

### 1. Prototype

#### - Title

Exploera Prototype

#### - Mission statement

With digital eyewear devices (Google Glass/Hololens/Eyewear) becoming mainstream, Exploera will provide a novel location-based platform by using AR technology for travelers to explore nearby area and share information.

#### - Prototype

[Original version \(Please download PDF file for high resolution image\)](#)

#### - Prototype description

Users say “Exploera” to get in the app, and enter the main page. The users use their voice command and “touch” AR icon on the “screen” to interact with the system. They may use three main functions “post”, “discover messages” and “find companions”. In the “post” function, the users can leave their message at the location, and also change and delete it with second confirmation. In the “discover messages” page, the users can “touch” the “AR message block” to see the details of the message and get the directions to the location if they decide to go there. In the “find companions” page, the user is able to contact potential companions who has left message nearby by saying the “companion” voice command, speak with them via internet call by “touching” the AR block, and get the direction to them if they decide to meet the person they contact. The users can always use “cancel” voice command to go back to the previous screen.

#### - Summary of heuristic evaluations

##### 1. Visibility of system status:

- “get direction” function is not clear.
- doesn’t provide clear navigational capability from each of the transaction.
- user may not know a dialogue is clickable or not

##### 2. Match between system and the real world:

- No severe violations

##### 3. User control and freedom:

- No homepage button
- No menu on each screen
- user cannot save drafts for messages
- how to edit previous messages is unclear

#### **4. Consistency and standards:**

- No title showing current status for each screen
- Help block is not always consistency at the same places on the screen, it should be consistent.

#### **5. Error prevention:**

- No error prevention pop-up windows before posting the message.

#### **6. Recognition rather than recall:**

- There is no clear difference among the pages of three main functions, users may confuse where they are.

#### **7. Flexibility and efficiency of use:**

- Need a menu explicitly showing all functionalities

#### **8. Aesthetic and minimalist design:**

- Use icons instead of text for aesthetics purpose
- dialog boxes and the font size is too small

#### **9. Help users recognize, diagnose, and recover from errors:**

- No error recovering function

#### **10. Help and documentation:**

- No severe violation

#### **- Revised prototype**

[Revised Version \(Please download PDF for high resolution image\)](#)

1. Added a homepage showing the list of four main functions to solves the issues in the heuristic evaluations **1. Visibility of system status**, **2 . User control and freedom**, and **7. Flexibility and efficiency of use**.

2. Changed the order in the process for the “get direction” page from the last order of the process to the second layer order right after the homepage, previously it is a affiliated function while in the revised version it becomes one of a main function. This change solved the issue in the heuristic evaluations **1. Visibility of system status**.

3. Added “Home” oral command in every page to let users have freedom to get back the homepage from any page. This modification can solve the issue in heuristic evaluation

**3. User control and freedom.**

4. Showed the function on the top of the screen to let users know which state they are in to solve the issue in heuristic evaluation **4. Consistency and standards and 6.**

**Recognition rather than recall.**

5. Added a “Help” oral command to let users turn on/off the help blocks on the top right corner for beginning and experienced users to solve the issue in heuristic evaluation **7.**

**Flexibility and efficiency of use and 10. Help and documentation.**

6. Redesign the dialogue blocks in order to solve the issue in heuristic evaluation **8.**

**Aesthetic and minimalist design.**

7. Added more detailed instructions in content of the “help blocks” (e.g. refer user can touch the message block on the screen to get more details of it...etc) to solve the issue in heuristic evaluation to solve the issue in heuristic evaluation **1. Visibility of system status.**

[Heuristic Evaluation \(Individual\) for PicBuy \(Po-Yih Lee\)](#)

[Heuristic Evaluation \(Individual\) for PicBuy \(Zhigang Wang\)](#)