
CALAMITY: A Disaster Preparedness Application

User Interface Design

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Unique Reference:

The documents are stored in the following github project link:

<https://github.com/geneaudrey/Disaster-Preparedness>

The interview videos are stored in the following gdrive link:

https://drive.google.com/drive/folders/1UYqR4vdvoURoaMaJZqY_cmJrQ5TJ10rw?usp=sharing

The file reference in GitHub:

<https://github.com/geneaudrey/Disaster-Preparedness/tree/master/03-Design%20Engineering> with the filename “Disaster Preparedness App - User Interface Design.pdf”

Document Purpose:

The purpose of this document is to determine how the interviewees feel about the initial prototype/ user interface design. The document will also contain the evaluation and summary of the interviewees’ comments as well as the revised prototype design.

Target Audience:

The following are part of the target audience:

- People who like or are interested in playing games
- People who have little to average knowledge on disaster preparedness, or people who would like to refresh their knowledge on disaster preparedness
- People who are interested in the development of the application

Revision Control:

<i>Revision Date</i>	<i>Person Responsible</i>	<i>Version Number</i>	<i>Contribution/Modification</i>
10/12/19	Gene Tan	1.0	Created Initial Document Added Document Purpose Added Target Audience Added Participatory Design Target Audience
10/13/19	Gene Tan	1.1	Added initial prototype link
10/14/19	Nephia Dalisay	1.2	Updated initial prototype (added messaging app artboards)
10/16/19	Filbert Wee	1.3	Modified the Participatory Design Protocol
10/17/19	Nephia Dalisay	2.0	Added Participatory Design Notes for Participant 3
10/18/19	Filbert Wee	3.0	Added Participatory Design Notes for Participant 2
10/18/19	Gene Tan	4.0	Added Participatory Design Notes for Participant 1 Added the Observation Summary and Prioritization Modified prototype (added the tutorial “entities”) and added revised prototype link
10/18/19	Nephia Dalisay	4.1	Modified prototype (emphasized “Click to reply” and added

			back button on the messaging app)
10/18/19	Gene Tan	4.2	Modified prototype (disabled some buttons and added more artboards to limit the flow; emphasized title and the word “locked” in the diary) Added revised prototype screenshots

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I . Participatory Design Guide and Protocol

This section provides instructions on how to conduct a participatory design to assess the usability of the prototypes.

A . Purpose

The purpose of the participatory design is to gather information on how users will interact with the application. It is also done to assess the usability of the application.

B . Target participants

The following are part of the target participants of the participatory design:

- People who like playing games (people who have played a decent amount of games)

C . Participant's Consent

Participants will sign a consent form to participate in this activity. One copy of the informed consent should be given to the participants, and a second copy should be kept by the team. Participants should be informed that a video recording will be used as data collection.

The participation in this study is completely voluntary, and the participants may refuse to participate or withdraw from the study without penalty or loss of benefits of the group. They may withdraw by informing the team that they no longer wish to participate (no questions will be asked).

D . Initial Prototype Link

The prototype demonstrates how the general gameplay will be like, namely (1) how the players will be interacting/ “talking” to the other characters in the game (using the messaging app), (2) sample minigames they will be playing, and (3) how the minigames will be inserted within the game.

Prototype Link: <https://projects.invisionapp.com/prototype/ck1rwn5pk01bl5z01a1dqpxi9/play>

E .Data Collection

The participatory design are recorded if agreed by participants, and transcribed verbatim for analysis. The recordings need to be securely stored. The transcription shall not contain information that would allow individuals to be linked to specific statements. Confidentiality will be strictly preserved. Another member of the team may take down notes. The notes will be analyzed later.

F . Schedule of the Participatory Design

The participatory design can last for about 10 minutes.

Participant	Date and Time	Venue
Participant 1	Oct 16, 11:18-11:30 am	DCS
Participant 2	Oct 16, 2:46-3:00 pm	DCS
Participant 3	Oct 16, 3:00-3:09 pm	DCS

G . Participatory Design Protocol

Welcome and thank you for volunteering to take part in this participatory design. You have been asked to participate as your point of view is important. I realize you are busy and I appreciate your time.

Introduction: This participatory design is being done to help us understand how you wish to be able to interact with our game. Since the time we had to make the prototype was quite limited, we were only able to implement one flow or scenario in the prototype. Hence, some dialogues will be skipped and some features won't be available. We will be guiding you through the flow of our prototype. Please, feel free to state what you feel and think about the prototype of our product.

Anonymity: Despite being videotaped, I would like to assure you that the discussion will be anonymous. The transcribed notes of the participatory design will contain no information that would allow individual subjects to be linked to specific statements. You should try to answer and comment as accurately and truthfully as possible.

For a brief overview of the project, the application we are planning on developing is a game that aims to encourage disaster preparedness. As you can see on the "menu screen", the game is designed to look like the player's phone. This is to help heighten the feeling of immersion and sense of realism the players get while playing.

In the prototype, you will be conversing with your "friends" over a messaging application. In the overall game, your task will be to help the character survive the upcoming disaster, however, due to certain limitations, your task for the prototype is simply to educate the character about the disaster. Throughout the "gameplay", you will also be encountering minigames.

Conclusion: Of all the things that you mentioned today, what would you say are the most important thing that we (developers) need to keep in mind.

Thank you for participating. This has been a very successful discussion.

Your opinions will be a valuable asset to the study.

We hope you have found the discussion interesting

If there is anything you are unhappy with or wish to complain about, please contact the local PI or speak to me later

II . Participatory Design Notes

Video Transcript:

Participant 1:

Gene: Good morning, the purpose of this interview is to show you the current prototype we have of our game, which is going to be kind of like a visual novel na simulation. The main point of it is to make you feel that you own the phone and that you're actually talking to "people".

Participant 1: okay

Gene: so far we only had one scenario implemented for this so we're going to be guiding you throughout. kasi medyo limited pa. You can't click some apps yet and then some apps, wala siyang pang block, something like that. So first, you have to swipe to open the game

Participant 1: Okay, wow

Gene: And then here we plan on adding parang message notification tapos magkaka red mark dito (on the messaging app) para it makes you click that. because it's the first thing you should click

Participant 1: So it's all, like, grayed out tapos there's an arrow pointing to the messaging app?

Gene: Ah no, it's kind of like that except for example, when you click google, you're not supposed to be able to go to the next part yet. Parang it just opens like that pero you can't click anything in the app.

Participant 1: ohh

Gene: pero you can open the apps, you just won't be able to click anything within the app

Participant 1: Can it be like you know how yung in any mobile game, sa start they force you to press this. Because they don't care about the other apps pa naman eh. At the very start, people might get overwhelmed about everything so you can just point at the messaging app. tapos automatic na

Gene: Okay, So this is the part where you make your decisions in the game. you do that by clicking that thing (the input box). It says "click to reply" if you can reply tapos "text message" if you can't click it

Participant 1: Ohh okay

Gene: And for now, only the left choices work kasi it's only one scenario

Participant 1: Wait, do i read this pa?

Gene: Okay lang kahit you don't read it

Gene: And for the choose to reply we were also planning on changing the color, maybe making it red or making it blink para mas eye catching

Participant 1: AH yeah yeah. You don't have to make it blink naman, i think you can just make it a different color. Like a lighter shade of green. Or at the very start, the first press is "Press when the thing is green". like an arrow and a text box here

Gene: click to reply again kasi two messages

Participant 1: That's weird. I think for stuff like this, maybe you can say the idea you want to say pero what's going to appear sa messages is a different thing. Instead of saying "No it wasn't a tsunami", say "Correct Him" or "Leave Him Alone" or "Agree" "Disagree". I think it's better din because it adds a bit of mystery

Participant 1: *clicks on next dialogue* Woahwoahwoah

Gene: For this part, wala yan sa actual game, pero for the flow of the prototype, we put that there para if you click "no", its gonna take you back to the home screen. And then you said you'd "google it" so press google

Participant 1: Ohh, yeah same thing din for that. Yung pointing thing

Gene: And then you see may bababa na instructions for the minigame

Filbert: Supposedly. We haven't implemented the actual minigame yet.

Participant 1: Make it easier

Gene: No, it's supposed to be hard so the players gets forced to go through the other branching muna and they can go back

Participant 1: So paano yun, when you press T all the letter T's show up?

Gene: Yeah, so it's like hangman talaga

Filbert: For now, we can assume that you've finished the hangman game so you can press enter

Participant 1: You know yung when you press a key sa keyboard parang lumulubog? then it becomes gray. When they do that, you can put that to the keys

Gene: And then after it's done, you can go to the diary and you'll see na unlocked na yung "What is a storm surge"

Participant 1: Ahh kasi natapos mo na ung minigame?

Gene: Yeah

Participant 1: What does the date mean?

Gene: Oh those are random dates lang sa game. Or we can make it the date the player unlocks it

Participant 1: Wait, weird eh Just don't put the date nalang

Gene: Para it looks more like a diary

Participant 1: Or you can put the date ng when he unlocked it in the game. So when it's unlocked in the game

Gene: Tapos these are the locked ones, do you think it's better if they're gone and you cant see them or naka gray nalang

Participant 1: "Unknown" or the ones you think that will be harder to find, you can make those Unknown tapos you leave the others like that. actually all of them can be unknown

Gene: Final question, ano sa tingin mo ung main things we should edit sa prototype? You summarize it again

Participant 1: click to reply, at the start force me to go to the messages, force me to go to the google, tpos sa diary force it the first time, tapos sa text, if it's going to be multiple messages, just use the main idea for the choices

Participant 2:

Nephia: The prototype is an Iphone looking interface with multiple apps layed out.

Participant 2: I see a group chat with F1 and F2. (F1 and F2 are placeholder names)

Gene: Story is itself is not final and only has 1 flow.

Participant 2 can scroll in the messaging app.

Everytime need to reply, the app will say click to reply at the bottom.

Nephia: You can choose from a few decisions.

Participant 2: I like how the game simulates a phone. It is pretty cool -- like a game within a game

Participant 2 continues to play the game and read the plot

Participant 2: It feels like I am actually in a messaging app

Nephia: Square brackets are placeholders

Participant 2: They seenzoned mo so I send another message.

Participant 2: 3000 dead in typhoon is really an underestimated number. I think it is like 6000+.

Participant 2: It is really realistic. I really like it -- I can see the Globe (Cell service provider in the upper left), the time, and even the battery percentage.

Gene: Minigame are placeholders to return to the home screen as of the prototype.

Participant 2 sees there is no home button.

Participant 2: In the game, going home is also counted as an action.

Nephia: There will be hints in the game but as of the prototype, wala pa

Participant 2: Maybe Have an out of character assumption, that will be really apparent to the user na its part of the game. Telling you to not just stare at it.

Participant 2: Since it shows a Google interface, I have to click the Google search bar.

Participant 2: Haba naman ng hangman.

Nephia: There should have been timer in the game, but isn't implemented in the prototype.

Nephia: If you see a photo sent by a friend,...

Participant 2: I want to click on the photo

Nephia: If press game not done, goes back to previous screen

Participant 2: Pressing on the photo and opening the minigame feels natural.

Participant 2: Very logical flow

Participant 2: Diary app outline is a bit dark, because the wallpaper is also dark

Participant 2: Cool. Its neat.

Participant 2 clicks on a revealed tip -> Oh, thats nice.

Gene opens sidebar menu -> Participant 2: wow, cool

Participant 2: Instead of using an X to go back to the home screen, it's nicer to have a home button instead.

Participant 2: "Discarte" nalang how you will do it.

Participant 2: Am I right that it is a game within a game?

Participant 2: Ok that's cool

Participant 2: I really like the concept of your game is a phone “mismo”

Participant 2: Its feels really immersive na I'm having a conversation with my friends

Participant 2: Interface wise, I guess yun lang talaga yung tips. I haven't seen the tips so I don't know how you will interface that.

Participant 2: Also with regards to the back button, I don't know how you're gonna..., it's really nice if you're gonna have like something because it's really inconsistent if one app has an X button but in the other apps its the back button, it should be uniform.

Participant 2: Diary tips is fine with locked, you will know what u haven't done yet, as it is fine. It will serve as a guide on what to do and to keep track what you haven't done yet. Which is I think it's nice which is your functionality intended.

Participant 2: Maybe bold nalang “what is a storm surge” ,but that minor lang yan.

Participant 3:

Nephia: Our app simulates a phone. It is like a visual novel/text adventure game wherein you interact with this phone in order to play the game. So, in order to start the game, you have to slide (the screen) to unlock.

Participant 3: *jokingly* Is this a real phone?

Nephia: We have different apps there that you can open. Yung unang app na i-open natin is messages kasi yun yung magiging start. You can just look at the UI. The friends are talking there. You can also scroll like a normal messaging app. Tapos, nakasulat doon sa (reply area) 'Click to Reply', so everytime you need to reply, you just click on it. Wait, don't press anything first. Kasi we're going with one flow lang muna. So, even though you are faced with two decisions, you can only click the one on the left side.

Participant 3: Oh it's animating.

Nephia: So there. Nakasulat nanaman 'Click to Reply', which means you have to reply again.

Participant 3: Very intuitive pa naman so far yung UI.

Nephia: 'Text Message' nakalagay if you don't have to reply yet.

Nephia: So yeah, it's supposed to promote awareness.

Nephia: Oh, you have to press on the actual words ('Click to Reply')

Nephia: So ayan, they're just talking.

Nephia: It says, 'Hold on I'll google it'. That's the sign for you to start your minigame 1. Wait, don't press yet. This is like a placeholder muna for our home button whatever. Since you haven't finished minigame 1, you press 'No'.

Nephia: Yung minigame 1 kasi is supposed to be you're going to google it, so you go to the google app.

Participant 3: I think better pala if you guys explain the concept of the minigame 1 before the whole thing starts.

Gene: Kasi it's different minigames. Per app is one minigame.

Filbert: The explanation would be in the text messages

Nephia: Pero ngayon wala pa siya. But it's not gonna be like ganon, 'Finished minigame' lang.

Participant 3: So here I just press?

Nephia: Yes. So ayan, the instructions for the minigame, andiyan siya.

Gene: parang nakakagulat din pag ganyan..

Nephia: So parang hangman, you're going to guess.

Participant 3: Is this legit? (referring to keyboard)

Nephia: Ngayon, hindi pa siya interactive, yung keyboard. Ang pwede mo palang i-press is 'return'. When you press it, you're gonna return (back to messages). Kunyari na finish mo na (yung minigame 1), you press 'Yes'.

Nephia: So the conversation is supposed to continue

Nephia: (Pointing at 3 dots) That's supposed to be more conversations.

Nephia: (Pointing at picture sent by F1) That's supposed to be a signal for minigame 2. If a friend sends you a photo, what do you do with it?

Participant 3: Look at it.

Nephia: Yes.

Nephia: There. So that's how you open minigame 2. Yung instructions nandiyan. It's supposed to be spot the difference. But, it's also not functional yet so right now you can only press 'Game Done' or 'Game not Done'. Try mo muna yung 'Game not Done'. It's just gonna go back (to messages).

Participant 3: Then you'll resume

Nephia: Yeah. So let's say you finished this minigame, you can press 'Game Done'. Ayon, conversation (continues).

Nephia: So yeah there. It says 'END' there. Just to signify the end (of the conversations). Right now, yan muna yung end ng messages

Nephia: I'll press this muna so we could (go back sa start).

Nephia: Yung last app na functional is the Diary app. Which is the second app to the left. That's supposed to keep track of your progress sa game. So like ano na yung mga na-unlock mo na level.

Participant 3: Does it also store like the knowledge you're supposed to know?

Nephia: Yes. So like trivia, tips, whatever.

Nephia: Don't press 'X'. You can press this one. To go back, just press storm surge and flood again. Wala pa naman yung fire and earthquake ngayon. So, you can press 'X' to go back to the home screen.

Nephia: So basically, yan muna yung mga functional apps namin right now. Do you have any comments?

Participant 3: I think what I said earlier dapat clear yung this is a game. If you need to say the flow sa start, maybe you should.

Nephia: What flow?

Participant 3: Like diba sa start ng ibang games may tutorial. Para lang guide na which is the minigame, which is part of the bigger game. It explains the whole concept of the game before you dive straight into it. Or at least the goal that you want for the user to get.

Nephia: What about like the UI?

Participant 3: UI-wise? Straightforward naman.

Participant 3: So like what Sean said, I think you need a home button.

Participant 3: (Referring to google app) This one wala naman akong problems dito and the other minigames.

Nephia: Any other suggestions?

Participant 3: Actually wala naman. Clear naman yung iba.

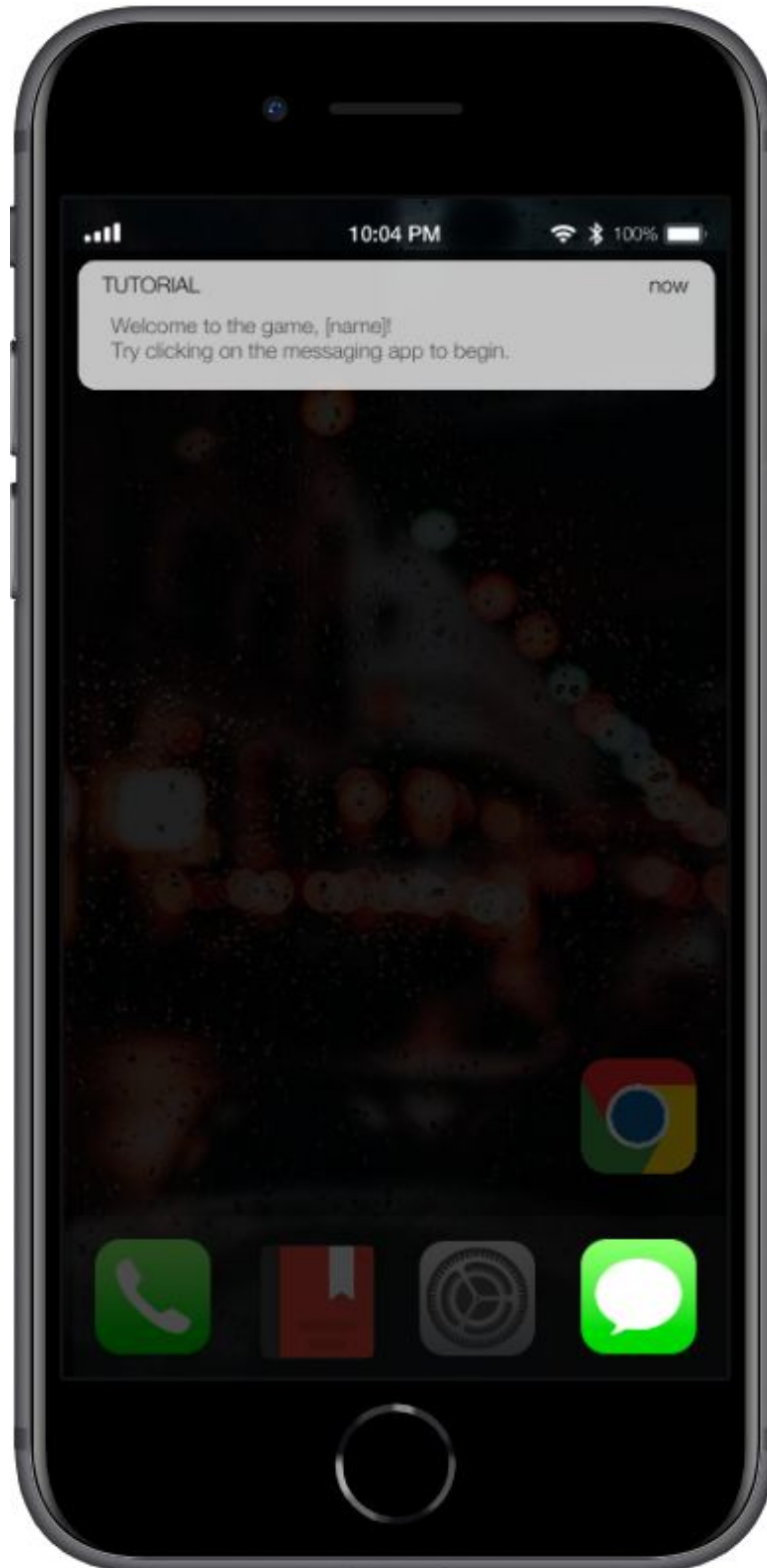
III . Participatory Design Report

A . Observation Summary and Prioritization

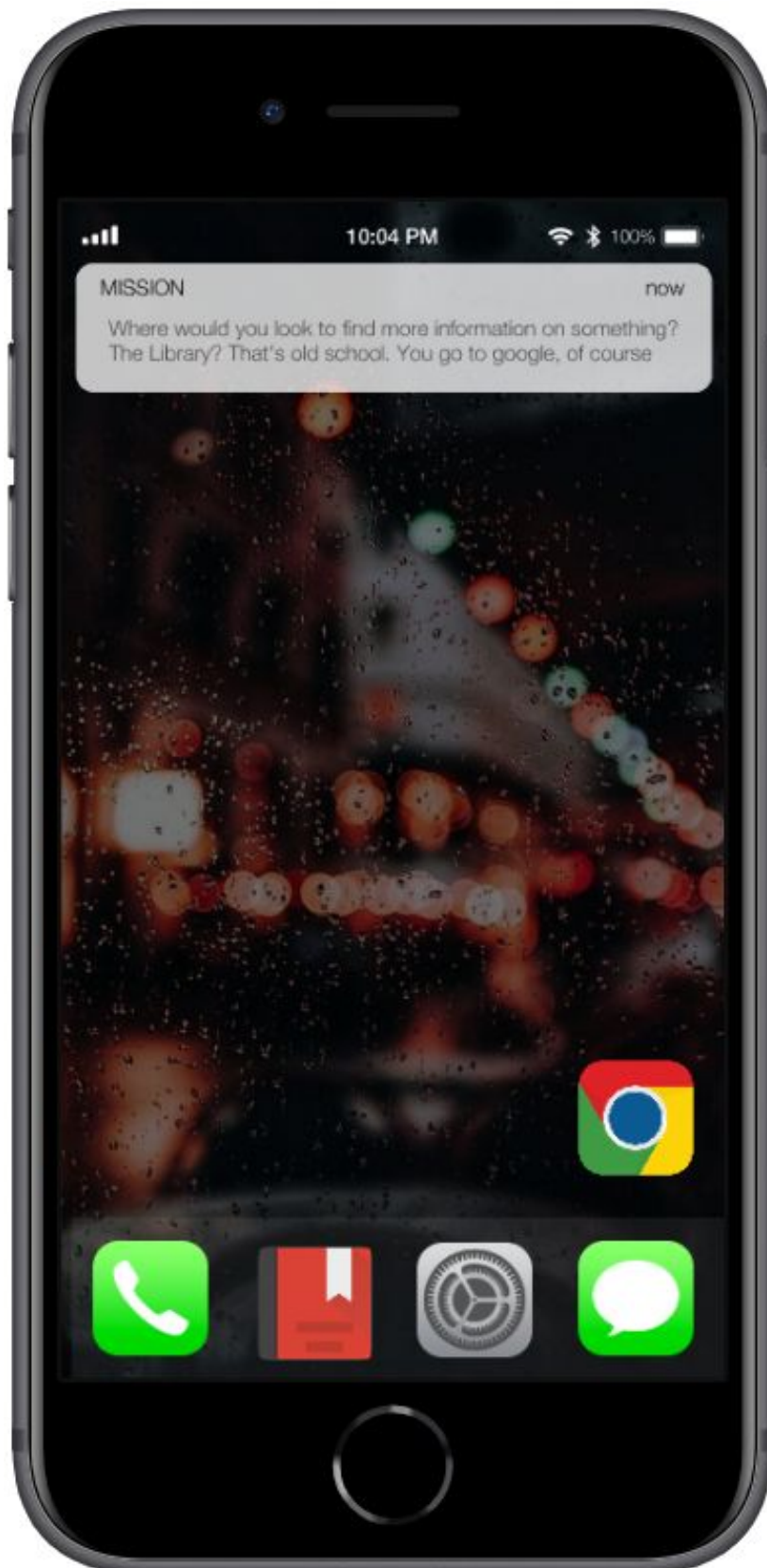
Observation	Prioritization (using MoSCoW)
Participants made comments about adding or making the “home” or “back” buttons more consistent	Must Have
Participants made comments about making the background of the application icons lighter on the homescreen (more consistent)	Could Have
All the participants made comments about adding an “entity” (arrows, tutorial, out of character assumption) that guides the player in the game; either throughout or on the first unique events encountered.	Must Have
Participants made comments about making the reply bar more eye-catching whenever it’s active (a.k.a when it’s time for the player to reply)	Must Have
Participants made comments about emphasizing some text (page title, ‘LOCKED’) in the diary -- make some texts bold or larger. A participant suggested not showing the title of the locked diary pages, however another participant thought it would be better to keep the titles visible even when locked.	Could Have
Participant made a comment about editing the words on the decision-making parts (the words in the input section could be different from what “sends” after clicking them) and suggested that the player shouldn’t be sending two messages consecutively	Would Have
*due to limited time, this was not included in the revised prototype since it has the lowest priority and since it won’t be affecting the UI much	

B . Sample Screens of the Revised Prototype

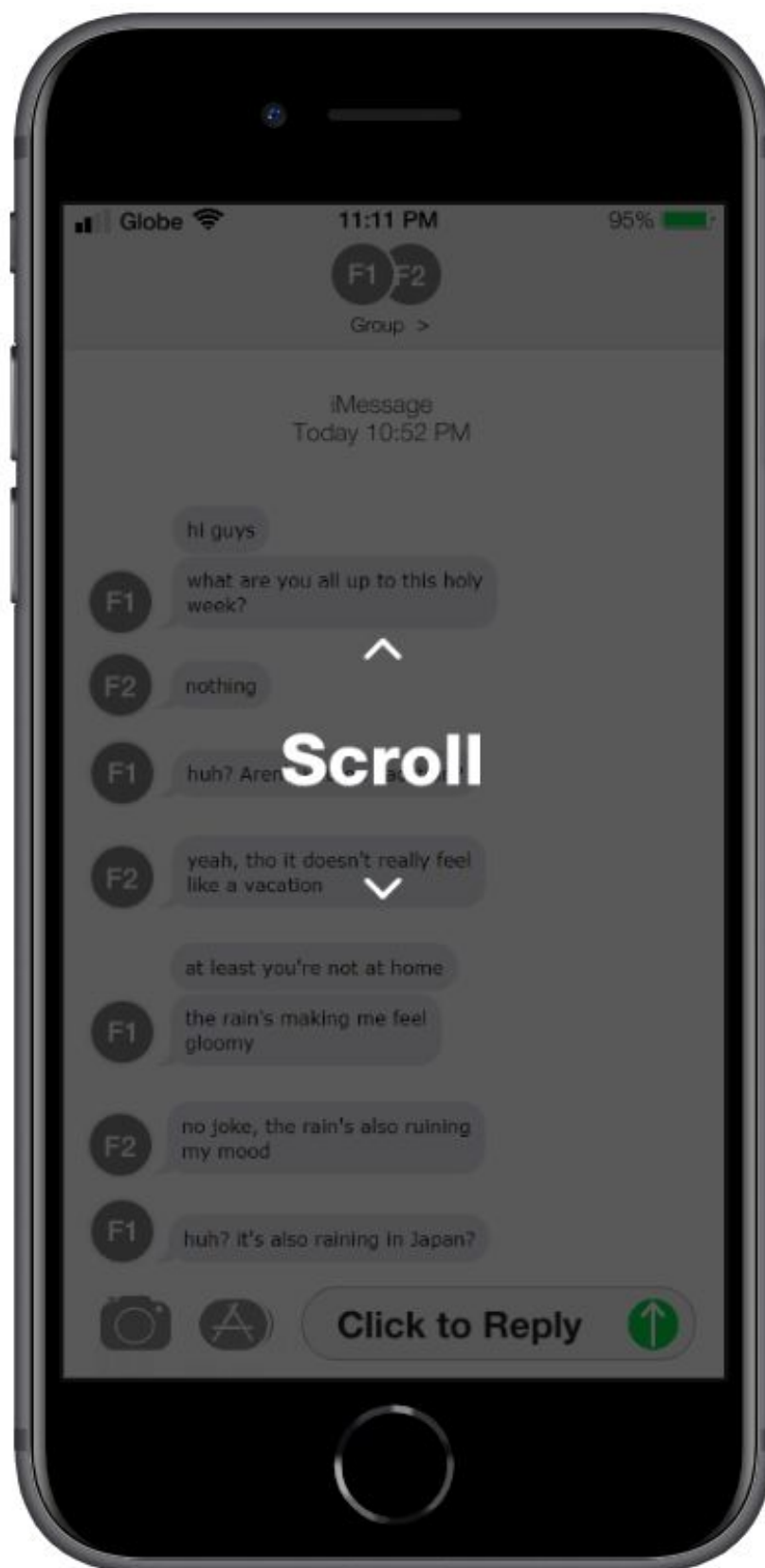
Tutorial “Entity”/ “Out of Character Assumption”:



Tutorial Entity: + making the application icons more consistent (diary app):



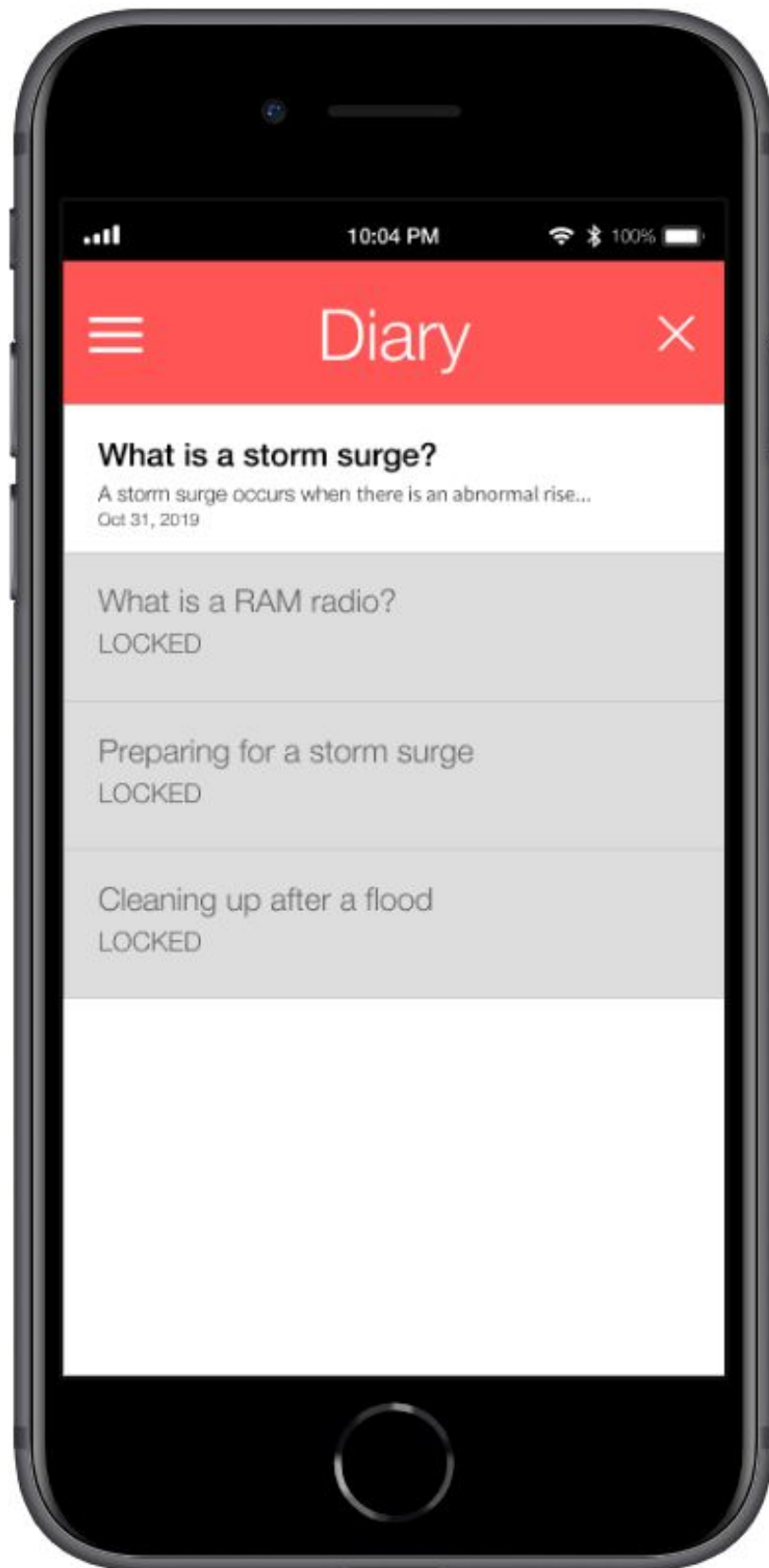
Tutorial “Entity” + Eye-catching “Click to Reply”:



More consistent back or exit buttons:



Emphasizing title of unlocked diary page and emphasizing the word “locked”:



C . InVision Link(s):

Revised prototype link: <https://projects.invisionapp.com/prototype/ck1vwam2017ohk016zqqizu3/play>