

SENG 310: Milestone 6 Final Report

Problem description and motivation

1. Lacking players in a group when planning to play a team sport

People often find it is hard to gather people together to play team sports. This problem is for the team leader or the coach, who are having a hard time finding sports members who are qualified to join the team and play.

Motivation: Makes it easier for people to find prospective sports with our app. And quickly let other people find out about your event, then as the leader, you can simply just choose the people that you want to invite and form a group.

2. Not having a group to play a team sport with

For those users without a group to play with, who have some time, and want to join a sports team. Sometimes, when they come to the field or the gym, even if there are some players available, it is hard to find the sports of interest.

Motivation: Makes it easier for people without a team to join a team with the same interest. There would be more uncertainties when you come to the playground or gym, and an unlimited amount of events could take place. The app provides you with a way to simply search online, then find out the group you would like to attend, and click to join.

3. Make it easier to find other players and contact them more efficiently

When a player has joined the team, it is easier for the leader to locate their players. Therefore, he won't have to worry about leaving someone else behind.

Motivation: Easier for a leader to manage their team and reach their team members quickly. If emergency occurs, the leader could contact each player with efficiency.

Existing solutions that address the same problem/need

1. Use social media network to contact friends one by one, moreover, have to ask their interest as most people have different interests with different sports. Another problem is sometimes you would have to wait for a really long response.
2. Going to the nearby gym or sports field to see if there is a spot available to play at. Often needs to wait if the location is busy or not enough available spot to join.
3. Text messages or phone calls to see if friends are available to join the sport activity at nearby location.

4. When some users want to cancel, the leader have to use different social media network to respond with his team members. If there are a lot of chatting messages, it would be really hard for the leader to justify which one is the team message.

Proposed Solutions

With the rise of pressure in metropolitan daily life, people tend to play competitive team sports to release the pressure in North America. However, individuals are feeling it is difficult to find a group with their friends in common time to play a team sport together, and each group is hard to find sufficient players to play a team competition. The existing solutions are not effective enough to solve the problems. So we propose our solution, TeamUp mobile app, which is a platform that provides a communication and social environment that those people who want to play a competitive team sport can efficiently find their teammates.

Specifically, the TeamUp app allows all users to create an event, which contains all detailed information, including title, activity type, event type, date/time, location, number of players needed, and the event description. Once the activity is created, other users would notice it in the find event activity by searching the event name or browsing the same activity type. All users are welcomed to join the event. Once the new player join the team, the other team members would get notified, and they would be able to check all team members' basic information. My event page would list all incoming events that involves the user and, once the event is passed, it will automatically removed from the user's event list. And if users find someone you really want to make a friend of, you can also send an "add friend" request to him/her. At last, in order to increase the familiarity and build team dynamic, users can improve their personal profile by uploading a selfie or adding more interest and descriptions about so other members would know you better.

Personas

1st persona: Bobby

Bobby, a 22-year-old male student that lives in Victoria, BC, who enjoys playing recreational sports with his friends during his free time. He loves to compete in sports such as basketball, volleyball, and floor hockey. Bobby also works part time as an intern at a company to pay for his tuition. Due to this factor he had no choice, but to stop competing in his intramurals leagues. Juggling between working and schooling, he finds it a challenge to make time to plan or play sports during his free time and often cannot find a common time for his friends. The tools he use to find or organize events are facebook and through texting on phone. Bobby is always looking to compete in sports around where he lives when he does have time and would love to join anyone's team, as long as he gets to play.

2nd Persona: Rochelle

Rochelle is a 20-year-old student who attends Simon Fraser University in Burnaby and coaches an intramural soccer team at the university. Intramural practices are twice a week, one during the weekdays and one on the weekends. She notices that the attendance to her

practices have been dropping a lot and has already had to cancel a few practices due to the lack of players. After a week, a few team members approached her and explained that their courses are very demanding this semester and will no longer be able to play for the team. Rochelle becomes frustrated because there is a game in two days and they are short three players. If she is unable to find three new players, they will not be able to compete and will automatically lose the game.

Scenarios and Use cases

Bobby's Scenario:

On a sunny saturday afternoon, Bobby has to work overtime until 4:00PM due to the heavy workload from both work and school. After finishing all his work, he desperate to have a basketball game with some friends to release the stress. Bobby doesn't have a car so he can't travel to basketball courts that are too far from him. So he takes his phone, opens the TeamUp App and looks at the nearby games that are happening tonight. There is a 4v4 basketball game at the Carsa basketball court at 7:00PM with 2 opening spots left. This is perfect for him since he only lives 2 blocks away from CARSA and will not need to bus. Thus, he doesn't need to waste his time texting or creating an event on facebook to gather his friends for a game. And after that game, Bobby has made some new friends who he could play with in the future.

Rochelle's Scenario:

Two days before the game, Rochelle decide to find three more players to fill up the missing spots, in order to prepare for the coming competition. While she was warming up at the soccer field, she opened up the TeamUp App and posted an event. The event which indicate that there is a upcoming game in 2 days at location XXX and the team is missing 3 players. 10 minutes after she post this event, Rochelle received notifications on this event of players that are interested in joining the team. Rochelle have saved a huge time in finding students in comparison to other methods such as, facebook or sending text message one by one. Rochelle is filling up the missing spots on her team by using TeamUp App! And after the game, Rochelle gained some players that would love to join the team permanently

Use Cases

New User Registration:

1. User opens the TeamUp application
2. System prompts user to login or sign up
3. User enters username, password, full name, and email
4. User clicks sign up and the account is created
5. The system emails the user a confirmation link
6. The user goes to their email and clicks on the link
7. The account is verified
8. The user can now access the homepage

Find an Event to join:

1. In the home screen, the user chooses the option to find an event to play at
2. The system prompts the user to enter a type of team sport or a list of them

3. The user begins typing the team sport to search for it and selects it from the drop down menu
4. After entering all the team sports the user is interested in, the user taps on search
5. The system will list all the nearby events that correspond to the chosen team sports listing showing the nearest events at the top
6. The user clicks into an event to look at the description. The event description will list the players who have joined and display the event's location and date/time
7. The user can join an event by pressing on attending when looking at the event description
8. The creator of the event will receive a notification that the user has joined
9. The user can now attend the event at the specified location, date, and time

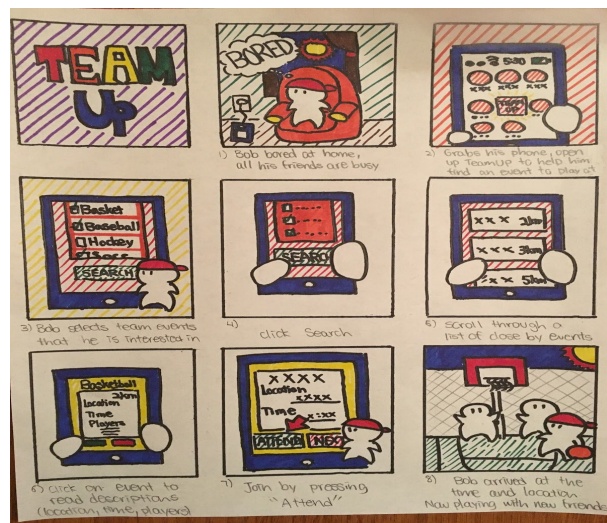
Create an Event:

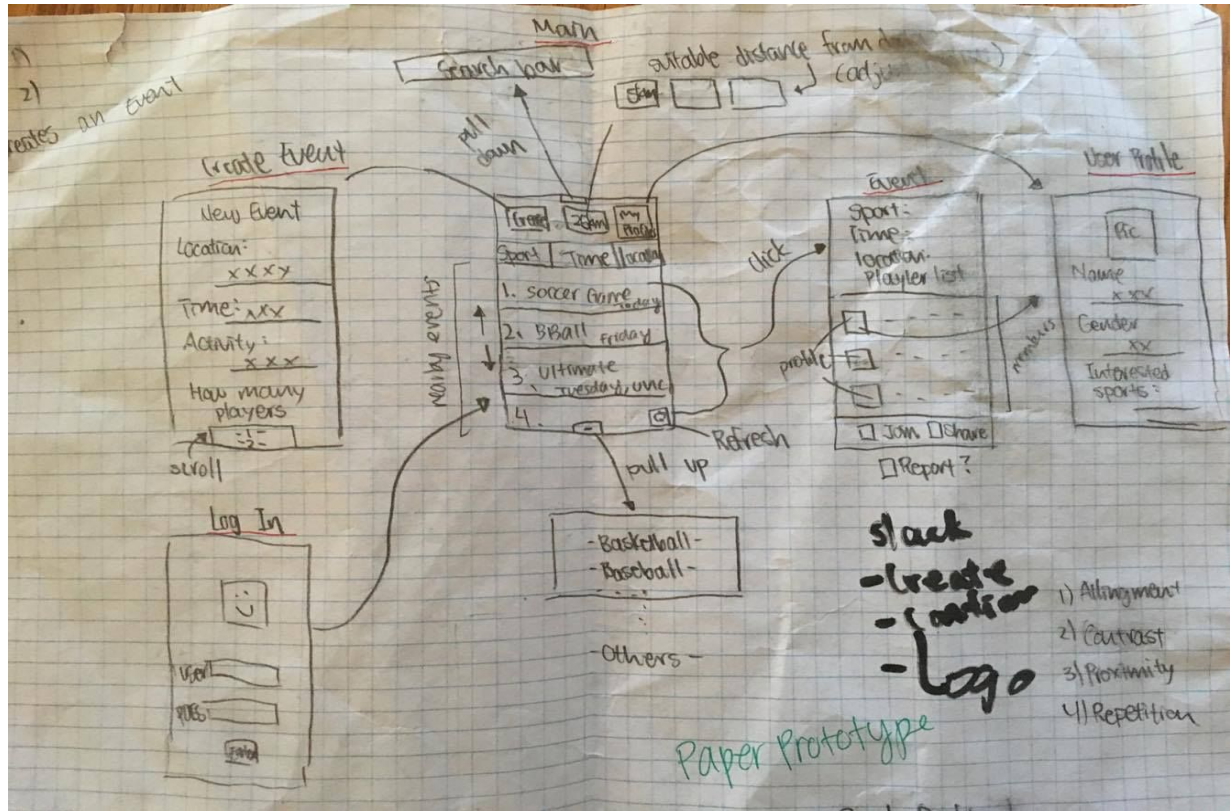
1. In the home page, the user chooses the option to set up an event
2. The system prompts the user to select an event type: public or request to join
3. The user selects the type of team sport for the event by searching for the team sport and clicking on the possible activities
4. The user enters the number of people needed for the event
5. The user specifies the location of where the event will take place by entering the address of the location
6. The user enters the date and time the event will take place
7. The user can then choose to enter a brief description of the event
8. Finally, the user posts the event and waits for people join or request to join the event
9. Once enough people have joined, everyone attending the event will meet at the specified location, date, and time

Evolution of the prototype

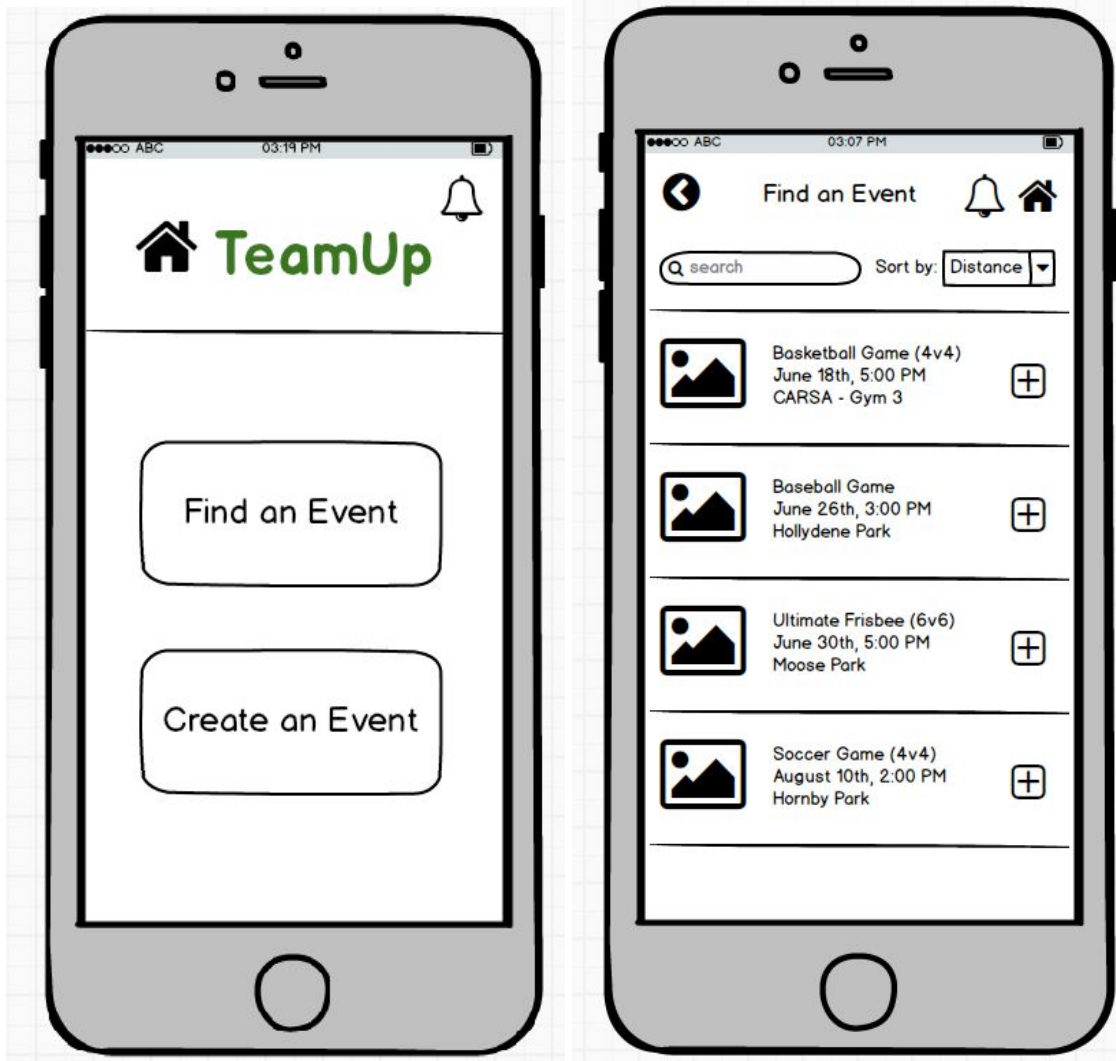
Use case: Find an Event to join

Low Fidelity Prototype: Storyboard & rough rough draft

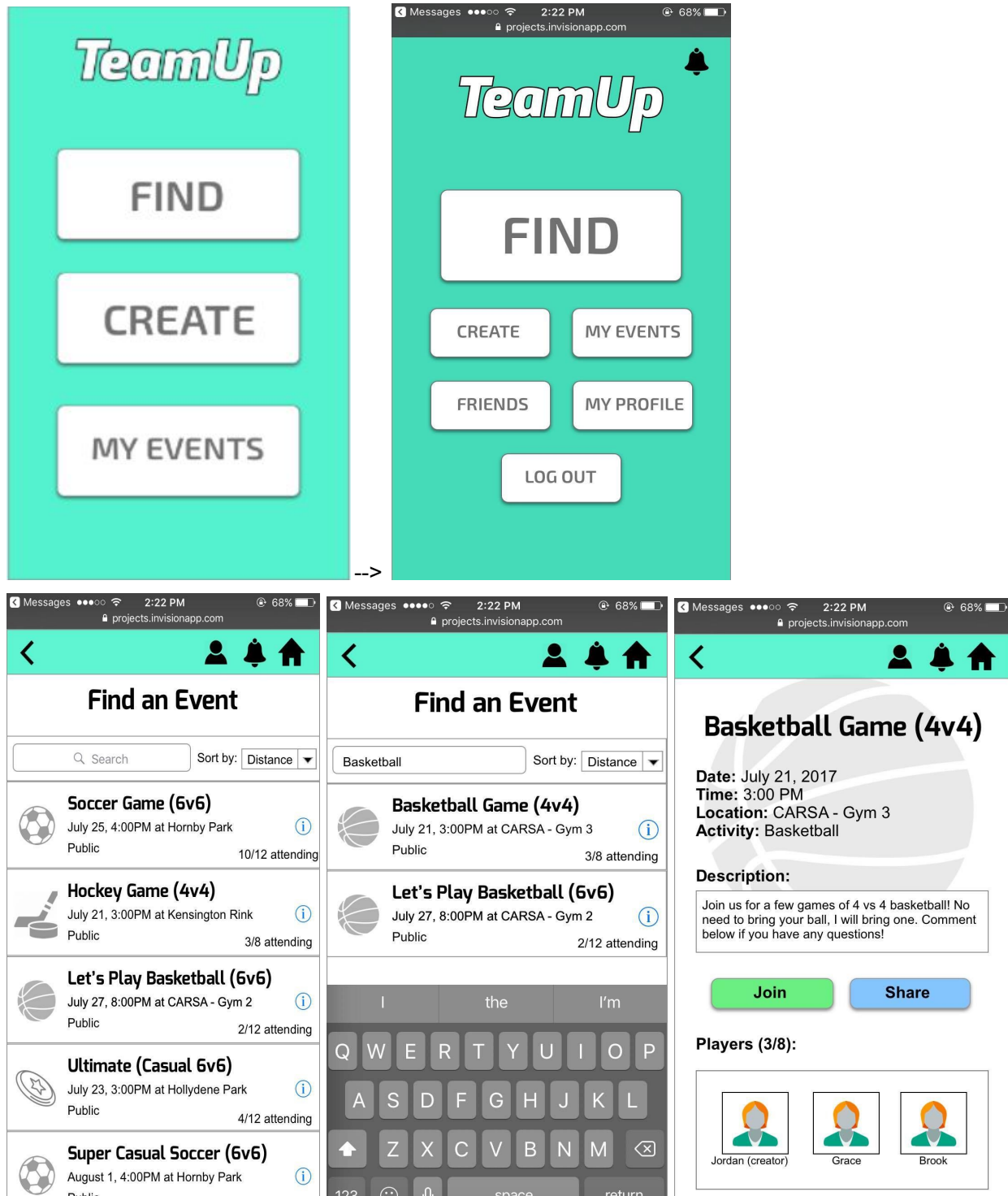




Medium Fidelity Prototype: Balsamiq



High Fidelity Prototype: InVision



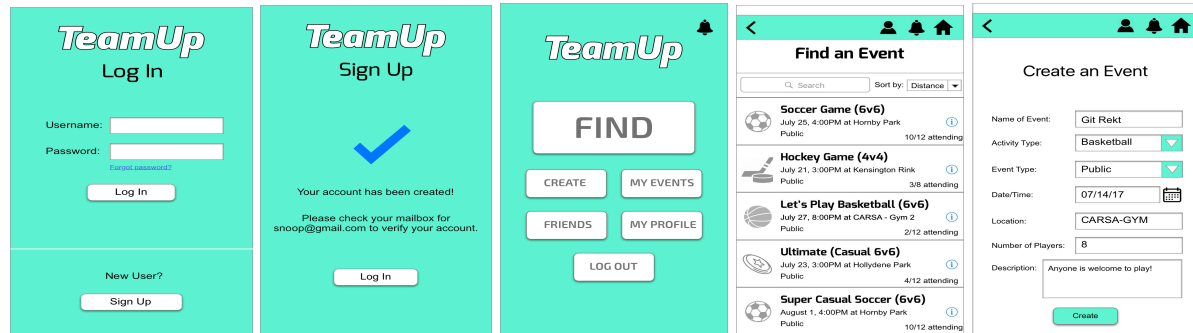
The first phase of data gathering begins after the initial brainstorming of the main problems, target users, and proposed solution. First, identify the research methods and the requirements for data gathering. The methods chosen for this team were to conduct interviews and surveys on recreational sports players. These data results are then derived to help create

our low and medium fidelity prototypes. The data gathered from the result helps shape down the main objectives of the mobile app. Next, the medium fidelity prototype is evaluated by team ZZZHL for further improvement on constructing the high fidelity model. For example, the “Create” button located at the top right corner for the low fidelity prototype has been replaced with a “Sort” button. Once this button is clicked, the drop down menu will appear and show the two different types of classification: Distance and Time.

Once the High fidelity prototype was constructed, two types of evaluation schemes were performed for further testing/improving. The Heuristic Evaluation is an inspection method used for testing when users are not readily available. Therefore, the ten points of the evaluation were analyzed by the team and used for further adjustment of the prototype. For example, “Help users recognize, diagnose, and recover from errors”, our mobile app uses plain language for the error message; but should add a solution button on the page for how to resolve the error. This suggestion was then discussed as a group and was decided to be unnecessary. Not much improvement was done for the Heuristic Evaluation.

Next, the pilot user study is conducted with the help from team ZZZHL. The team members were given a series of tasks to complete without being given too much background information. Members completed each task with ease and without significant challenge. Therefore, we can derive from the result that our prototype model is a straightforward tool that can easily help users to achieve their goals. However, one improvement idea provided by ZZZHL was taken into consideration and was implemented onto the final model. The confirmation page for joining an event was added to help a user acknowledging the event he/she had signed up for. Lastly, the follow up evaluation questions were given to users once again, for understanding their reaction/feeling towards the final product. The results received from the follow up evaluation shows that the users are happy with the overall design and interface. Users find the model very easy to implement. Regardless of the positive feedback, one user suggested that the size of the “Find” button on the Homepage should be increased due to being the most used feature and should also add a “Logout” button. Both of these evaluation results were then implemented to improve the final product. The overall personas and use cases did not change over the scale of the project because it clearly presents and describes our user problem.

High fidelity prototype



URL for the TeamUp mobile app: <https://invis.io/P9CK6ULSU>

Future Work

Our next step for this project would be to decide whether or not we want the application to be independent from other social media platforms. For example, we need to decide whether or not a user can sign up with their Facebook account instead of creating an entirely new account for TeamUp. The option to use Facebook may be appealing to users who wish to connect with their Facebook friends on the application and it also speeds up the process of signing up. If we choose to implement this feature, there will be various other issues that may need to be considered. For example, will users have the option to allow other users to access their Facebook profiles through their TeamUp profiles and how can we protect the user's privacy?

Next, we will need to implement the friend list and messaging system to allow users to contact each other. Since this application is based on organizing events and meeting new people, we will allow any user to contact any user unless the user specifies in his/her privacy settings that he/she only wants to receive messages from friends.

Lastly, we will implement a messaging system for each event created so the players that are attending may discuss things about the upcoming event. This will appear at the bottom of the event description, after the list of players attending. We will most likely use a comment-like system where users can post a comment and others can reply to the comment.

Lessons Learned

The biggest challenge we encountered was during the start of the project: deciding what kind of application we wanted to design and what problems it would address. As we were thinking of problems we face in our daily lives and their potential solutions, we realized that many of these solutions have already been proposed and people have already developed websites, web applications, mobile applications, and more. We thought about designing an online tutoring system where students could video chat with tutors from all over the world and we even thought about creating a public toilet finder mobile app. However, to our

surprise, these systems already exist. To overcome this challenge, we had to come up with a large number of potential ideas and narrowed them down one by one until we were left with just two choices and we decided on one of them. After completing the first milestone, we decided to make further changes on our problem and solution. We realized that our original idea to create an application that allowed users to meet up for any activity was too broad and we needed to narrow it down. This was an important decision since it would dictate what the rest of the project would be about and once we made this decision, there was no going back. We finally agreed on team sport events since having an even number of players and enough players per group are mandatory to play team sports, so a mobile application which could help people find a group or a group find extra players would be quite useful to many.

As a group, we learned many valuable lessons throughout this project. We learned that planning group meetings is not an easy task due to the differences in everyone's schedules. It is important that we always plan far in advance which day and at what time we are going to meet. It is also vital to plan ahead on what we will be discussing and working on during the meeting so we don't waste any time trying to figure out what to do. Throughout the semester, we also were required to present a lot of our work and findings. We found this to be very helpful in improving our public speaking skills and learning to summarize our ideas and then backing them up.