COSC 341
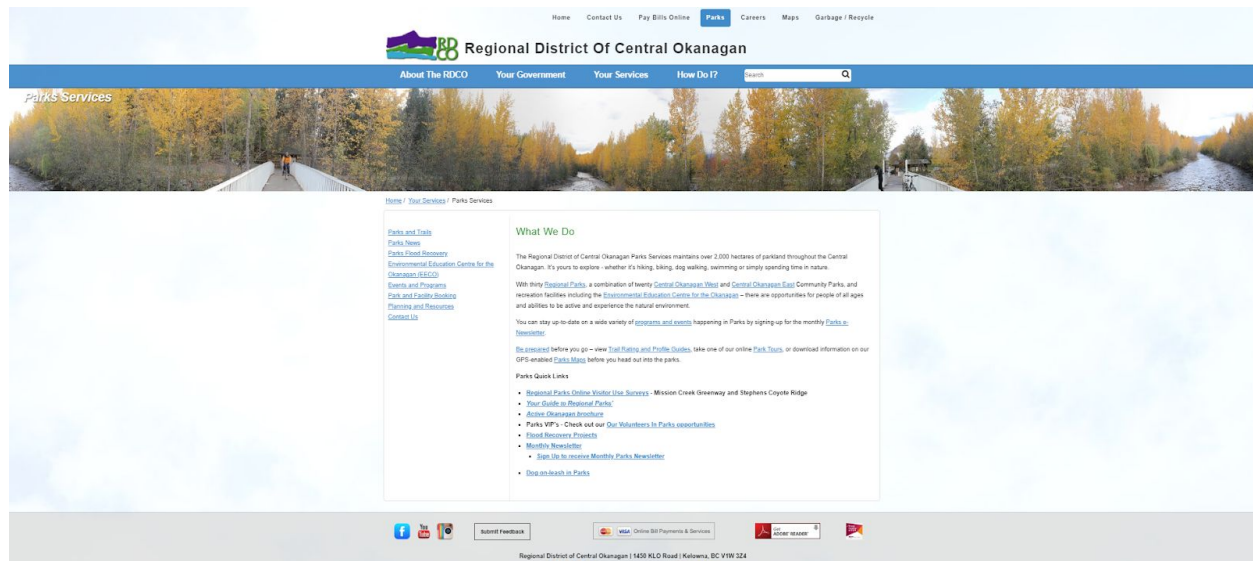
User Research and Requirements Gathering
By Calvin, Jared, Andrew, and Christina

Research of problem domain

There is a need for information on the Central Okanagan parks and recreation area's so we focus on the "Parks" section in the Regional District website. This section features maps of where and what is included in the parks as well as a series of links down the left hand side. Each link redirects the user to a page that is specific to that park. The problem centers around the user clicking on a link to a specific park and having that link along with the other main links that originally appeared down the left hand side of the page disappear. The user would have to navigate back using the back button to get back to the original page, otherwise what they will now see down the left hand side is a new set of links closely related to the park they selected.

Identify goals for project

Our goals are to improve user navigation and visual/data organization on webpage, to have no animations and to be responsive for both web users and mobile users.

Identifying Functional and Non-Functional Requirements

Functional Requirements:

- The website should list all parks that the RDCO supports
- The website should list details on each of the parks
- Users should be able to search for parks

Non-Functional Requirements:

- *Performance*: Should be fast and simple to find different parks
- *Device*: Should scale to whatever you're viewing the website on (PC, MAC, Tablet, Tablets, Smartphones)
- *Usability*: Language will be English and French
- *Training*: No training required, layout should be simple for users to easily be able to know how to navigate the website
- *Availability*: Website will be up 24/7. Location is Kelowna.
- *Security*: There is no user login or password to access the features of the website.

Discuss and document requirements of system

The website will be simple to use and navigation should be easy. The website will use basic colors, these will most likely include black, blue, white and green.

Expert Evaluation of Existing Systems

North Okanagan Regional District: http://www.rdno.ca/

Rule of Thumb	Is this rule being applied?	Is the rule violated?	How can this rule further improve?
Visibility of system status	Yes	No	Faster animations for switching tabs. Otherwise great.
Match between system and the real world	Yes	No	
User control and freedom	Yes	Yes	Provide user with more available features for control rather than just a back button.
Consistency and standards	Yes	No	
Error prevention	No	Yes	Errors in form submissions returns the previous page with no indication of what the error was, or how to fix it.
Recognition rather than recall	Yes	No	The use of color will help the users to remember the different options available.
Flexibility and efficiency of use	Yes	Yes	Animations can feel clunky and take up the users time.
Aesthetic and minimalist design	Yes	No	No clutter, everything is clearly organized.
Help users recognize, diagnose and recover from errors	N/A		Couldn't find a way to break the site to get errors to compare.
Help and documentation	Yes	No	No real improvements, but perhaps add a second place to see *How Do I...* menu options.

Kelowna Regional District: https://www.regionaldistrict.com/

Rule of Thumb	Is this rule being applied?	Is the rule violated?	How can this rule further improve?
Visibility of system status	No	Yes	Doesn't provide feedback to the user to let them know what actions they are completed or updating "visibility". It is more static than anything else.
Match between system and the real world	Yes	No	Language is straightforward and is what you would expect from a government website.
User control and freedom	Yes	Yes	Provide user with more available features for control rather than just a back button.
Consistency and standards	Yes	Yes	Considering F patterns that users have when browsing web pages, the navigation should be moved to the right of the page as the content is more important to get to than the navigation bar.
Error prevention	Yes	No	The only error that we came across was to do with map layers not loading.
Recognition rather than recall	No	Yes	Reduce the amount of links by using sub categories or another format to clean up the site. This will allow for a cleaner page and reduce the confusion by the user to remember the available options on the page.
Flexibility and efficiency of use	No	Yes	Website does not have function keys, hidden commands or macros to make it faster for the user.
Aesthetic and minimalist design	No	Yes	There is a clutter of web links down the side of the page. These need to be cleaned up and organized for easier access.
Help users recognize,	No	No	Because there are little or no forms, any error recovery is adequate for the

diagnose and recover from errors			current interface. Most if not all problems can be solved by clicking the back button. Perhaps add on screen contextual buttons.
Help and documentation	Yes	No	No real improvements, but perhaps add a second place to see *How Do I...* menu options.

User Research

A usability test conducted with a early twenties female. She isn't an avid hiker and wants to learn about the possibilities for hiking in the Kelowna area. The user was looking for a park that would give her the possibility to hike and have picnic areas. After clicking around the website she reached the park lists where she wasn't able to find the interactive map portion and used the clickable list in navigation to find the parks. The user liked the layout and simple design of the park, but it she said it could have more directions with where to look.

Current User Practices

How:

- Physical mapping
- Tours
- Word of mouth

Where:

- Information centers

Why:

- To look for Parks and Trails

When:

- Business hours only

User Wish List

Our users would like to make it more clear what the "Interactive Park Map" and "GPS-enabled Trail Map" are before/after clicking on them. Some users did not initially find the interactive mapping when searching for parks, so they would like this to be easier to find.

Combination of observations, surveys, focus groups, interviews

We came up with the following survey questions to ask users:

1. Where do you normally go/look to find parks and trails?
2. Initial thoughts of the website (layout/design)?
3. Was the information you found useful? (yes/no)
4. How easy was it to find the information you were looking for? (Easy, Difficult)

From the answers we received from users we found out hikingaddiction.ca and physical maps were other places people went to look up parks and trails information. Users initial thoughts of the layout and design is that it is "Easy and to the point". The maps were also a stand out feature. Every user who took the survey found the information on the website to be useful. Lastly, users found the website to be easy or average to navigate and find the information they were looking for.

Personas

Name Brian	**Preferred Method of Communication** • Phone • Face-To-face	**Tools They Need to Do Their Job** Knowledge of the products.
Age 18 to 24 years	**Job Responsibilities** Sell as many products as you can.	**Their Job Is Measured By** Produts sold.
Highest Level of Education High school degre	**Reports to** Supervisor	**Goals or Objectives** Travel the world
Social Networks	**They Gain Information By** Google and testing out products.	**Biggest Challenges** • Problem Solving & Decision Making
Industry Salesman		
Organization Size 1-10 employees		

Sally Ann - Vet

Behaviours

- Gets up at 5am every day
- Has a cat and two dogs
- Works 12 hour days
- Does like people with big trucks

Facts & Demographics

- Age: 40
- Works in Vet Clinic
- Lives in Lake Country, works in Kelowna
- Single
- Household 100k a year

Needs & Goals

- Enjoys taking her dogs for long hikes/walks
- Doesn't like motorcycles. They are too loud.

Dave - Retiree

Behaviours

- Needs to be in control
- Must have a plan at all times
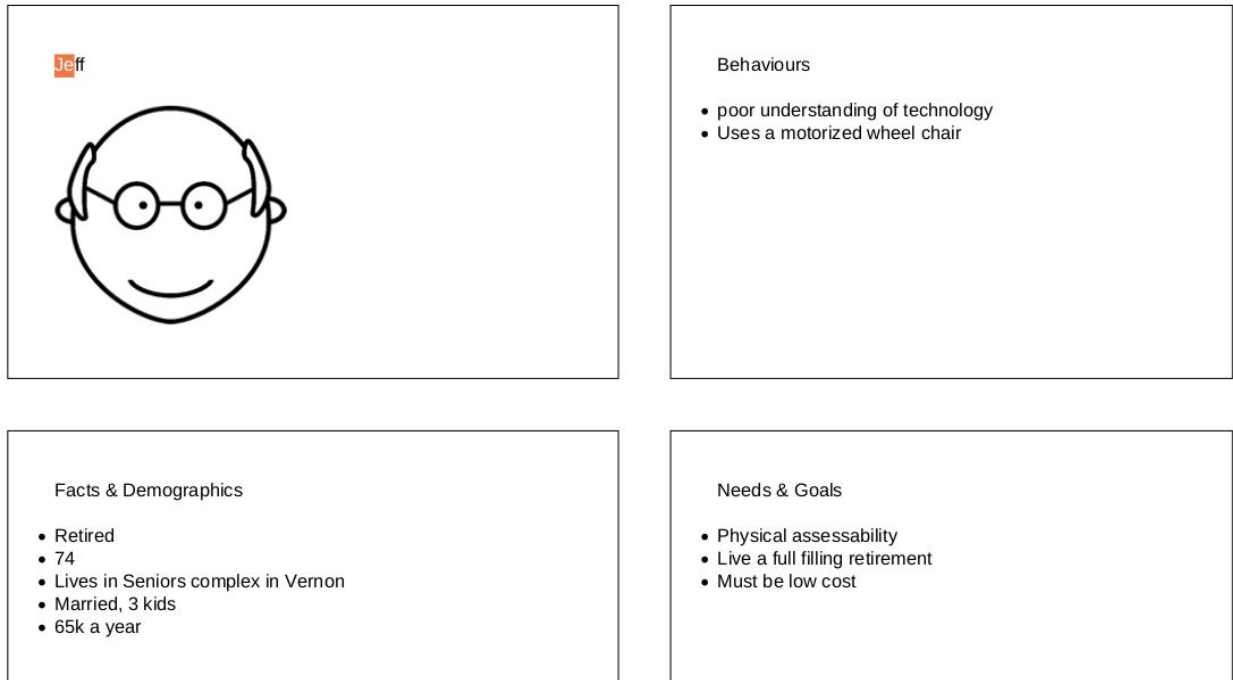- Has had the same morning routine for the last 27 years

Facts & Demographics

- Retired
- 68 years old
- Married
- 3 children
- 4 grandchildren
- Lives on west coast
- Enjoys outdoors
- Busy areas makes him feel claustrophobia

Needs & Goals

- Spend time with family
- Cannot be overly expensive
- Easy access to information

Jeff

Behaviours

- poor understanding of technology
- Uses a motorized wheel chair

Facts & Demographics

- Retired
- 74
- Lives in Seniors complex in Vernon
- Married, 3 kids
- 65k a year

Needs & Goals

- Physical assessability
- Live a full filling retirement
- Must be low cost

Users of the system

In general users will be visiting the site to view the Regional District of Central Okanagan Parks.

Primary Users

Primary users want to see the detail on the parks. For example, the list of parks, park/trail maps, GPS/interactive park maps, what animals and plants inhabit the park, things to do, general information, directions on how to get there.

Secondary Users

Tourists, possibly using the website through a tour agent.

Tertiary Users

Regional district staff working at the parks.

Scenarios

Brian likes to travel the world he is in town on a business trip and heard some good things about the Central Okanagan in regards to trails. He goes to the Regional District website to find out the best Parks for hiking in a large group since he knows the people he will be meeting with this week will be interested. After some searching and a few mishaps he finds some events coming up that may be an easier fit for the people in his group without much outdoor experience and decides on 'Fins and Fur' an Exhibit at the EECO.

Sally Ann is a Kelowna Veterinary who enjoys hiking and taking long walks with her two dogs. She uses the website to find local parks that are dog friendly and show her views of the Okanagan she wouldn't see any other way. She is used to the website and finds it frustrating but knows where to go to find a new park she hasn't taken her dogs to before.

Dave needs to always have a plan, when he goes to access the current Regional District website he finds himself frustrated after clicking on a link that takes him away from the main page. After trying to navigate back to the original Parks page he gives up in frustration and goes to ask his wife for help.

Jeff is new to technology he found out about the Regional District website from his nephew who thinks they should go on a hike together. After Jeff google's to find the website he gets confused on the home page which says Regional District of Central Okanagan, where is the Parks section? After he scrolls around the page with his eyes, since he isn't very good with the mouse either, he finally finds the "Parks" link at the top of the page. On the main parks page he is again confused because his nephew mentioned a specific park but he can't find it as an option in the links on the page. It takes him a few minutes to realize that he needs to click on the "Regional Parks" link to get to the list. After some continued searching he finds the right park and clicks on its name on the left. Here he finally finds the directions to the park.