

## Heuristic Evaluation of Quest

### 1. Problem

Quest allows users to stay connected with friends and loved ones by sending and receiving messages that require a bit of effort (ie going to a set location) to get them.

### 2. Violations Found

#### 1. H3. User control and freedom / Severity 4 / Found by: B

Upon opening the app through the notifications, users only have the option to start the quest even if the user just wants to look at the apps homescreen. There should be some button or method that allows the user to go to the home page after seeing this notification and opening up the app through the notification.

#### 2. H3. User control and freedom / Severity 4 / Found by: A, B, C

There is also no way to escape from the AR setting when finding a quest to go back to the homepage. If a user decides they do not want to walk the distance to find the quest, they have no way of backing out to the main screen. A simple sliding screen feature similar to how snapchat changes from camera to app could fix this or just a home button on the AR screen.

#### 3. H9. Help users recognize, diagnose, and recover from errors / Severity 1 / Found by: B

When clicking on the envelope to receive your message, there is no error message if the user clicks on an envelope that is not the user's message (In the case of the med-fi prototype it is the one with the red dot behind it). Perhaps just making the envelope pressed pop like a bubble if they press the wrong one or just display a message like a game would if you messed up.

#### 4. H4. Consistency and standards / Severity 2 / Found by: B

If the user receives a quest and then chooses to reply they are brought to the map screen. However, if they press the back button they would expect to be returned to the quest image/message they just recieved not to the friends page as it currently does. Be sure that the back button goes back to the previous screen and not just back to the screen as if the user was selecting a friend to send a quest to.

#### 5. H6. Recognition rather than recall / Severity 3 / Found by: A, B

Although the main page has a very interesting interface for displaying previous quests, there is no way of seeing if you ever replied to their quest or not. Perhaps there should be some symbol to show what the last action was with that person. Similar to how snapchat has a sent message, read message, message was screenshot icon that people recognize and realize okay I sent the last quest to this person.

#### 6. H8. Aesthetic and minimalist design / Severity 1 / Found by: A, B

The home screen background can be a little confusing. Why are some people/messages different sizes than others? It's not really an inconsistent problem as much as an aesthetic problem. I know in your slideshow you said wanted to eliminate your white space so perhaps you can find a compromise. Maybe the images and names can take up the same amount of space or be evenly divided to it seems uniform. Should these images be in the background at all? Maybe previous messages deserve their own screen.

**7. H8. Aesthetic and minimalist design / Severity 1 / Found by: B, C**

When sending a gift to someone this screen seems cluttered. I feel the images for the gifts should be more divided and larger. I think increasing the size of the cards on the screen and possibly putting a line or box to divide the images will help the user choose an option. Giving the user too many options right off the bat can be quite confusing.

**8. H1. Visibility of system status / Severity 1 / Found by: B**

A few possible feature I could see being added to the successfully sent a quest screen include the users amount of coins left after they send a quest (especially if you decide to make users spend coins in order to send quests as you discussed possibly doing in class) and possibly the image of the user you sent the request too.

**9. H2. Match between system and the real world / Severity 2 / Found by: B**

I am unsure if when you choose a friend to send a quest to and the map shows up if it is their location or yours? Assuming it is their location, perhaps you should make this a little more clear on the map with their image in a circle above the cursor.

**10. H5. Error prevention / Severity 4 / Found by: A, B, C**

When on the map screen, I feel as though I could zoom far enough out so that the map is very large and if I dropped a quest it would be the size of San Francisco and wouldn't know exactly where to place it in the real world. Maybe you can maximize how far the map can zoom out (but this may lead to speed issues when trying to set a quest very far away). Another option is when you place a quest another small window pops up that shows the exact location the quest will be placed zoomed in.

**11. H3. User control and freedom / Severity 4 / Found by: B**

It doesn't seem as though a user can delete or decline requests. What if a friend decides to spam the user with 100 quests all placed on different parts of the Earth. The user should be able to easily delete unwanted quests and deny/block users so they can stop spamming.

**12. H7. Flexibility and efficiency of use / Severity 2 / Found by: A, B, C**

The favorite places to put quests with the hearts (within the map screen) is a good idea but the way it functions now it would be just as quick to place a quest by hand selecting it without even having the hearts. I feel as though the favorites should be more list like so the user can select from a wide range in area and know exactly where it is going instead of favorites only popping up they are already somewhere the user can see on screen.

**13. H2. Visibility of Status / Severity 1 / Found by: A**

The screen to select who you are sending a message to doesn't have a clear indication of what do. Even if the whole name will be clickable, putting a pencil icon next to each person to show that you are choosing to write to them would be useful.

**14. H3: User Control and Freedom / Severity 1 / Found by: A, C**

As mentioned in class, the "return to previous screen" button looks more like a new line arrow. Replacing it with a standard straight arrow to the left side of the screen would increase usability.

**15. H6. Recognition over Recall / Severity 2 / Found by: A**

When writing a message there is no continuous prompt of who are you sending to (after initial selection). I think putting the person's name across the top of the screen would help the user be more conscious and personal about what they are sending.

**16. H6. Recognition over Recall / Severity 1 / Found by: A**

Instead of displaying verbose instructions such as "look up to fetch your message", I would recommend using arrows and symbols to indicate what the user is supposed to do as that will instinctively prompt action. Another option is to have the text prompts visible the first time a user performs a Quest and then remove them in the future.

**17. H7. Flexibility and Efficiency of Use / Severity 2 / Found by: A**

Rather than sorting friends by time since last contact (or even sorting at all), I would recommend using a friend ordering system like Snapchat, where frequent contacts are listed at the top, followed by an alphabetical ordering of the rest of the people you are connected to.

**18. H4. Consistency & Standards / Severity 1 / Found by: C**

There are different shades of yellow used throughout the app for action colors. This can be seen most clearly when navigating between the home and profile pages. The profile page uses a darker shade of yellow. This could cause confusion for users, who may think that these different colors represent different sorts of actions you can take. One color should be chosen to remain consistent.

**19. H3. User Control & Freedom / Severity 3 / Found by: C**

Once a picture is taken, the picture itself doesn't appear for the user to view before deciding whether to retake it or not. This could be fixed by changing to an interface like Snapchat's that shows the picture just taken and has an option like an 'x' in the corner of the screen to go back to the camera page.

**20. H4. Consistency and Standards / Severity 3 / Found by: C**

There's no clear way to listen to the voice message that you just recorded in the send message step. Most of the time when you write or record a message you want the ability to go over what you said before sending it. Most voice recording apps use the conventional 'play' button to show

that you can listen to the message that you just recorded, so the designers could adopt this in the app.

### 21. H1. Visibility of Status / Severity 2 / Found by: C

On the profile page, it is unclear what will happen if you have multiple pending quests that have not been started. Will they all stack up and crowd the profile page? This would obviously make the current status very visible, however at the expense of making a very busy screen. There could be a 'quests' or 'quests to begin' page that is separate from the generic profile page to make this less crowded.

### 22. H6. Recognition not Recall / Severity 2 / Found by: C

When starting a quest, the distance to the end is displayed, however it would be nice to know how much time it will take. Also, so that the user doesn't have to guess how much time as elapsed throughout the quest, the time left should be displayed while going through the quest. This could just be displayed in small font somewhere on the edge of the screen while the user is following the coins to complete the quest.

### 23. H10. Help & Documentation / Severity 2 / Found by: C

When setting the location for a quest for a friend, if the user doesn't know what to do it could be confusing. For a first time user, the user probably would have no idea what to do. This could be fixed by having a one-time direction message that pops up that walks the user through the whole process.

## 3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		1	1			2
H2: Match Sys & World		1	1			2
H3: User Control		1		1	3	5
H4: Consistency		1	1	1		3
H5: Error Prevention					1	1
H6: Recognition not Recall		1	2	1		4
H7: Efficiency of Use			2			2
H8: Minimalist Design		2				2
H9: Help Users with Errors		1				1
H10: Documentation			1			1
<b>Total Violations by Severity</b>		<b>8</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>23</b>
<b>Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)</b>						

\*Note that the bottom rows are *not* calculated by adding the numbers above it.

## 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C
sev. 0	0%	0%	0%
sev. 1	50%	50%	37.5%
sev. 2	37.5%	37.5%	50%
sev. 3	33.3%	33.3%	33.3%
sev. 4	50%	100%	50%
<b>total (sev. 3 &amp; 4)</b>	42.9%	71.4%	57.1%
<b>total (all severity levels)</b>	43.5%	52.2%	65.2%

\*Note that the bottom rows are *not* calculated by adding the numbers above it.

## 5. Summary Recommendations

The biggest problem I ran into when using the prototype is not being able to return home when I wanted to. Whenever a quest was started, I had to go through the entire thing before I could access any of the other user interfaces again which can be a challenge especially if the quest was very far away. On top of this, if I receive a quest and open it through my notifications or if I click on my profile icon on the upper right corner of the homepage and click on the notification (that is something I feel most people would do because it is natural to want to get rid of this red notification) I get stuck in having to do the quest without any way of backing out. Other than not being able to go back to the home screen I can see some potential problems with the placing of quests when it comes to selecting a destination on the map; especially if the map is very zoomed out. I am very curious to see how this will be implemented and am overall very excited to see how the app turns out! Good Luck with the hi-fi prototype!

### Severity Ratings

- 0 - don't agree that this is a usability problem
- 1 - cosmetic problem
- 2 - minor usability problem
- 3 - major usability problem; important to fix
- 4 - usability catastrophe; imperative to fix

## ***Heuristics***

### **H1: Visibility of System Status**

- Keep users informed about what is going on

### **H2: Match Between System & Real World**

- Speak the users' language
- Follow real world conventions

### **H3: User Control & Freedom**

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

### **H4: Consistency & Standards**

### **H5: Error Prevention**

### **H6: Recognition Rather Than Recall**

- Make objects, actions, options, & directions visible or easily retrievable

### **H7: Flexibility & Efficiency of Use**

- Accelerators for experts (e.g., gestures, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

### **H8: Aesthetic & Minimalist Design**

- No irrelevant information in dialogues

### **H9: Help Users Recognize, Diagnose, & Recover from Errors**

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

### **H10: Help & Documentation**

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large