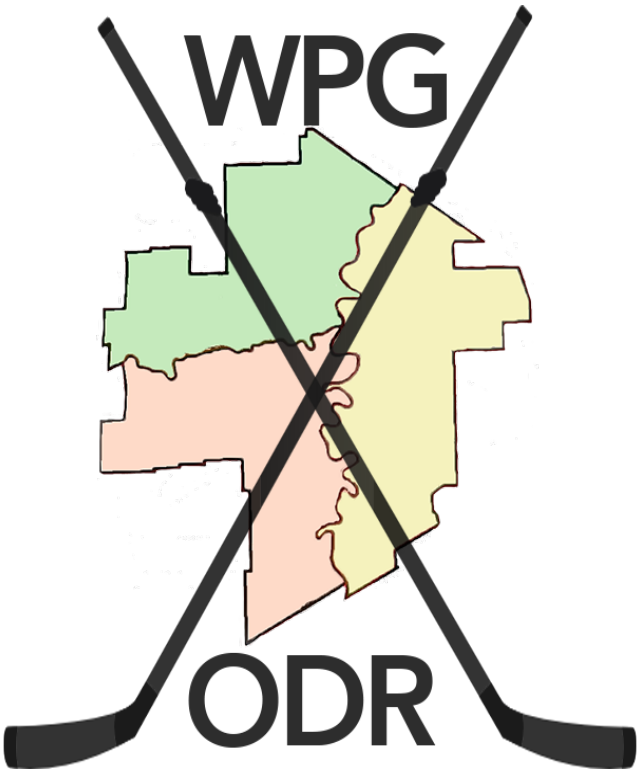
WINNIPEG
ODR



Team Number: 18
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COMP 3020 – HCI Project Milestone 1

PART A – Project Idea

Our project plan is to build a web application for monitoring Winnipeg's outdoor skating rinks. Due to Winnipeg's current lack of any tracking of the status (open/close, etc) of their outdoor rinks (referred to as ODRs from here on) our application revolves around user input to keep up to date. Our concept is simple; when someone wants to learn more about the ODRs near them or check on the ice status, they can open up the web site and select their area of the city. From there they are presented with a list of ODRs in that area and the current status of each of those rinks. If the user would like to learn more about a particular rink they can simply click on the rink and it will bring them to a new page with photos of the rink, a map location, overall rating of the rink, amenities (warm up shack, bathrooms near buy, lighting, etc), and so on.

The core purpose of our application is to keep track of the usability of the ODR, ergo if someone wants to go to a certain ODR but wants to be sure it's open they can go online and check. Likewise, if someone goes to an ODR and find that its current status does not reflect its online one then they can change its online status. Another goal for our project is to provide a form of communication between users with the purpose of organizing meetups at ODRs. Our idea is similar to a forum, with each ODR being its own thread. The plan is to allow the user to go onto the system, select their rink, and post that they are going there at X time to play hockey, for example, and that anyone who wants join in can come down.

PART B - Stakeholders

There are many users who will be affected by our project. In general, it will be used by anyone wanting to know about a certain rink or people trying to find a rink in their area. There are many reasons to go to an outdoor rink which means there will be many different types of users. Most of our impacted users will likely be people who know how to skate.

Our primary users would be young skaters and hockey players. Experience in skating won't matter since the outdoor rink is usually a place where no one is at the same level and people adjust to make it a fun time for all. Usually the people who have been playing hockey for years play fair with people who haven't been on ice for years. We will be targeting a younger crowd from teens to young adults looking to connect to get a group of people to skate or play hockey with. Skaters may not want to go to a rink if they notice everybody went and tore up the rink the night before and the Zamboni didn't flood it the next morning. These people most likely already know how to skate and are looking for the best experience (player/ice quality)

Our secondary users would be parents and their families. Parents who want to find a place to take their kids to skate. Maybe they don't want to take their three-year-old to the rink when 20 young adults are planning a game the same night. They could also use the site to find locations and ratings so when they teach their kids how to skate they won't go somewhere with choppy ice causing their kids to fall a lot. Parents with toddlers would also want to know if the location had resources like a heated shelter for cold days.

Event Organizers unfamiliar with the area may be looking for an optimal location that isn't busy so they can hold a tournament or party. They may not know a lot about the rink itself and

what to know what amenities are available or if it's even open. The users could be of any age but most likely would consist of a large group of people in any case.

The city workers or volunteers maintaining the rinks would update status of the rink after a flood or to declare when its ready. These individuals would have experience in getting the most accurate update of the overall status of the rink. They may notice issues and want to fix something that needs repair thus changing the quality status of the ice.

Anyone who doesn't want to pay or follow the rules of an indoor rink may want to use an outdoor rink instead. Most indoor rinks force you to wear a helmet, bring certain equipment, and schedule your time by the hour. Outdoor rinks usually have no rules and almost all of them are free. People wanting to play when they feel like it or are in the mood to would rather go to free outdoor than a crowded indoor rink. These people may not be as organized or might what to use the rink at odd hours (i.e. late at night.).

PART C- User Research

Learn: **Anthropometric Analysis – Use human population measurement data to check the coverage and suitability of the design solution for the target user group.**

An outdoor rink is a public place that anyone can use. This signifies that there will be a userbase. An individual might be looking for the closest open rink to skate, play, practice, etc. There will also be cases where the user is looking for people to play or watch people play. We need to come up with a design where it will be suitable for general use. Since there's such a broad userbase, using the human population measurement data to check the coverage and suitability of the design solution for the target user group (*Anthropometric Analysis*), it will help us to identify a representative group of people for testing design concepts and evaluate the general usability of product details. Selecting individuals in different age group for each interest on the rink to represent the population will help us design an interface for general use.

Ask: **Surveys & Questionnaires – Ask a series of targeted questions in order to ascertain particular characteristics and perceptions of users.**

Using Surveys and questionnaires is the most common method to quickly elicit answers from large number of users. Since we chose to have a large number of individuals for analysis, this method is the most reasonable and reliable way to elicit information. We'll be conducting web-based surveys to collect user's perspectives from many people. This survey will ask the individual's age and interest in the rink. After data is collected, the information will be organized by the interest and age groups. Then we will analyze and compare the needs and concerns of the different groups and come up with a design interface that will be useful for everyone in all target groups.

Try: **Try it Yourself – Use the product or prototype you are designing.**

In order to come up with a design that can be for general use, the design should be based on the information collected through the surveys and questionnaires. Trying the prototype ourselves will help us experience what the actual users might have. It will also give us an understanding of the product's effectiveness and whether it meets the requirements. A good design will allow for easy navigation through the interface. Since this is for general use, the whole team should be able to conveniently and satisfyingly use the product with ease.

Summary

The purpose of this research is to find out what information people would like to see and need to see when looking for an ODR. We conducted a web-based survey to gather data on different user's needs and wants (Ask). Based on the survey, older people are either looking for a rink that has the least people or a rink where they can peacefully skate. Teenagers are looking to play hockey and young children to skate. The data is collected and the information was organized by interest and age groups. Then we analyzed, compared the result of different groups and affiliated all perspectives together to come up with a general design (Learn). We came up with a simple design that has separate regions and a list of outdoor rinks. We concluded that the design will include a histogram that indicates the time when the most people come, a live chat that can help organize meet ups, map locations and most importantly basic information about the rink such as contact information, address, ice quality, rink status if open or closed, overall rating etc. We tested out the design prototypes ourselves to check if it's valid for general use and easy to understand and navigate through (Try). In this last method, we focused on the visual concept and interface of the website.

PART D – Requirements

Function - System should allow users to find ODR's by location and check status as it pertains to whether the rink it open, if it has amenities and what the ice quality is like on that day. Should also allow users to interact with each other via live chat, which would allow for users to dialog and set up events. The system should also have the ability to leave comments and ratings for each rink and be able to be marked as open/closed by use of a button.

Data - The system should store rink information for each rink (location, name, ice quality , chatroom, rating, histogram showing peak times, comments and map photo).

Environmental - Users will use the system when looking for open ODR's for the purpose of skating or playing hockey.

User Characteristics - Users will be of all ages, anyone with an interest in playing hockey or ice skating, with a focus on young adults, families with kids and older skaters.

Usability - System should be easy to learn and use. It should also have an efficient user experience to provide a fast check of the ODRs.

PART E – Scenarios

Scenario 1:

Its middle of December and there is a high school student who wants to go skating with their friends tonight. It was relatively cold the past two weeks and there might be ice on the rink. The student then goes to the site “WinnipegODR” selects the area and sees that the rink has a large “open” status beside it. They let their friends know that the rink they’ve been waiting for all summer is finally open and they will see who wants to go later that day.

School just let out for the day. Everyone heads home and logs onto the site and sees the rink is in mint condition, 5/5 stars. They even see other people noting that the shack is unlocked and bathrooms are available. The student then sends a message out on that rinks feed to see who wants to play and most of the guys are in to play some hockey. It’s a go. On the way, they walked past another rink they thought was down that turned out to be ready. They logged on and posted that the rink looked open for the season so people would see.

Later that night and early through the next morning before class everyone was able to go back to the site and comment and rate the ice quality and that the Zamboni didn’t do a good flood. The rating reflected the entire group for that day and would be available in case the maintenance people checked online before they head out.

Scenario 2:

Mom and Dad just get home after they pick the kids up from daycare. They are looking to go skating after supper. They go online to the site, click on their area, and notice all the high school kids are going to the outdoor they usually attend to play hockey and don’t want it to be busy with pucks flying while they teach their daughter how to skate. They notice the other rink a few blocks down the street is open and people commented last night that the ice was well maintained. They notice there hasn’t been too much activity today and decide to go to the less busy rink.

They proceeded to go to the rink and after they were done they came home and had no trouble putting a review up, noting how the shack was clean and the ice was in pristine condition. They also added that there was extra sticks and goalie equipment at the location if anyone else goes there. Since they usually go to the other rink they also gave this rink a rating showing they would likely go back to it. There evening was full of enjoyment and a complete success.

Appendix