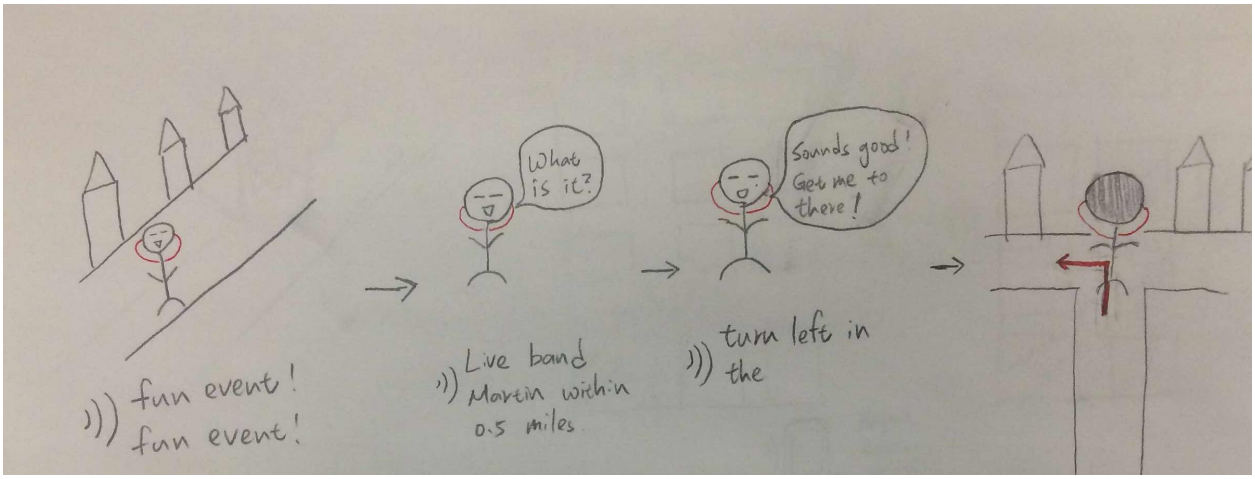
1. Team Name: Value Proposition (short phrase)
Exploera : Deliver ubiquitous traveling information to backpackers/travellers by using digital eyewear devices.

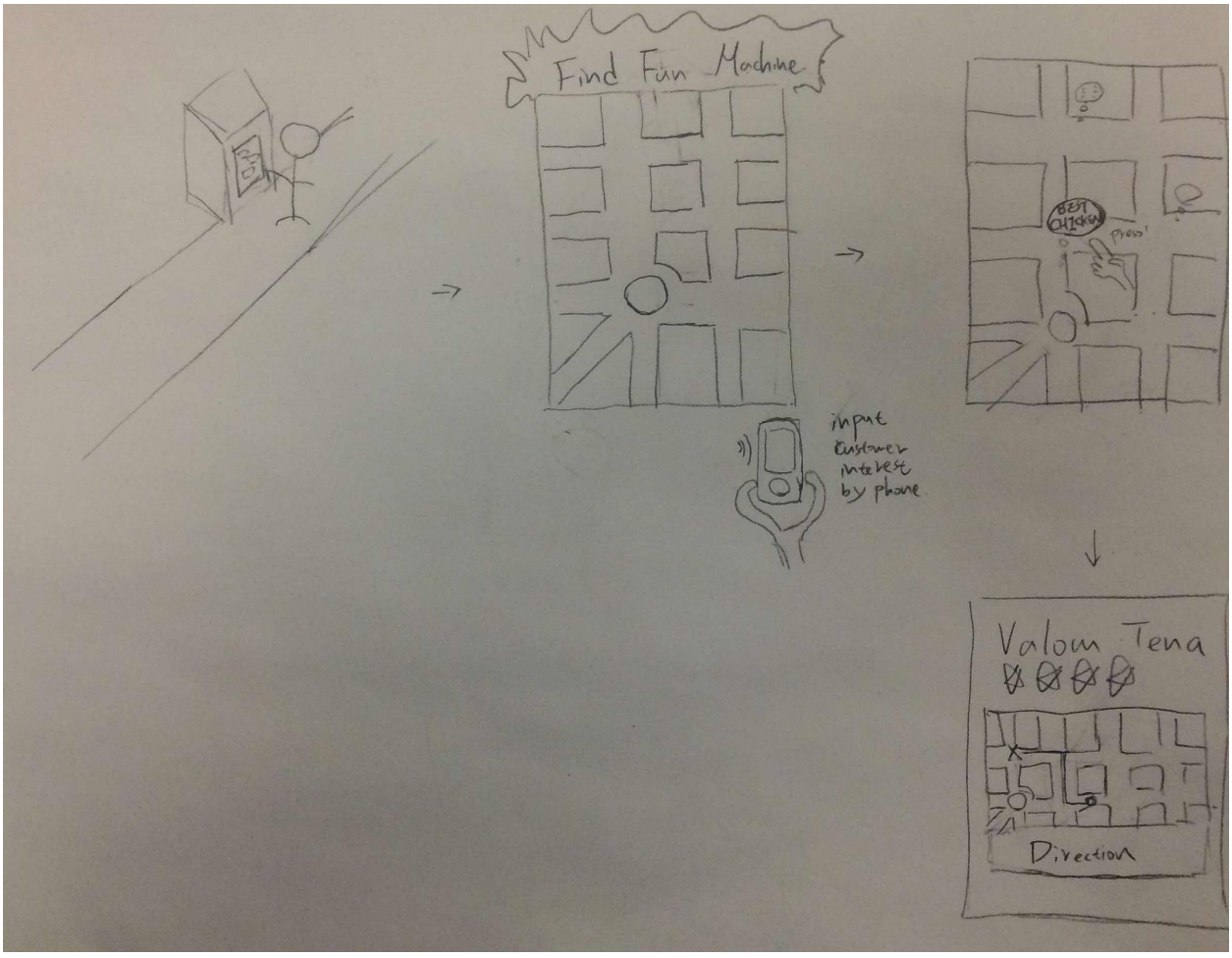
2. Each team member's name and role
Zhigang Wang (zw344@cornell.edu) / Film Cutter
Po-Yih Lee (pl497@cornell.edu) / Director

3. Problem and Solution Overview (short, 1 paragraph)[you should be reusing/rewriting this text]
Travelers use location-based services like FourSquare and TripAdvsior to access tips, history, and events. With digital devices (Google Glass/Hololens/Eyewear) technologies becoming mainstream, Exploera will provide a novel location-based platform by using AR technology for travelers to explore nearby area and share information easily with their smart glasses.

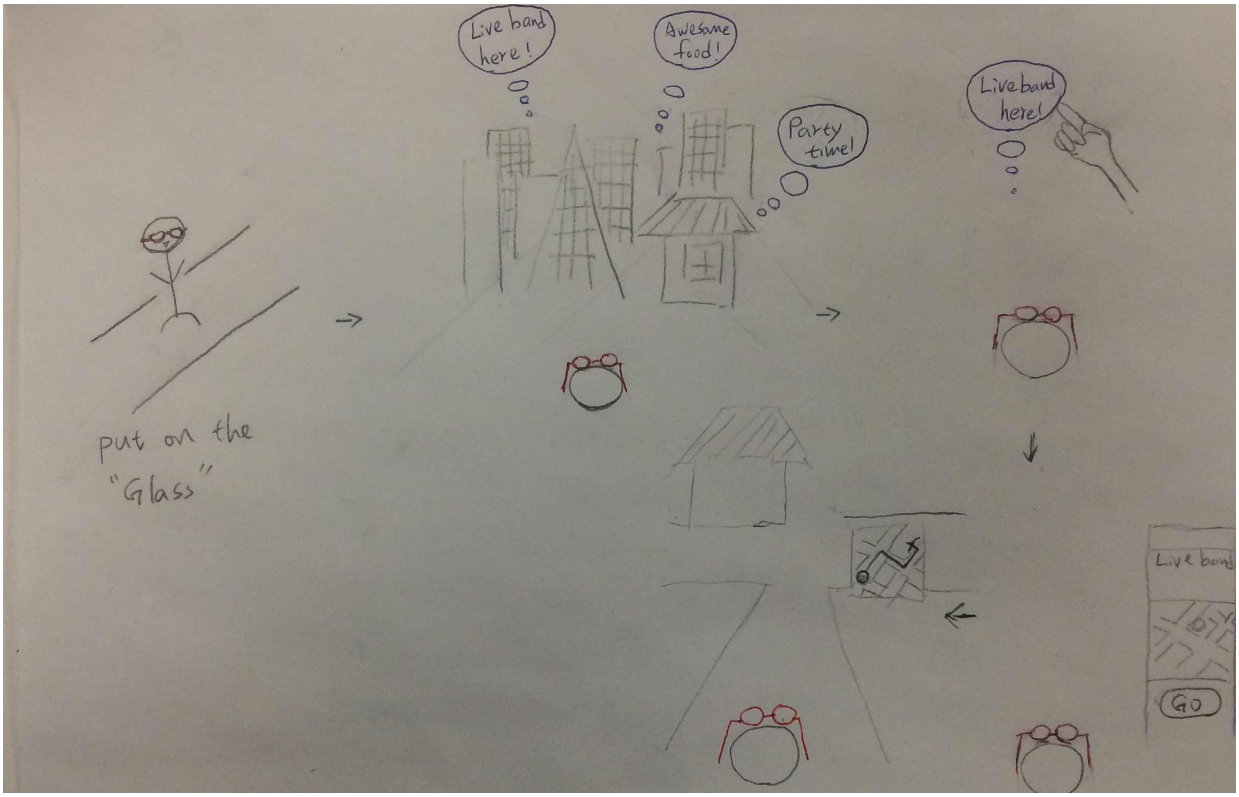
4. UI Flow Storyboards for 3 different interface designs (as many pages as needed)
Design 1: audio-based user interface



Design 2: the interface of fix guiding machine on the street



Design 3 (selected): The interface of the digital eyewear devices



5. Selected Interface Design (1 page)

a. Explain which design & reasoning for choice

We choose the third design of the interface because it makes more sense for the traveler and backpacker with digital eyewear while they are traveling alone. There is an awkward scenario that users seems like speak to themselves in publics space for the first design. It only provides limited convenience for the traveler in the second design because it is impossible to put the machine in every corners in the city.

b. Functionality summary (what you can do with it)

It provides messages that other users share in this location in the AR speech bubble that the user can see though their digital eyewear device. The message includes tips, recommendation, and social information about stores, restaurants, historical sites and attractions within the area. The user can use it to get the direction for target place, explore fun ongoing events, and find the companions with the same interests with in the area.

c. User interface description (how you use it – reference sketches in #3 & add more if

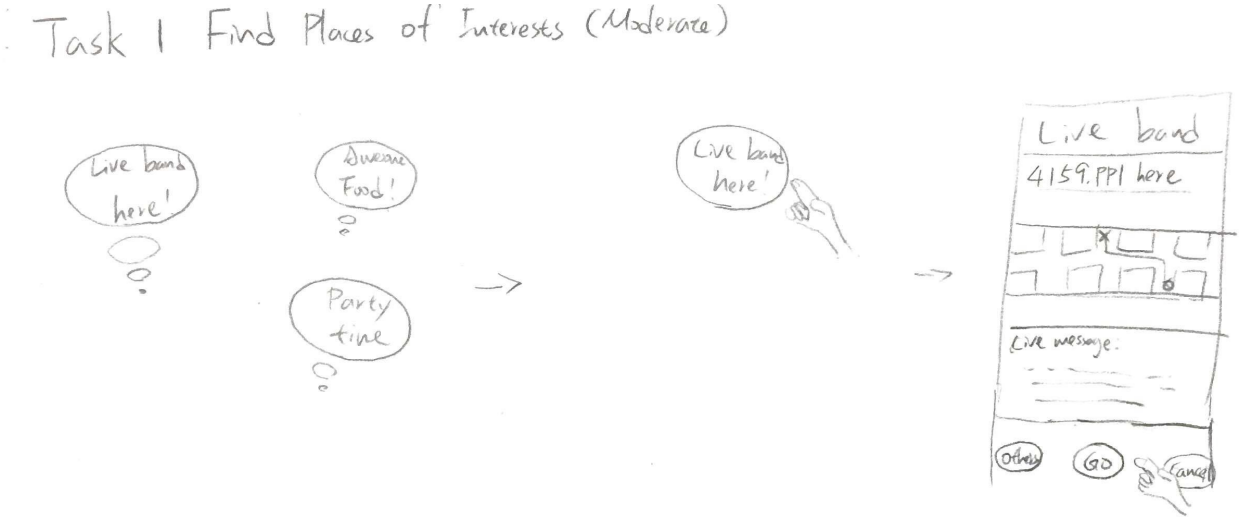
With the digital eyewear devices (such as Google glass, Hololens...etc) and walking on the street. They can see the information in the AR speech bubble around them which matches their preference through their glass. The information include two different types: event-centered message (the announcements that others sharing nearby) and people-centered message (the message that others posts on the social

network media to invite people to do something with them) The user can use gesture to “touch” the bubble that they feel interesting in the air and more details will showing up on the side of the glass screen. They can also use gesture to interact with the details frame. For the event-centered message, the users can get the direction to the location for the event if they decide to join the event. For the people-centered message, the user can browse the companions who would like to join their trip and explore within nearby area. They also use gestures to touch the bubble and get the connection with the person they are interested in. The opportunity to chat with the person before they meet she/he can help the users to increase the confidence of meeting the foreigner. They can also get the direction to the person after they decide to go and meet them.

5. UI Storyboards for 3 Scenarios -- example tasks carried out with selected interface design (1 page)

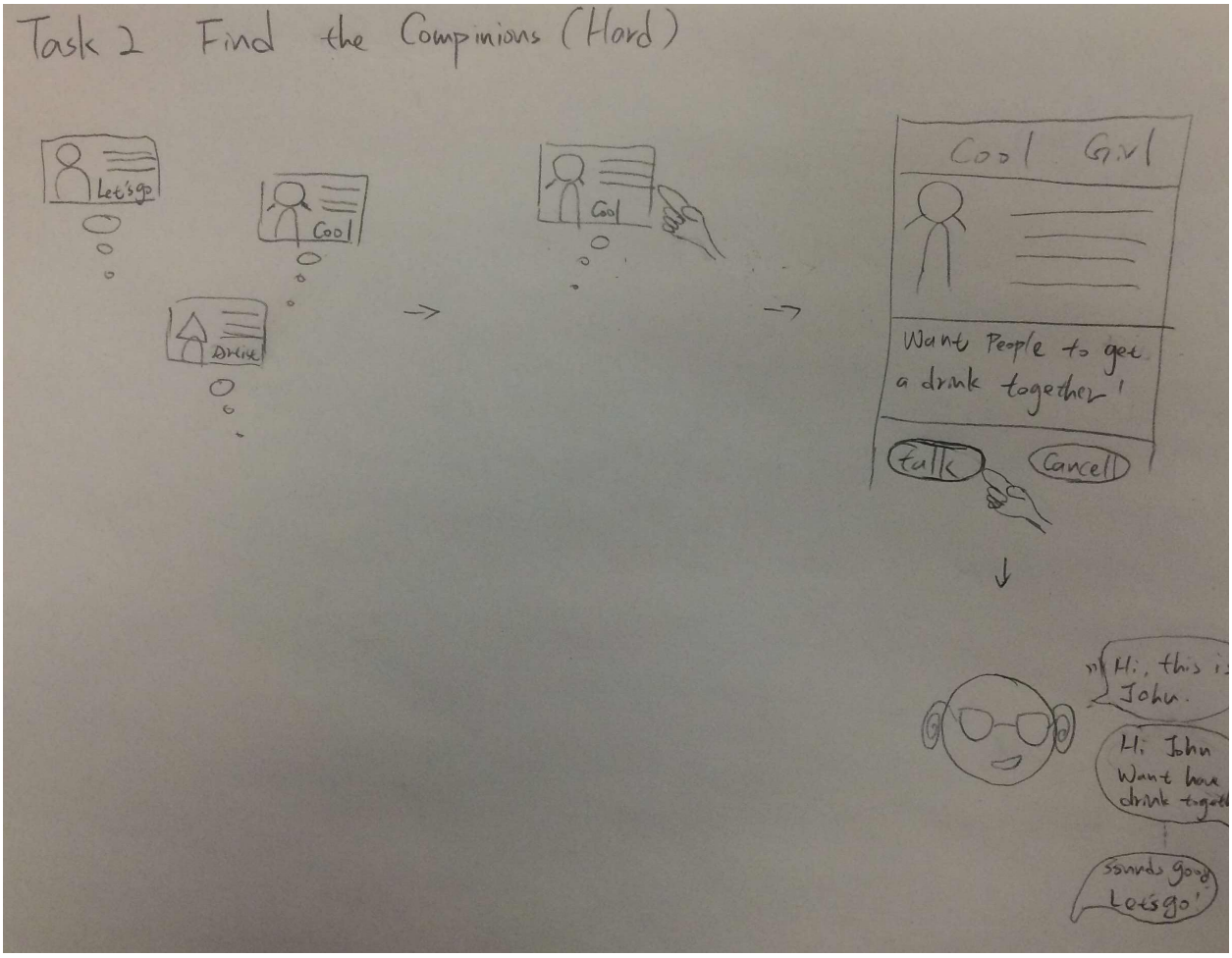
Task 1: Find Places of Interest

1. **Put on the digital eyewear devices, and see through the digital eyewear devices of the AR bubble about the ongoing events.**
2. **“Touch” the AR bubble the users are interested.**
3. **More details will shows on the side of the screen on the glass, the user can also interact with the gestures.**



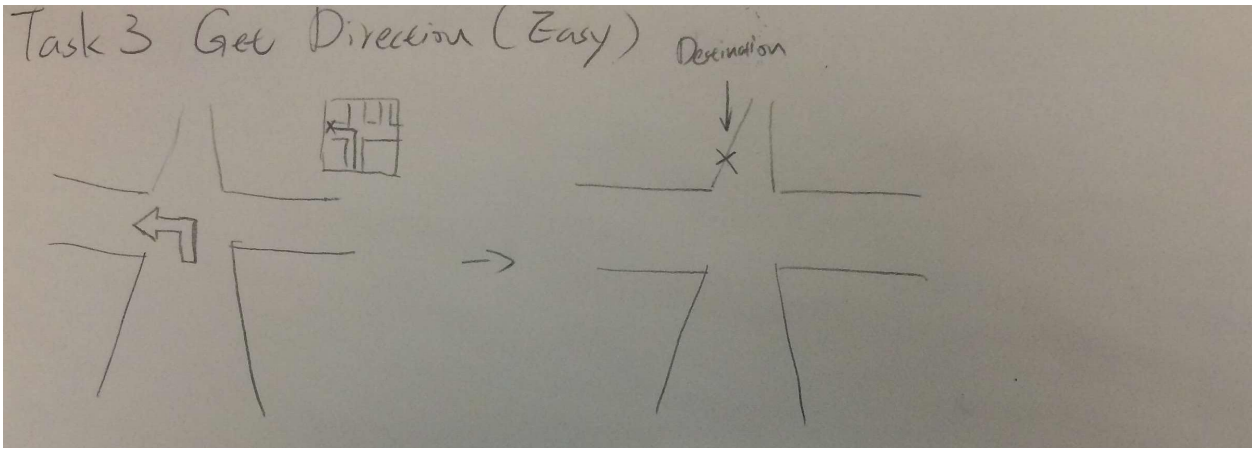
Task2: Find the companions(Hard)

1. **Put on the digital eyewear device and see the bubble of the message through the glass**
2. **Click on the namecard which the user is interested in and detailed information will show up on the right side screen on the glass**
3. **Click Talk(Call) if the user want to get in touch with him/her**

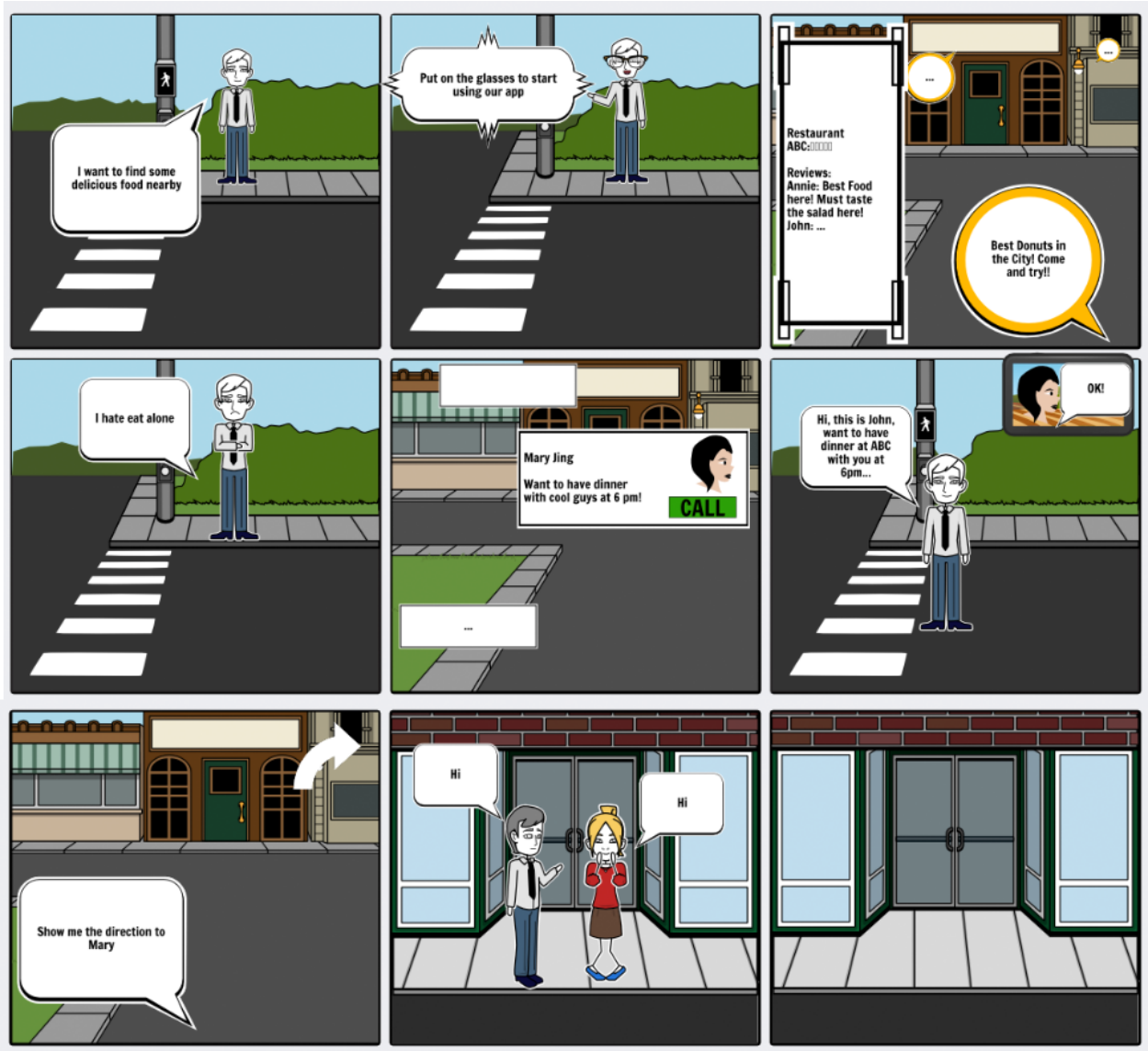


Task 3: Get Direction

1. **Put on the digital eyewear devices.**
2. **When people decide to go some location, the map and the next step of the direction will show on the screen of the glass**
3. **The destination will be marked when the user get close to it.**



6. Video Storyboards for 3 Scenarios for shooting video (1 page)



7. Concept Video Description (1 page)

1. How did you make it?

We use iphone 6 to take some clips with different scenarios, and after that we use iMovie as the editor to add some effect, add the subtitle, and use image in image function to present our idea in a better way. In the final stage, we also ask some friends to watch our video and take advices from them to improve our video.

2. Any interesting new techniques you came up with?

Role play technique helps us a lot in the process of storyboarding, we assume ourselves as the user and think about what we are assumed to do in a circumstance, in order to figure out the pain point of a user.

3. What was difficult?

We need to present our idea in a video which is shorter than 2.5 minutes, it is hard not only to make the video concise and short, but also wrap it up with a consistent story. In addition, since none of us in our team has the experience in making videos before, it is a challenge for us to design the story and present the concept in our video.

4. What worked well?

Presenting our video to our friends and iteratively improve the video by taking their advices worked well. We present it to our friends and try to improve the video with their critiques and suggestions. Since they are totally unfamiliar with our idea, it is hard for them to get the concept and that's also why we have received so many valuable advices.

5. How long did it take for each phase of design prep, shooting, editing?

For the design preparation, it takes about 3 hours. We use paper board to make a fake glass(though eventually we did not use it), and discuss to figure out all the scenarios.

For the shooting phase, it takes about 2 hours. We choose the street near Chelsea market as our shooting place since the street view is gorgeous over there, we are both directors and actors for the video in order to better understand the users' needs.

For the editing part, it takes about 5 hours. We did some research about iMovie and use it to cut, add effects, add music, add subtitles to the movie. We also use photoshop to make some pictures for the movie.

HCI Video Homepage : https://sites.google.com/a/cornell.edu/hci/home
Youtube Video Homepage: https://www.youtube.com/watch?v=Qu94hvlMy0I