

9.7 Mid-fi Usability Testing

9.7.1 Mid-fi prototype screenshots and links

Prototype A: [Link here](#)

Figure1: Login Screen

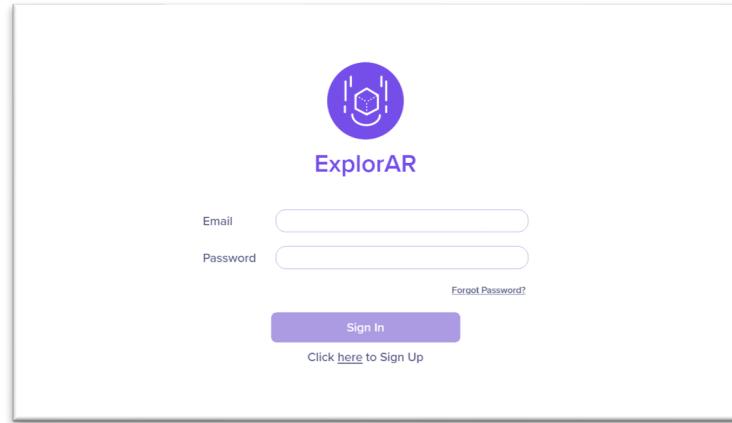
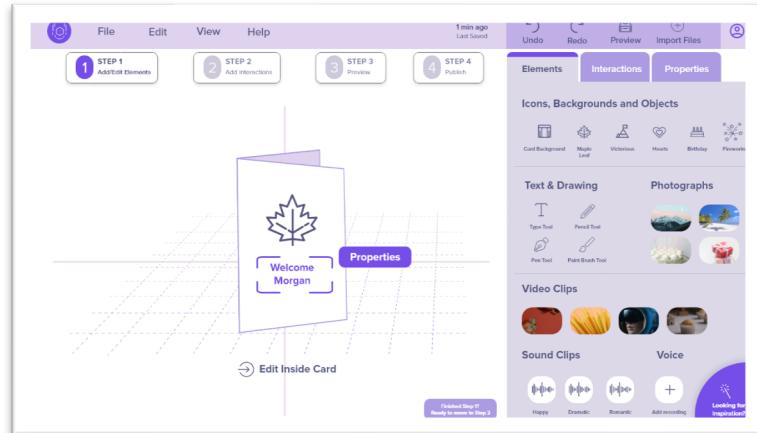
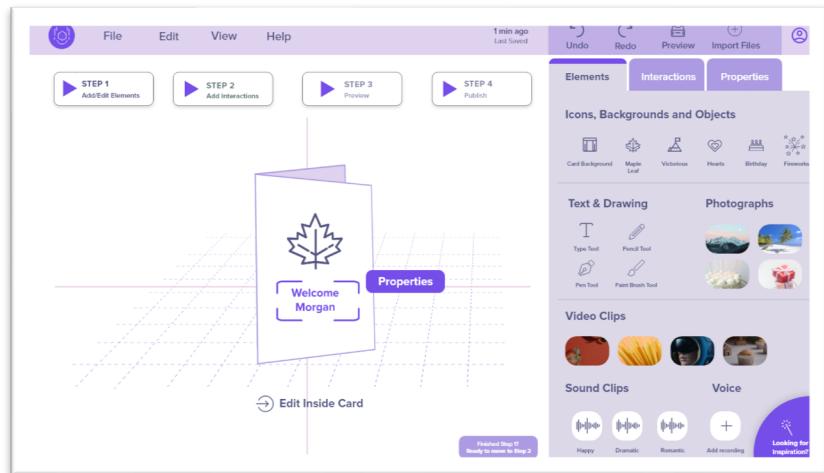
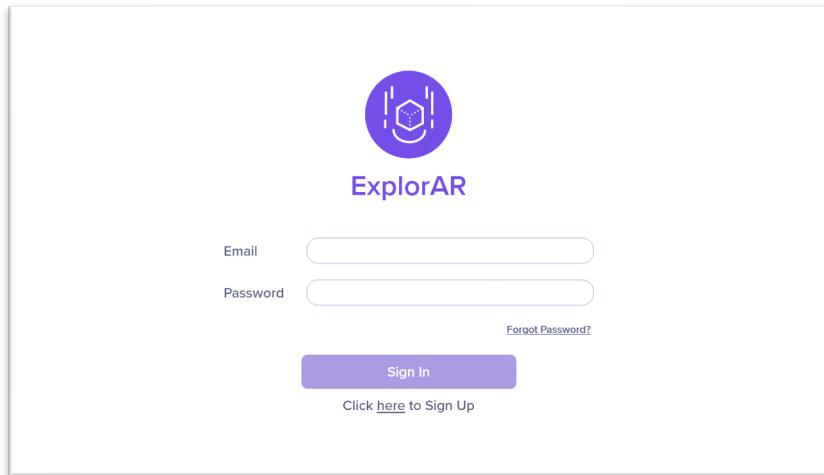


Figure2: Step to Add/Edit Elements



Prototype B: [Link here](#)

Figure3: Prototype B Login Screen



9.7.2 Mid-fi prototype interview questions and test plan

Scope

Our usability test involves testing two mid-fi prototypes for our AR Content Creation Tool. The first prototype will have a verbal guidance that will provide instructions to the user on what step they are on. The second prototype will be basically without verbal guidance. We will focus on understanding the user thoughts and their satisfaction with the prototypes.

Purpose

This project aims to show the two mid-fi prototypes for our AR Content Creation Tool to our participants and analyze which prototype they prefer to use. This study focuses on the test objective: Would users of our platform prefer adding verbal guidance or without verbal guidance? In our previous usability tests, participants struggled to identify the start and end of the project. They also noted the various elements and terms that were confusing to them. A strong project creation process helps conversion rates and increases learnability.

Test Objective

Would users of our platform prefer adding verbal guidance or without verbal guidance?

Introduction

"Thank you for joining today. My name is _____, and I'll be leading this session, which is for a Capstone Human-Computer Interaction Masters class at DePaul. We are conducting a comparative usability test to evaluate the AR Digital Creation Platform prototype that my team designed. Our Capstone project is focused on making it simple and easy for individuals such as yourself to develop AR content. Your feedback is vital to us, and we appreciate your willingness to help with this project.

Explain the purpose of the project

The research conducted today will be used for our capstone project, and only our team will know your identity. Outside of our team, your identity will remain confidential.

Explain what will happen

Please know that there are no right or wrong answers, and we are testing our prototype, not you. I will be showing you two mid-fi prototypes and ask you to complete short tasks on each. We want to understand your expectations as you interact with the prototypes, and which one do you prefer. This meeting should last about 30 to 45 minutes.

Informed consent

This activity is voluntary. You have the right not to answer any question and stop the test session at any time or for any reason. Your responses will be confidential and used only in connection with this class assignment.

We will use pseudonyms rather than your real name. Before starting the session, I want to make note that my pronouns are (say pronoun). To make sure I am addressing you properly, would you mind sharing what pronoun or pronouns you would like me to use to address you during our time together?

[Ask the participant if they read the informed consent form.]

Have you read the informed consent form? Do you have any questions about it before we start the interview?

We also would like to record this interview to get an accurate representation of what was said. May we have your consent to start recording?

Definitions – to make sure we are using the same terminology

1. **Augmented reality:** Augmented reality is an interactive experience of a real-world environment where the objects in the real world are enhanced by computer-generated perceptual information.
2. **Creation Tools:** Tools that assist people in creating digital and non-digital content such as documents, art, photography, music, games, tools etc.

Background Interview

To get started, I would like to get to know you a bit:

1. Have you ever heard about Augmented reality?

2. On a scale of 1 to 5, how aware are you of Augmented Reality (AR) experiences? (1 is Not at all Aware, and 5 is Extremely Aware)
3. Have you created AR content?
4. On a scale of 1 to 5, what is your level of familiarity with creating AR experiences? (1 is Not at all familiar, and 5 is extremely familiar)
5. If say 1 or 2, show the iGreet video:
https://www.youtube.com/watch?v=p7mUzgEX_Y8
6. Do you know what content creation tools mean?

Usability Tasks

Now we will jump into the usability test, and I will begin by providing a link to first prototype in the chat. Please, open that link and then begin sharing your screen. I will provide a brief scenario and ask you to complete a short series of tasks. After completing the first prototype, we will jump into the second prototype. When performing tasks, remember to THINK OUT LOUD, describing your thinking process. For example, talk about:

1. What you are planning to do next
2. Reasons behind your selections
3. The challenges you face (if any)
4. If anything is confusing or unexpected

You may ask questions during testing, but please know that I may not answer them if I feel like it will affect how you would interact with the prototype if I were not here. Are you ready to begin?"

I have shared the [prototype link](#).

For Prototype A (without verbal guidance):

Scenario: Imagine that your school friend is coming from Canada to visit you. You wanted to share a few fond memories of your time to make them feel welcome. Your colleague at work mentioned that there is AR software that could help create a fun greeting card experience to share those memories. You decided to use it and create a greeting card for your friend.

Task 1: Can you show me how you go about creating a greeting card project? Let me know when you are done with the task.

Post Task Question:

- Do you think you finished the task?
- On a scale of 1 to 5, how easy was it for you to complete this task? 1 is very difficult, and 5 is very easy. Please explain your rating.
- On a scale of 1 to 5, how satisfied were you with the process of creating a new project? 1 is dissatisfied, and 5 is satisfied. Please explain your rating.

Task 2: How do you add a “Maple Leaf” icon and “Welcome Morgan” text on the card? And once you do that, how would you change the color of the text? Let me know when you are done with the task.

Post Task Question:

- 1) Do you think you finished the task?
- 2) On a scale of 1 to 5, how easy was it for you to complete this task? 1 is very difficult, and 5 is very easy. Please explain your rating.

- 3) On a scale of 1 to 5, how satisfied were you with the process of adding a maple leaf icon and text and then editing it? 1 is dissatisfied, and 5 is satisfied. Please explain your rating.

Task 3: How would you add the content inside the card? Let me know when you are done with the task.

Post Task Question:

- Do you think you finished the task?
- On a scale of 1 to 5, how easy was it for you to complete this task? 1 is very difficult, and 5 is very easy. Please explain your rating.
- On a scale of 1 to 5, how satisfied were you with the ability to edit inside the card? 1 is dissatisfied, and 5 is satisfied. Please explain your rating.

Task 4: How would you add "slide to right" motion to the card? Let me know when you are done with the task.

Post Task Question:

- 1) Do you think you finished the task?
- 2) On a scale of 1 to 5, how easy was it for you to complete this task? 1 is very difficult, and 5 is very easy. Please explain your rating.
- 3) On a scale of 1 to 5, how satisfied were you with the adding motion to the card? 1 is dissatisfied, and 5 is satisfied. Please explain your rating.

Task 5: How would you go about previewing and publishing the card? Let me know when you are done with the task.

Post Task Question:

- 1) Do you think you finished the task?
- 2) On a scale of 1 to 5, how easy was it for you to complete this task? 1 is very difficult, and 5 is very easy. Please explain your rating.
- 3) On a scale of 1 to 5, how satisfied were you with the process of previewing and publishing the card? 1 is dissatisfied, and 5 is satisfied. Please explain your rating.

Now we are done with the first prototype, I am going to share my screen and show you the second prototype, I'll give you a short task and just walk me through what steps you will take. (If needed mention due to some additional abilities, it asks you to create an account with Adobe, and we thought it would be much easier if I share it than making you sign up). For this section, it's a good idea to lower your volume a little bit.

<https://xd.adobe.com/view/332ca611-555e-4650-980c-a340d41d8c1e-667f/?fullscreen&hints=off>

For Prototype B (with verbal guidance):

Task: Again, create a greeting project, once you reach the project workspace, explore it for a little bit and then explain your thoughts.

Note: If they don't explain the buttons at the top, ask what do you think about those? If they don't click button, ask what do you expect them to do?

- 1) What do you think about having verbal guidance in the prototype?
- 2) Do you think it will be useful for you when using the platform?

- 3) Looking at this interface, do you think it is clear enough that you can move back and forth between the steps?

Post-Test Questions:

- 1) What was your overall impression of ExplorAR platform?
- 2) Do you feel the number of steps provided on the platform was sufficient to complete the task? What if anything would you change?
- 3) What are your thoughts and impressions of verbal guidance feature?
- 4) Do you feel we overlooked or missed anything in our prototype?
- 5) Between the two prototypes, which one was easier to use? Why?
- 6) We are almost done but before you go, I want to show you a list of words (<https://forms.office.com/r/X2pLb5iVqk>). Please pick any 5 to describe our platform.
- 7) Any additional comments or feedback?

Demographics Questions

- 1) What is your occupation?
- 2) What age range do you fall into? (18-24, 25-34, 35-44, 45-54, 55-64, 65-90)
- 3) What is your ethnicity?

This concludes our usability test session. Thank you for talking with me today. Have a good day!

9.7.3 Mid-fi Interview Consent form

Used the same consent form as in the Lo-Fi Usability Test [Section 9.6.3](#)

9.7.4 Mid-fi Usability Test Log

Background Interview

1. Participant Number

2. Notetaker

3. Has the participant ever heard about Augmented reality? (Enter Yes or No or Explain if the participants share their experience)

4. On a scale of 1 to 5, how aware they were of Augmented Reality (AR) experiences? (1 is Not at all Aware, and 5 is Extremely Aware)
 1 2 3 4 5

5. Have they ever created an AR content?
 Yes
 No

6. On a scale of 1 to 5, what is their level of familiarity with creating AR experiences? (1 is Not at all familiar, and 5 is extremely familiar)
 1 2 3 4 5

7. Do they know what content creation tools mean?
 Yes
 No

8. Did they share anything interesting before starting the usability test session? Note them below:

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9.7.5 Mid-fi Usability Test Data

Mid-fi usability test data