Husky Locator Process Book

Ngan Nguyen

INFO 360 Autumn 2012

This is a book that describes my team's process to design a mapping service application.

We started by addressing what problems that student have in their college life. We decide to design a mapping mobile app that helps students to location their classrooms easier. This mobile app displays indoor maps of building which make it different from other mapping services. Students can save time and have less worry on their first days of the quarter.

Contents

THE FIRST MEETING – DEFINE THE PROBLEM

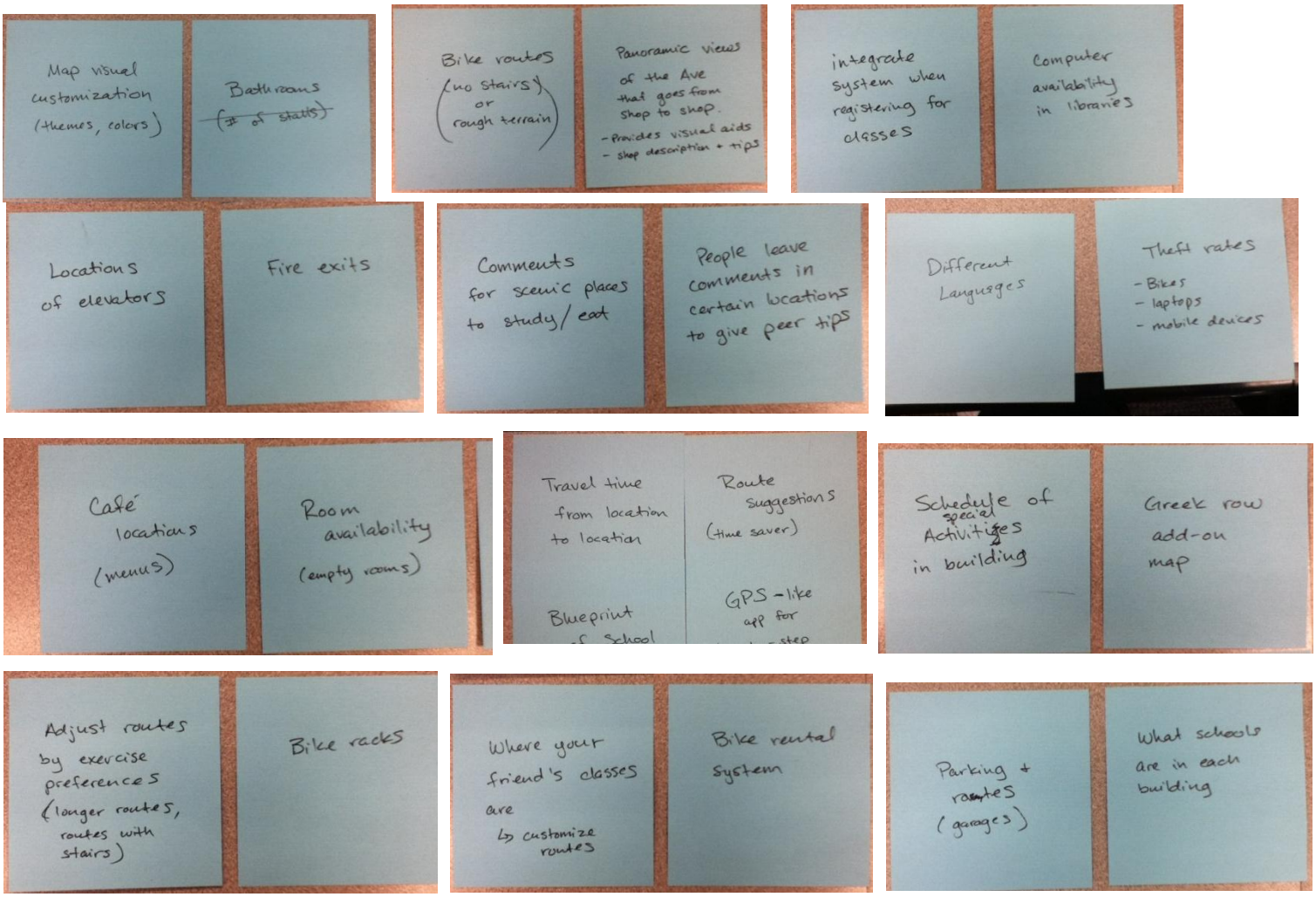
Our first meeting was in class. We met our teammates and talked about the project. We have several ideas about how to survive college. In the end, we narrowed the ideas into two main ideas that seem very promising to work on. The first idea was to develop a time management service that keeps track of students' class schedules, events, club activities, and their personal activities. The purpose of the calendar was to help student to manage their time better. The second idea was to build a mapping service application which helped students to get to their classes on time. The app could display direction instructions inside a building and indoor maps of buildings. This feature allows the app to distinguish itself from several navigation app existed on the internet.

After getting feedback from Hanna, we felt that the time management app was a broad idea and there would be a lot of work involved. Given the time constraint, we decided to stick to the idea of developing a mapping service app for our project. The time management app's idea was brought up by me so I felt a little bit disenchanted; however, we have been given the lecture on "letting of your idea in order to have a better one". I believed that other members would also be happy to work on the project whether it was time management app or navigation app.

At this point, we started the process of generating ideas for our mapping service app.

GENERATE IDEAS:

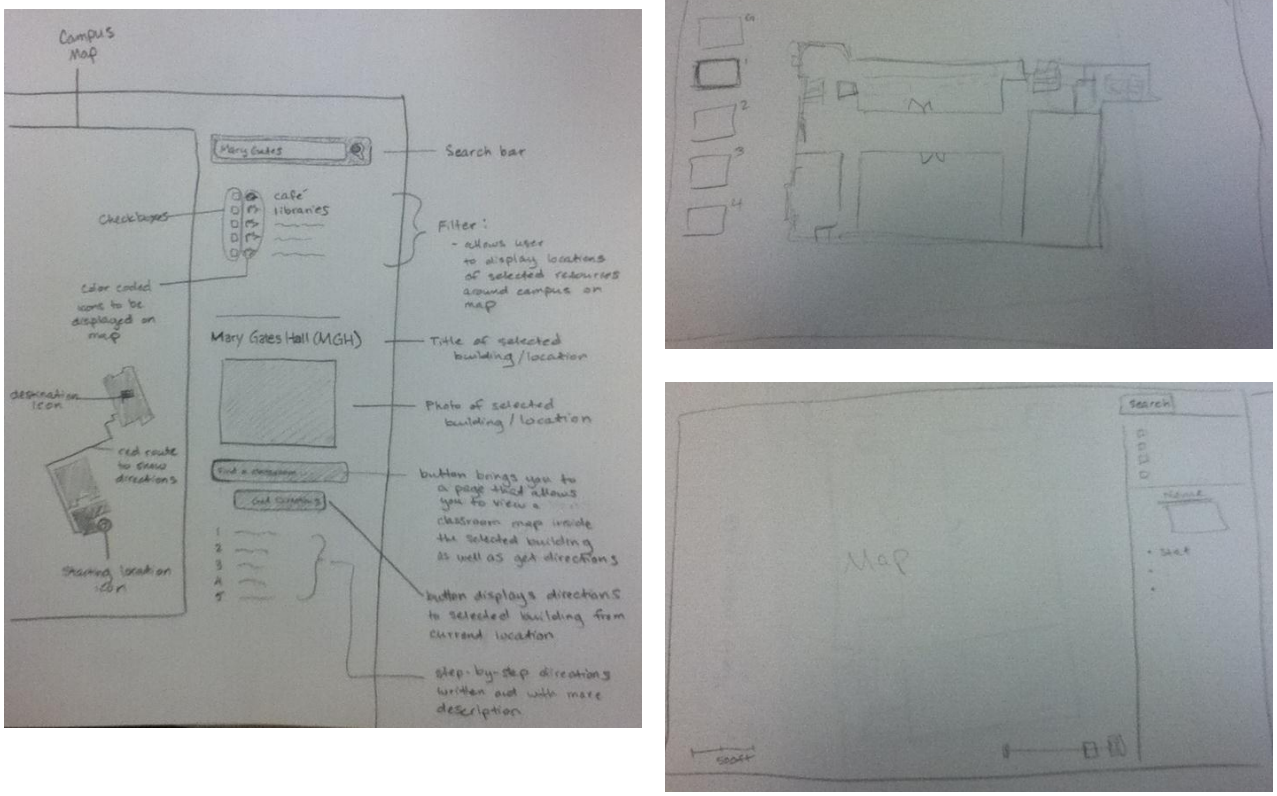
It was a hard time to get started, but as soon as we got a grasp of the app overall functions, we had no difficulty thinking about features of the navigation app



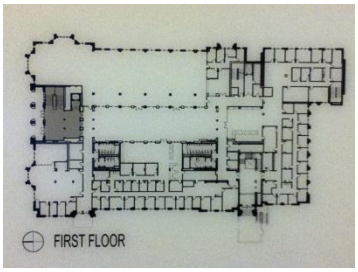
Some notes of original ideas for the mapping service

DESIGN THE LAYOUT

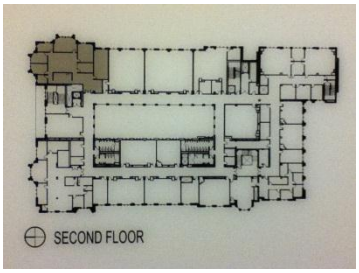
We decided that the navigation service will be a web application. We utilized class time to sketch some layouts for our website. In these sketches, the positions of buttons, search boxes, and features based mostly on our design intuition.



Original sketches of the web mapping service application



Raw photo of 1st floor's blueprint

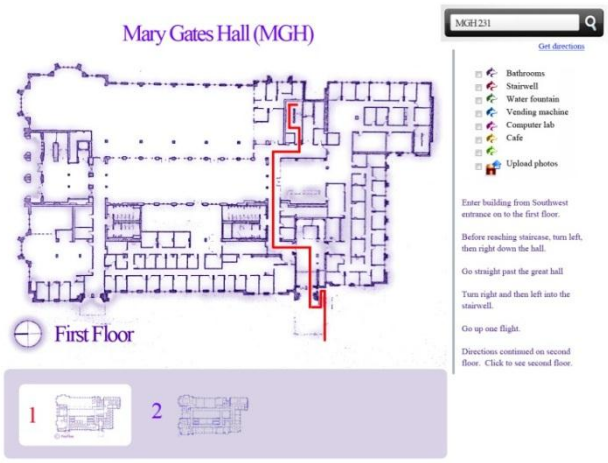


Raw photo of 2nd floor's blueprint

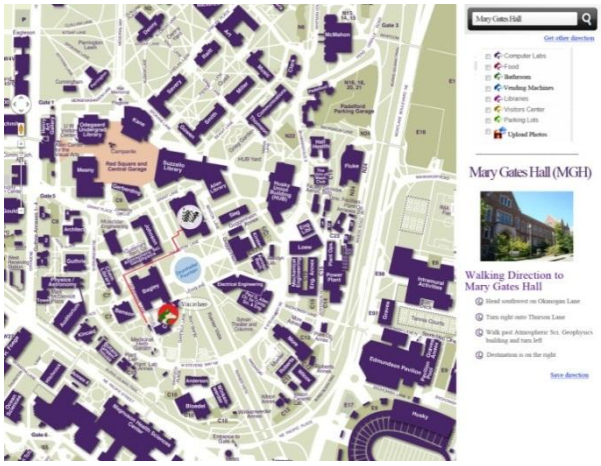
I started to design the website's layouts. Since our app has a feature to display the floors' blueprints, Janella took photos of the floors' blueprints to facilitate the process.

THE FIRST DESIGN OF OUR WEB MAPPING SERVICE APPLICATION:

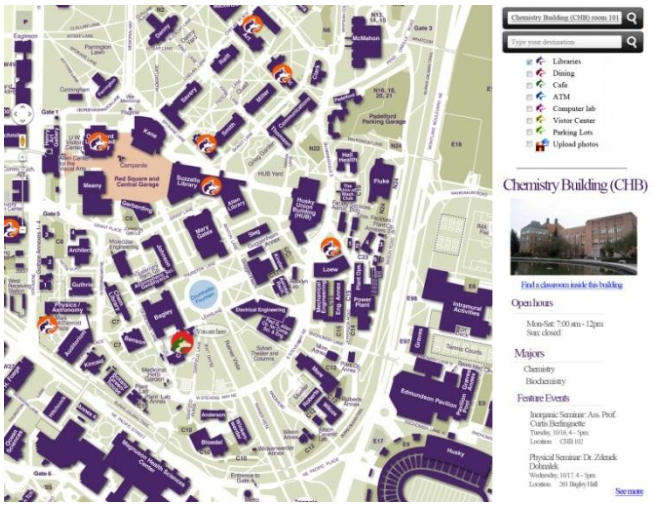
I had the design of main pages done in a few days to be ready for feedbacks from Hanna. Janella helped me to do some touch ups for the pictures so that the pictures look best, and Michael prepared the scripts for our first user test.



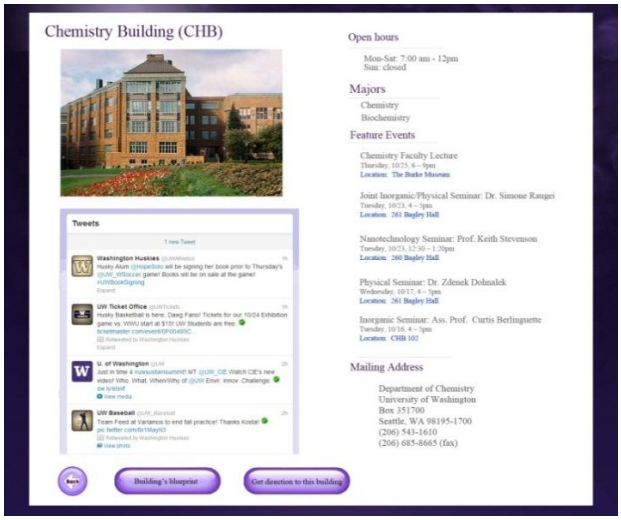
The "Indoor Map" page



The campus map and direction instruction to go from Chemistry Building to Mary Gates Hall



The page displays when user wants to know locations of dining places in UW campus



The page displays when user clicks on a building to get the building's additional information

USER TEST

The user test revealed what normal people thought our app should work. We had two tasks for users:

-find a route from Chemistry Building to Mary Gates Hall

-find additional information about a building

Some problems emerged:

-user looked at the map find the route manually. After a few seconds, he/she realized the search box at the right side.

-Originally, the search box allowed user to enter their destination address. The app would generate a route from user's current location to their destination address. However, if user wanted to start from a different starting address, they had to click on the "Get other direction" link. Ironically, we found that people's intuition was to simply click on the building to get a route. They did not understand the purpose of the "get other direction" link.

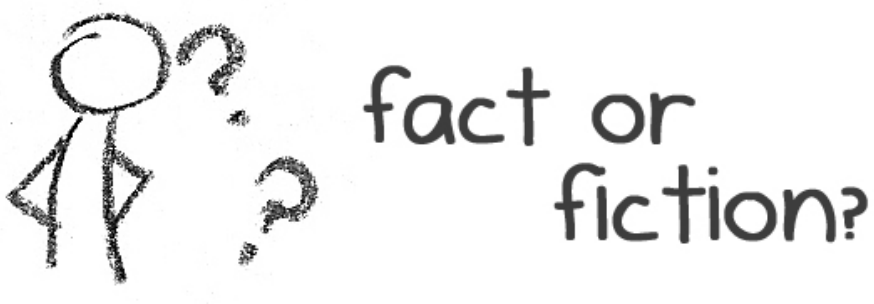
-how to navigate between indoor map and external map

-A web mapping app was not practical since no-one wanted to hold their laptops running from place to place.

-some users stated that they had no problems to navigate around the campus without a map.

EXPOSITION

From some users' view points, the need for one more mapping service seemed trivial since UW has an official campus map. Google Map is also a great mapping service application. Thus, we wanted to gather data that could support our decision for designing a mapping service in UW campus. Although some students in our interviews mentioned that they got lost on campus and had some difficulty to navigate around the campus, the number of interviewees is too small to reflect the whole population's opinions.



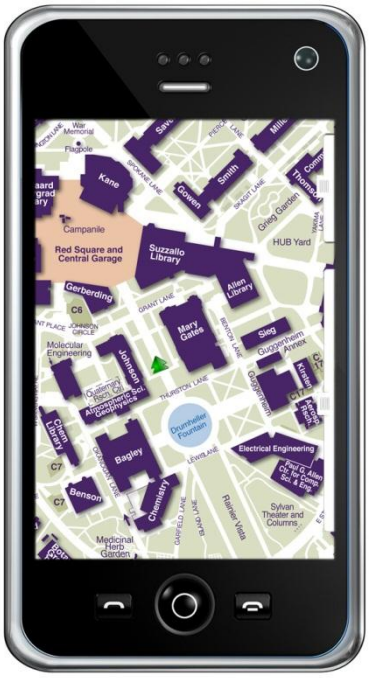
I did some researches about the number of students getting lost on campus. There were numerous articles about students getting lost on campus. Unfortunately, there were no actual data about how many students got lost on campus. Most of the surveys focused on college student suicide. People were actually lost geographically and emotionally in college. They did not know what to do, where to go geographically and emotionally. Although I could not find any actual data to support our design decision, I found an interesting fact that could support our solution. We could not help students from getting lost emotionally, but we could prevent them from getting lost geographically. At least, our Husky Navigator helps students to save time and have less stress in their college life. For people who are prone to stress, the mapping service application can be a big help. Another interesting fact is that there is a similar mapping service used in Australia universities. The app is well-known and is used by many Australia university students.

REVISE THE DESIGN:

After getting useful feedback from Hanna and other users, we decided to redesign the web mapping service as a mobile app. It would be more practical for users because they only need to pull out their smartphones to get direction instructions.

I redesigned the sample pictures again in the form of a mobile application. Although the original ideas are the same, it took me some time to imagine a mental picture of the mobile app in mind. At the same time, we also started to write our first draft of the specification. I was responsible for the design problem, project scope, and target audience. Michael and Janella were responsible for writing the "Application Details" section.

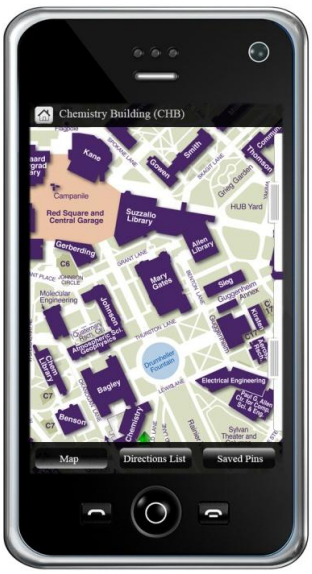
Sample photos of the mobile app

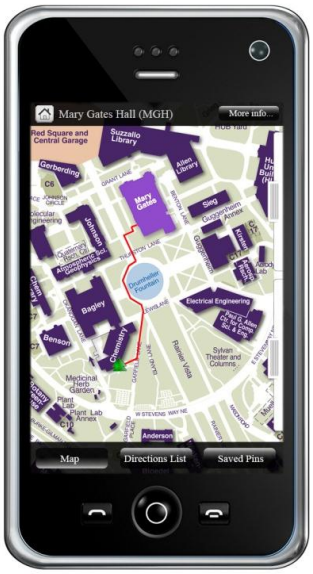


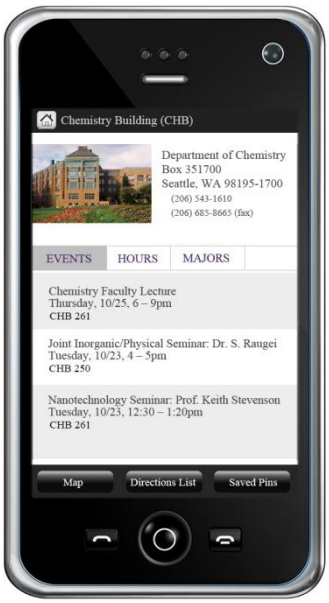
We dived into the application details, and recognized how complex the design process has become. There were many problems emerged that we did not think of during our group discussions. How user discovers the app's features. How user navigates from one screen to another efficiently. Now, it makes sense that the design process should be an endless and iterative process.

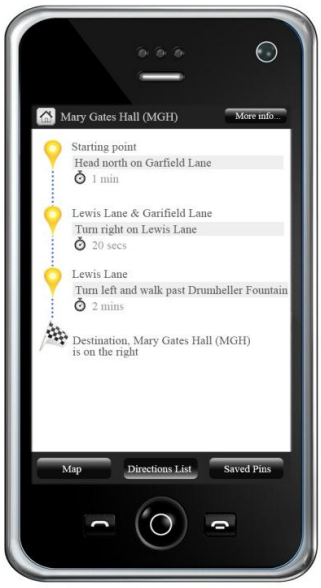
THE THIRD DESIGN:

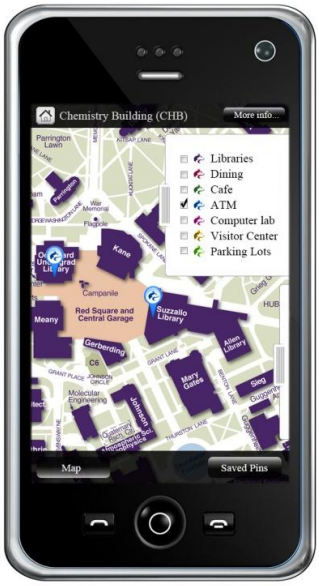
When we met with each other to go over the sample pictures, there were many missing functions. Apparently, I forgot to make notes of some details that we have discussed in class. The lesson here was to remember to take notes of everything that my group members have discussed. I fixed my pictures and added more sample screens to show case other features of the app. Again, Janella helped me to touch up the final details of the pictures.











SPECIFICATION FEEDBACK

Meanwhile, we received feedback for our first complete specification. Our group recognized how useful feedback from other people was. As designers, we may have bias over our own design. Users have better visions, and especially they are people who use our app. Some important feedback we received was:

-will we have features for users with disability?

-no diagram to show transitions between screens

-the project scope did not convince readers about the usefulness of the app

-the design problem lacked users' data

-sometimes we need to specifically say things to avoid assumptions (For example: users know that they can slide out the tabs to see more options. We have to state in the spec that "users can slide the tab to see options")

-the specification's format is confusing to read

-lack end-to-end explanation for some features

We kept the same task for each group member. I was responsible for the design problem, project scope, and target audience. Janella and Michael were responsible for "application details" section. Nonetheless, I and Janella also had to read over the second version of the spec to make sure that everything is consistent.

GROUP COMMUNICATION

Google doc file was overloaded with comments. It became hard to see which comment associated with which section.

We mostly used class time to discuss about our project. There were some group meetings physically and online. However, it was difficult to get everyone to understand every detail in the specification completely. There was always something popping up while we wrote the specification. Sometimes, we decided how a feature worked by ourselves; consequently, the specification was inconsistent.

I read over the whole specification, gave feedback for every detail on Google Doc as much as I can. Nonetheless, it seemed that even Google Doc became hard to keep track of things when there are numerous comments to read. We also had problems to find previous emails since our inboxes is loaded with spams, school events, and emails from other classes. Moreover, my teammates had trouble to understand my heavy Vietnamese accent, and I was aware of that.

Eventually, we had to physically meet in order to resolve some issues. After some conversations, everyone understood what they were supposed to do. We continued to work on the final version of the spec to submit it in a timely manner.

CONCLUSION

There were insufficient communication in our groups that made the specification inconsistent. It was hard to keep track of what was going on and what each person was supped to do. If I had to do this project again, I would have carefully outlined deadlines, organized meetings, and delegated appropriate task for each person. This makes sure everyone knows their roles and keeps the consistence in our thinking. We used Google Doc, Doogle Drive, and gmail as the main sharing tools. However, in the future, I would like to use some collaborative softwares to facilitate communication, collaboration and the process of problem solving in my team. Additionally, collaborative software also support project management functions such as task assignments, time managing deadlines, and shared calendars.

Working in group is more time consuming and difficult to keep track of shared materials. However, I believe group works are essential for great projects. Each person has his/her own strength that can complement other people's weakness. Also, my teammates had some great ideas that I wouln't be able to think of on my own. As the saying goes, "if you want to go fast, go alone. If you want to go far, go together".