in too much and it difficult to notice amongst other content</td>
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<tr>
<td>3:22:00</td>
<td>Jerry</td>
<td>And you’re talking about like the buttons below the pictures over there?</td>
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<td>3:35:00</td>
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<td>Put a button below all those sections</td>
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<td>Jeff</td>
<td>In your opinion, what information would you find on the HP of the website?</td>
<td>Additional line of questioning to get further input</td>
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<td>4:48:00</td>
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<td>The first thing I would want to see on a government website would be a map</td>
<td>Answering question about HP</td>
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<tr>
<td>4:58:00</td>
<td>Jerry</td>
<td>Include all the facilities and parks, etc, so it’s easily findable</td>
<td>Answering question about HP</td>
</tr>
<tr>
<td>5:15:00</td>
<td>Jerry</td>
<td>It would be nice to just navigate to a place near me using an interactive map</td>
<td>Describing how he envisions the HP map would work (interactive over static image)</td>
</tr>
</tbody>
</table>
DATA VISUALIZATIONS

The visual to the right shows the distribution of our coded data. We created this visual based on how many times a particular theme emerged based on our coding of the interview transcription. Creating this graphic helped our team focus on the most frequently discussed topics. For example, we realized that Ian uttered the words "confusion" and "navigation" frequently as he completed the eight tasks. Findings like these guided us as we moved ahead into the redesign stages of this project.

KEY FINDINGS

During our sessions with interview participants, we identified two general findings:

1. Less engagement with material presented below the “fold” of the home page.
2. Incongruence between what the user expected and what the website provided.

Currently, the home page consists of several different sections, with links to news articles and upcoming events in Bellevue. However, our review of Google Analytics data revealed that people infrequently click on the news articles and current events links. Notably, none of the news articles showed up in the lists we generated of the top 10 most visited pages or the top ten most searched for words. Thus, we found that the information and links the City shares on its home page do not always reflect primary reasons people visit its website.

Certain tabs and sections of the website prompt users to visit other websites or to sign-up for a subscription to view the content. One example of this is registering for swim lessons: there are several different pathways one could follow to sign a child up for swim lessons; yet, each pathway requires several steps, clicking through multiple pages, and transferring to different sites. The City’s website does not offer a direct path for users to complete this single task. Rather, the City’s website redirects users to an external site, set up with information related to different aquatic centers and services. Meanwhile, other links open to long, detailed pdf files. Further research would be required to determine how people react to encountering these long pdf files. However, the inconsistent experiences users now have in clicking on different links may cause confusion and irritation.

SUMMARY OF CODED DATA DISTRIBUTION

We found that the information and links the City shares on its home page do not always reflect primary reasons people visit its website.
LOST IN TRANSLATION

We noticed during our interview with Ian that non-native English speakers may not understand concepts even if they think they do, because so much meaning can be lost in translation from one language to another. Ian’s native language is Chinese. While he speaks English quite well, clear misunderstandings caused him to feel frustrated and confused. For example, when we asked him to show us how he would find out more about Bellevue’s community centers, he failed to complete this task. He also asked us why this task mattered. In chatting with him, we realized that to Ian, a “community center” meant something along the lines of a “residential center,” or an apartment complex. He did not conceive of community centers as public spaces; rather, he thought of them as private residential areas, only accessible to the people living in them. Even though “Community Centers” appears as one of the most commonly visited pages on the City of Bellevue’s website, we discovered this term’s meaning may be unclear to many of non-native English speaking residents.

We also detected differences in participants’ use of the website based on their level of English proficiency. The City’s website is set up almost entirely in English, although certain pages can be translated into other languages. Users more comfortable with English demonstrated greater capacity to understand each of the eight tasks. Because different participants’ level of English proficiency varied, we found ourselves phrasing our questions differently to accommodate them. For example, with Ian, we spent time clarifying and re-phrasing many of our questions. There were times he did not know what we were asking him to search for, and so we had to take more time to describe the task. We found, especially during this interview, that words and topics that may be easy for English speakers to grasp may not be for people with limited English proficiency.

Another trend we detected related to the age of our participants. While we have not drawn from or produced quantitative evidence that supports definitive conclusions about the behavior of different demographic groups of Bellevue, we noticed that younger participants completed tasks more quickly, with greater ease. The youngest participants, Su and Kenny, navigated City’s website without difficulty, clicking on related buttons and links, seeming to understand the website’s layout. They used the search bar only as a last resort, after first trying to complete the task by clicking on links and scrolling around on different web pages. In contrast, the oldest participants we interviewed, James and Sandy, used the search bar at the top of the home page to attempt every single task. They never scrolled down to view additional information presented on a given web page. James and Sandy also admitted that they rarely use the internet, and that when they do it takes them a long time to navigate to complete their own tasks. We inferred from this statement that because James and Sandy seldom use the internet, and may not be as familiar with the general layout of websites, this likely explained their reliance on the search bar.

After completing our data analysis and summary of findings from the interview and coding process, we set out to create personas. We wanted to create personas with particular identities, with specific needs and wants. To come up with solid and credible persona options, we relied on a technique established by the user-experience consultant Tamara Adlin (Adlin 2018). We brainstormed reasons why different users would access the City’s website, categorized them into groups, and created “I need” and “I want” statements that would individualize each as a persona.

We brainstormed reasons why different users would access the City’s website, categorized them into groups, and created “I need” and “I want” statements that would individualize each as a persona.
The process of creating personas entailed four steps. First, we wrote down the City’s goals, as a way to measure the success of our project. We also thought of who would constitute a user and drafted descriptions related different users by broad category of need and desire. We organized this work using sticky notes.

The second step was to pair each specific user with a reason they would access the City’s website. For example, we considered “parents” as users and paired them with the reason, “looking for after-school activities for my children.” Each of us spent time brainstorming our own conceptions of different users as well as reasons they would visit the website, and then we shared our ideas as a team.

Thirdly, we categorized user-reasons into similar groups. After organizing user-reasons in groups, we created “I need” and “I want” statements to summarize each group. For example, we created a group with the following three user-reasons:

• A Chinese mom who wants to pay her utility bill online
• A new immigrant family looking for home-owners insurance
• A driver who needs to renew his driver’s license

The “I need” and “I want” statements we came up with to summarize each group are presented below.

• I need to take care of my utilities.
• I need after-school child care for my children.
• I want to do something fun this weekend.
• I want to find a job.

From these four “I need” and “I want” categories, we narrowed our focus to specific personas. We used demographics information to make variations on each, such as having one persona be Asian and another Caucasian. After engaging this four-step process, we drafted each persona.

We created a set of personas before and during the interviewing process. This way, we had more time to consider them and to make changes based on findings from the interview process. We expected that our original personas would need only minor revisions. For example, in our first iteration, all personas ranged in ages between 20 and 35. Problematically, all of these personas fell in the “young workforce” target group. In our final iteration, we changed Stacy’s persona to represent the older adult age range of James and Sandy, as well as the challenges we observed these participants faced in navigating the website. Two of our personas came accompanied by user case scenarios in their second iterations. These stories illustrate specific situations and reasons different users would need or want to access the City’s website.
Ajit Chopra

**Bio**

Ajit was born and raised in Patiala, India where he completed his education and earned a Masters in Software Engineering. Ajit moved to Washington 12 years ago after receiving a job opportunity at Microsoft and has since been here ever since. He earned his citizenship status a few years ago and is a recent homeowner. He greatly believes in building your own fortune and thus bought a fix-upper for his first house to work on as his first big DIY fix-up project.

**Goals**

- Fix up his new house from changing wiring to getting rid of overgrown trees in his backyard.
- Finding good after-school programs for his kids since both him and his wife work.
- Get involved with his community and participate in local events.

**Frustrations**

- There are many different permits that need to be filled out for different things for his house, but he's not entirely sure of the correct procedure since it's his first time.
- It's hard to know about current events beforehand and plan them out since he doesn't find out about them till the last minute.
- Feels that there need to be more engaging after-school programs that encourage play outside but is also worried about safety.

**Motivation**

Incentive
- Fear
- Growth
- Power
- Social

**Preferred Channels**

**Traditional Ads**

**Online & Social Media**

**Referral**

**Guerrilla Efforts & PR**

First iteration of persona ideas LCY STUDENT TEAM
Thomas is an Indian-American who moved to Bellevue recently with his family. He received his bachelor’s degree from a college in India, found a job about a year ago in Bellevue, and has been living here ever since. He is also married with one child, a daughter. His daughter is enrolled in preschool in the Lake Washington School District system.

Thomas prioritizes spending time with his family and looks for interesting family-friendly events taking place in Bellevue. He also plans to renovate his backyard, adding a playground for his daughter. Thomas visits the Bellevue.gov website and clicks on the activities button, visible under the search bar on the home page. Being a first generation, Indian-American, Thomas still experiences a slight language barrier and at times translation services would help him navigate the website. He finds translated pages provide more limited information compared to pages that appear in English.

About 30 minutes after initially landing on the City’s website, Thomas finds some activities to do over the weekend with his family. With some extra time to spare, he checks out the permits tab for more information regarding his plans to alter his backyard. He finds himself rather confused as he links to a complex list of information related to permits.
MAIA THE MOM

Maia is a Chinese immigrant who moved to Bellevue with her husband 10 years ago. Maia takes her oldest child to school every day since her husband leaves early each morning for work. She also homeschools her youngest child, and is very proactive in coming up with after-school activities for both children. One morning, after returning home from taking her oldest child to school, Maia sets out to find an activity for them to do over the weekend. She remembers that a parent of one of her children’s friends mentioned Kelsey Creek Farm as a great place to take kids. Maia searches for “Kelsey Creek Farm” on Google. A link directs her to the Kelsey Creek Farm home page on the City of Bellevue’s website.

With many resources at her disposal, Maia still feels lost and confused as a result of her language barrier. She finds a Chinese-translated page on the website, which describes Bellevue’s general activities. The page offers only basic information, with no links provided in Chinese. She resorts to reading about Kelsey Creek Farm in English and uses Google Translate to help her with unfamiliar words. One of the links Maia clicks on brings her to a 20-page-long pdf which describes in detail all the happenings at Kelsey Creek Farm. Nearly two hours later, and exhausted from translating between Chinese and English, Maia finally knows the times of activities that she and her children can participate in over the weekend.

Next, Maia needs to pay her household electricity bill. Maia neither trusts making online payments, nor feels comfortable talking on the phone in English. Often, Maia heads to Bellevue City Hall to pay in person, bringing along her youngest child. She feels nervous talking to government officials in English, but generally feels less confused than when she calls. Tasks like this one are very nerve-racking and emotionally taxing for Maia. She wants to improve her English so she will no longer face these barriers. For now, she wants to be able to talk with someone who has the patience and kindness to understand what she wants.

<table>
<thead>
<tr>
<th>Age: 38</th>
<th>Ethnicity: Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status: Married</td>
<td>Occupation: Housewife</td>
</tr>
<tr>
<td>Languages: Chinese/English</td>
<td></td>
</tr>
</tbody>
</table>

Pain Points
- having her kids stuck inside with nothing to do
- not finding enough support from her community events
- language barrier
- not enough resources available to teach her kids
- lack of information channel
- unfamiliar with govt. workflow

Goals
- finding ways to keep her kids busy after school
- take an English learning class
- pay family bills
- seeking a high ranking primary school for her kids

Above: Bellevue IT Manager Enzhou Wang (facing camera) discusses the website project with Interactive Media Design students at UW Bothell
TERI THOMPSON RANDALL
Below: Bellevue IT Manager Enzhou Wang (standing, right) visits the BIMD 481 Integrative Studio class at UW Bothell to introduce the website project.
Instructor Mark Chen is standing, center. TERI THOMPSON RANDALL
HOME PAGE MOCKUPS

UPDATING CITY OF BELLEVUE’S HOME PAGE

Our team created two mockups of the City’s home page. In each redesign, we explored different stylistic choices to address specific opportunities for improvement. We wanted to provide more than a single option for how the City’s home page could be redesigned. We started from a blank slate with the creation of each mockup, loosely basing our redesigns on the City’s current home page. We focused on rearranging certain elements to make a cleaner, more user-friendly design.

Our first mockup distinguishes between the different events going on in Bellevue. It achieves this by dedicating distinct sections of the home page to different topics. This mockup also places commonly searched-for topics above the fold of the home page. Our second mockup explores the space above the fold of the home page in a more personalized manner. Images and titles change to match popular current events happening each day of the week. This mockup also distinguishes between the different events occurring in Bellevue, “tagging” key words to call attention to current events and activities.

The central goal for our first website redesign was to reduce the number of options users encounter right off the bat. We sought to create a simpler, more streamlined user experience. Applied to the website as a whole, this would require reducing the vast amounts of text present on certain pages, suggesting user needs related to various topics, and presenting a more image-based menu layout that can be deciphered at a glance, regardless of language fluency. However, with limited time to initiate our first draft mockups, we limited ourselves to only redesigning the home page.

On the landing page of our first mockup redesign is a familiar image of Bellevue’s skyline and four menu options which address basic user needs which Google Analytics data revealed are among the most common reasons people access the City’s website: Visit Bellevue (for visitors interested in sightseeing), Assess Property (for home improvement), Pay Bills (for utilities) and Apply for Jobs. These topics take up the space above the fold of the home page.

Right below the fold of the home page, is a familiar carousel-style “Upcoming Events” row section. This displays large images which represent upcoming events and activities in Bellevue. Right below the “Upcoming Events” carousel, we added a “News” carousel. This displays...
updates from the City and other governmental information. These two carousels offer visual communication, which participants expressed is lacking from the City's current website. On the current website, weekly activities and news are clustered together in one “Happenings” section; in our mockup, we changed this so visitors of the website can discern between events and news.

At the bottom of our home page, requiring users to scroll down to view it, we include a basic staff directory for the Mayor and representatives of the City. Visitors can see headshots of each person as well as email and phone contact information for each City staff and representative.

Our second mockup of the website is a higher-fidelity version. We modified the content above the fold on the home page. The first thing a user sees when visiting a website is what compels them to continue to use the website (or not). Realizing this, we focused on how to draw users’ attention and immediately engage with them. This mockup uses less space above the fold, directing users’ attention to calendar events. The focal image relates to an event or activity occurring that day. From the first image shown, users can swipe through to view additional images and see what else is occurring later on in the week. Each image is accompanied by a brief description of the event. This feature takes the place of a dedicated “Happenings” section. Whereas the current website includes pictures and descriptions of events in its “Happenings” section, in our redesign we spotlight events on the home page so people immediately become aware of them. The second mockup also included an accessibility accessory. In designing this feature, we considered how we could make the website more user-friendly to vision-impaired and blind users.

Another aspect of the home page we decided to modify was the calendar. We wanted visitors to the website to view clearly events happening around the city, and so we added a picture for each calendar item. We also embedded color-coded tags. This redesign both arranges upcoming events to appropriate categories and alerts people to them. Our inspiration for this came from our interview with Ian, who expressed his interest in being able to more easily find activities to do with his young daughter. By creating the tag “kids” parents like Ian can click to view a list of kid-friendly activities without having to scroll through all other events and activities. The same approach applies to many kinds of events and would help people to view the events that appeal to them.

In both mockups, we removed the large search bar at the top of the screen and repositioned it in the corner. This simple change will compel people to actually take a look at the content on the home page. From our interviews with James and Sandy, we realized certain segments of the population may still rely on the search bar tool; and so we kept it visible in the top right corner.

Bellevue, WA
All city services are on regular schedule
Wed. Nov. 28th

Bellevue City Council

Position 1
Position 2
Position 3
Position 4

John S.
Conrad L.
John C.
Jared N.

Send Email
Send Email
Send Email
Send Email

Call us @ (xxx)-xxx-xxxx
Privacy Policy
Report an Issue
Site Map

A mockup of a government official’s section for the City of Bellevue website. LCY STUDENT TEAM
CURRENT HOME PAGE AND “HAPPENINGS” SECTION ON THE CITY OF BELLEVUE’S WEBSITE

Current City of Bellevue home page CITY OF BELLEVUE

CITY OF BELLEVUE HOME PAGE MOCKUP

Second mockup for City of Bellevue home page LCY STUDENT TEAM
A mockup of an accessibility feature for the City of Bellevue website.

CURRENT SECTION ON THE CITY OF BELLEVUE’S HOME PAGE

CALENDAR EVENTS

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date</th>
<th>Location</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>24th Annual Amenity to the Bellevue Comprehensiveness Plan</td>
<td>24 Nov</td>
<td>Bellevue City Hall</td>
<td>6:00 PM - 8:00 PM, Bellevue City Hall</td>
</tr>
<tr>
<td>Public Hearing - Main Street</td>
<td>25 Nov</td>
<td>Bellevue City Hall</td>
<td>6:00 PM - 8:00 PM, Bellevue City Hall</td>
</tr>
<tr>
<td>Transportation Commission Regular Meeting</td>
<td>26 Nov</td>
<td>Bellevue City Hall</td>
<td>6:00 PM - 8:00 PM, Bellevue City Hall</td>
</tr>
</tbody>
</table>

OUR REDESIGN OF THE CALENDAR SECTION

Dec 11 2018
City Council Conference Room and Council Chambers
MASCOT'S TO WALK KIDS TO SCHOOL

Dec 12 2018
City Council Conference Room and Council Chambers
CITY COUNCIL STUDY AND REGULAR SESSION

Dec 15 2018
City Council Conference Room and Council Chambers
CITY COUNCIL STUDY AND REGULAR SESSION

Dec 18 2018
Menter Slobig Environmental Education Center Council Chambers
NATURE MOVIE NIGHT: "THE ANIMAL HOUSE"

Dec 19 2018
Menter Slobig Environmental Education Center Council Chambers
FAMILY-FRIENDLY RANGER HIKE

Dec 21 2018
City Council Conference Room and Council Chambers
CITY COUNCIL STUDY AND REGULAR SESSION

Dec 24 2018
City Council Conference Room and Council Chambers
CITY COUNCIL STUDY AND REGULAR SESSION
Given limited time to complete this project, we worked with only a handful of interviewees and focused primarily on updating the website’s home page. This work could be expanded to include more users and more parts of the website. However, our updated home page is an important first step in creating a more user-friendly website.

The City of Bellevue could begin by implementing some of the design changes we indicated in our mockups. Since the home page leaves a lasting first impression on users, it is crucial that the information presented on it reflect the common needs and interests of users. A clearer display of activities and events could potentially compel more people to return to the City’s website. Separating the City’s events based on content, as in the first mockup, or applying coded tags, as in the second mockup, would help visitors immediately identify what they are looking at, even if their first language is not English. Accounting for disabled users is another key to creating a user-friendly website, and our team would like to have conducted more research on this topic. We suggest the City of Bellevue consider ways it can add or modify features to increase accessibility for more and different kinds of people.

The overarching goal which guided us throughout our study process and in designing both home page mockups was to create a more user-friendly experience. For users who are already comfortable with the layout and design of the current website, we believe our home page redesign maintains their standards of use. If any users felt confused by the new format of the website, the search function, which we preserved from the original website, could help acclimatize them to changes and retrain their navigation skills. For users who currently experience difficulty using the City’s website, we expect that our redesign suggestions and mockups would meet their needs and enhance their experience using the City’s website.


APPENDICES

APPENDIX 1: WEBSITE MOCKUP 1

Figure 1.1 Example of Home Page Landing Screen

Figure 1.2 Example of Home Page Landing Screen with Menu Items Being Hovered Over
**Upcoming Events**

- Nov. 28th
  - 10am - 8pm
  - Hiltop Holiday Craft Show

- Nov. 29th
  - 1pm - 8pm
  - Mice & Rabbit @ Lake Hills Greenbelt Ranger Station

- Dec. 1st
  - 1pm - 4pm
  - Nature Movie Night: “Salmon Running the Gauntlet”

**News Headlines**

- Safer bikes, faster buses with new bus platform
- Council Roundup
- Budget briefing on Community Development Utilities
- City congratulates T-Mobile on major campus renovation

**Meet the Mayor**

John Chelminiak, first elected to the City Council in 2004, is a champion for human services. The mayor represents the council on the Puget Sound Regional Council Executive Board, the Bellevue Convention Center Authority Board and the coordinating board of All Home.
APPENDIX 2: WEBSITE MOCKUP 2

Figure 2.1 Entire Home Page Mockup

Figure 2.2 Example of Search Bar Selected with Suggested Search Topics

Figure 2.3 Example of Accessibility Menu
APPENDIX 3: CODING PROCESS

Figure 3.1 Transcription Marked with Code Words

Note: The table displayed on pages 51 and 52 should be viewed together.

<table>
<thead>
<tr>
<th>Time</th>
<th>Person Speaking</th>
<th>Sentence/Phrase</th>
<th>Notes</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:27:00</td>
<td>Jerry</td>
<td>Google news shows relevant topics, website events aren't relevant to me</td>
<td>Listed events aren't appealing or engaging</td>
<td>#basic info</td>
</tr>
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<td>Jerry</td>
<td>Navigation structure... about us....</td>
<td>Navigational structure/content doesn't make sense in context</td>
<td>#Bellevue</td>
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<td>Additionally explaining the lack of intuitiveness</td>
<td>#unexpected results / confusion</td>
</tr>
<tr>
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<td>#layout</td>
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<td>Button blends in too much and it difficult to notice amongst other content</td>
<td>#clarification from interviewer</td>
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<td>Jeff</td>
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<td>5:15:00</td>
<td>Jerry</td>
<td>It would be nice to just navigate to a place near me using an interactive map</td>
<td>Describing how he envisions the HP map would work (interactive over static image)</td>
<td></td>
</tr>
<tr>
<td>5:29:00</td>
<td>Jerry</td>
<td>It would be better to have a visual like google maps instead of a search bar</td>
<td>Describing how he envisions the HP map would work (interactive over static image)</td>
<td></td>
</tr>
<tr>
<td>5:40:00</td>
<td>Jerry</td>
<td>I don't use the govt website to pay anything bc all the utilities provided are through third parties</td>
<td>Describing what is useful for him/what he doesn't use</td>
<td></td>
</tr>
<tr>
<td>6:03:00</td>
<td>Jerry</td>
<td>If they were providing map view, traffic could also be shown on there</td>
<td>Elaborating on uses for map view</td>
<td></td>
</tr>
<tr>
<td>6:27:00</td>
<td>Jerry</td>
<td>Right now, all of the things are useless for me</td>
<td>Referring to the information/links available on the HP</td>
<td></td>
</tr>
</tbody>
</table>
same as my expectation, I am thinking because those two should be related with activities but this button give me some confusion (this button give me some confusion)

Because I saw this one should be an activity, and I can read the address or schedual about this.

Those two are articles too, not the event.

There could be a see more.

Yes, I just imagine if there have 6 or 7 same days, they have so many similar item unnecessary for me.

I am a designer, I would like to see the layout. Here is the title, but behind the title their is a action, this is wired, they have the different architecture.

It's not oh you might mind it should be timing based for example it should be based on time

With a lot of time I would select different options, follow the mobile instructions (regarding pay by phone button)

So I thought it would LINK to a map or any kind of detail page.

I wouldnt search because search for me is too heavy... I dont know the exact name of the activity

Maybe here, and find which is related with the utility bill on the secondary page.

About seasonal uh not really seasonal but should be a calendar style

So related to my kids I would prefer there would be a category or a drop down menu

Another reason that I wouldnt use this website is I already paid many times (on PSE) (regarding pay by phone button)

But those two are just LINK to the dates. It doesn't make sense for me because here is some of the details.

I wouldnt search because search for me is too heavy... I dont know the exact name of the activity

Its not oh you might mind it should be timing based for example it should be based on time

But this activities just LINK to the dates. It doesn't make sense for me because here is some of the details.

Yes, I just realize they are not the activities.

With a lot of time I would select different options, follow the mobile instructions (regarding pay by phone button)

Then I properly can clicked it, but I'm not sure, because this can LINK to a map or other pages I'm not sure.

Another reason that I wouldnt use this website is I already paid many times (on PSE) (regarding pay by phone button)

So I thought it would LINK to a map or any kind of detail page.

I wouldnt search because search for me is too heavy... I dont know the exact name of the activity

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Another reason that I wouldnt use this website is I already paid many times (on PSE) (regarding pay by phone button)

But this activities just LINK to the dates. It doesn't make sense for me because here is some of the details.

Yes, I just realize they are not the activities.

With a lot of time I would select different options, follow the mobile instructions (regarding pay by phone button)

Then I properly can clicked it, but I'm not sure, because this can LINK to a map or other pages I'm not sure.

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But those two are just LINK to the dates. It doesn't make sense for me because here is some of the details.

Yes, I just realize they are not the activities.

With a lot of time I would select different options, follow the mobile instructions (regarding pay by phone button)
Figure 3.2 Code Words Used to Mark Transcription Continued

<table>
<thead>
<tr>
<th>Related to Bellevue downtown, or Bellevue city</th>
<th>children’s activities like community center..</th>
<th>traffic?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otherwise I would use, uhh... menu here, on search</td>
<td>the Bellevue downtown park provides many kinds of activities</td>
<td>yea this reminds me to think about another functionality. UH if you are going to for example I select a category</td>
</tr>
<tr>
<td>And then they...they can...if they couldn't see any other related article, they could just click to explore more news</td>
<td>for example last month... 2 months ago they provided bi weekly uh ya know movie time</td>
<td>which menu, discovering bellevue! let me see</td>
</tr>
<tr>
<td>Except the search title... there’s only one actionable title... “more”...</td>
<td>ya know pictures are more attractive than the sentence</td>
<td>which is children category and I click it its better if I can see the ranges of ages for children</td>
</tr>
<tr>
<td>Oh... But the term “more” is too vague for me</td>
<td>like for disabilities you should use icon, for that group of people</td>
<td>no, nothing</td>
</tr>
<tr>
<td>Highlight the “see more” so the user can easily find the action</td>
<td>if that happened again, I would try to search bellevue official website</td>
<td>so I can deeply select the subcategory for a specific group of children for example</td>
</tr>
<tr>
<td>And you’re talking about like the buttons below the pictures over there?</td>
<td>uh guess you can click on that</td>
<td>I don’t know how to do that</td>
</tr>
<tr>
<td>Put a button below all those sections</td>
<td>yea you can’t make the direct connection between the picture and the description</td>
<td>should be presenting something like that</td>
</tr>
<tr>
<td>Why not use different colors depending on functionality? Like activities... red color</td>
<td>yea otherwise I would have to read the articles um however even though I read the articles cause im over here</td>
<td>yea yea this page shows me some of the info but not too broad just some basic information</td>
</tr>
<tr>
<td>People with disabilities can identify not just with icons, but also colors</td>
<td>I probably choose select some pictures here</td>
<td>because this one, this, this entire section is related to...articles or news</td>
</tr>
<tr>
<td>Use color as a way to better navigation flow</td>
<td>2 young children kids um and like middle school range children im not sure how to call that but</td>
<td>what is the fire permit?</td>
</tr>
<tr>
<td>yea youth theatre yea they are the same almost the same</td>
<td>I mean you know which are not a group</td>
<td>comm center? what is the comm center</td>
</tr>
<tr>
<td>when I select here because the only word related to children</td>
<td>2 young children kids um and like middle school range children im not sure how to call that but</td>
<td>Because...um...this one is the (hero?) section, uh, everybody, when they go to the website they will see this...this section, freshly</td>
</tr>
<tr>
<td>but this is theater I would like to bring my 2 year old daughter</td>
<td>I probably choose select some pictures here</td>
<td>Why should I go to the page?</td>
</tr>
<tr>
<td>if I lost here if I can try again I would go to the website main page and then permit</td>
<td>2 young children kids um and like middle school range children im not sure how to call that but</td>
<td>And then they...they can...if they couldn’t see any other related article, they could just click to explore more news</td>
</tr>
<tr>
<td>umm yea I believe I can find the relative information here</td>
<td>I probably choose select some pictures here</td>
<td>What is the meaning?</td>
</tr>
<tr>
<td>ya see here, fire permit</td>
<td>I probably choose select some pictures here</td>
<td>Like see...see more here, something like this. More stories...city newsroom</td>
</tr>
<tr>
<td>so again, when you get to the comm centers page you have completed this task</td>
<td>I probably choose select some pictures here</td>
<td>But what is community center? (But what is community center?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>But I would go here, uhh...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t know that this...this...uh...this community center means for...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes...the information structure is not...very clear for the audience</td>
</tr>
</tbody>
</table>

| Yea...the information structure is not...very clear for the audience | the贝尔维尤市中心公园提供了许多活动类型 | I don’t know that the calendar icons are similar |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | Honestly I don’t know what’s that |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | Above the “see more,” something brief |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | Community center...(Community center...) |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | The first thing I would want to see on a government website would be a map |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | Really? But actually if I found some euh, interesting, activities, I would go to the downtown parks or downtown uh... any downtown stores. I wouldn’t go to a community centers. |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | It would be better to have a visual like google maps instead of a search bar |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | There are no reason for me to do that why. |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | If they were providing map view, traffic could also be shown on there |
| Yea...the information structure is not...very clear for the audience | Yea here is a picture | It should have activities that are happening right there... but it's just articles |
Firstly, I will go to the menu. I wouldn't think this one will be providing any...any job related information, I will go to "about page".

I will go to there umm...footer. There be...supposedly there'd be about

Ohh...oh the police station. Let me find...let me find it

Uhhhh I will go to the government_console.

Maybe. Let me try

Because this one is related to...any...government things

Government council members

Uhh if there's nothing I will go to...

Ok here's...here is the...police...uhhh...

I can go to the uh...the website here. The police station

All of them (follow the ?)

So...yea this is the...the (dam?) with the department

And uhh...they, I will go to...umm...

This a, this is a term for me, community

Why is the website providing news when it should be providing info on activities and utilities

But probably others would treat community different...but...for me uhh, in my...in my mind, from my perspective of personal experience I would think community here is just for a group of people who you know, who are enjoying a specific area and the benefits which are provided them by this community...by a specific group

For this kind of website, I wouldn't use a search bar

Government? Maybe government I don't know, let me check it

Yea I couldn't find that but, career. Yea anyway

Hmm?

Why the menu here are different from...

Oh oh, here is already open

Oh I didn't real - realize this is a, this is a, this is a drop down menu it's kinda weird

Supposedly a career page

Supposedly there..there should be a..LINK? Or something, something like that

But, this page is not related to this one

This is the open, open position for...all of the Bellevue departments