VDES3444 Interactive Narrative

Project 3 - Cognitive Walkthrough

Jigsaw

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Ruixin Dai
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Winter 2023

Content

Overview

Project Status: 95%

In the final stage of our game development, we completed all the remaining parts and began user testing. To conduct this testing, we chose **3 users** and identified some problems.

We intentionally shifted our perspective away from that of the game's designers and adopted the viewpoint of the user. This involved asking them to think out loud as they played the game, in order to gain a better understanding of how they interacted with it.

By doing so, we were able to identify areas of the game that needed improvement and make changes accordingly. This user-centered approach allowed us to create a more enjoyable and engaging game for our audience.
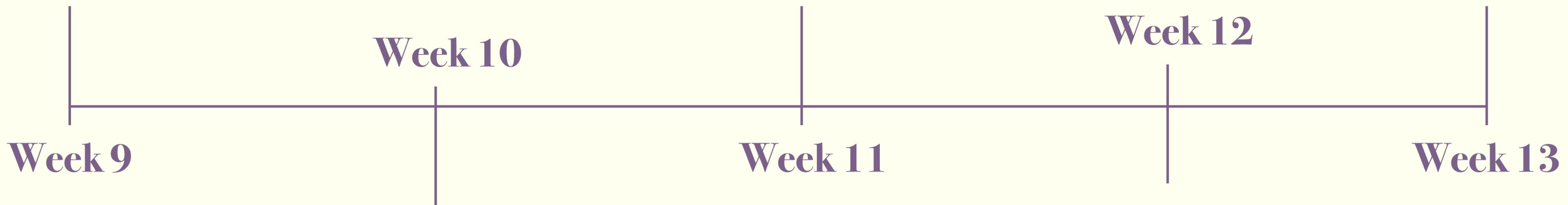
Project Management

1. Develop the schedule
2. Assign tasks

1. Detective notebook prototype
2. Puzzles design
3. Ending audio generated

Project due

Week 10

Week 12

Week 9

Week 11

Week 13

1. AR & VR refine
2. Physical platforms done
3. Social media refine

1. Detective notebook website built
2. AR & VR refine
3. User Test
4. All platforms refine
5. Presentation power point

Project Management

Assignment of tasks and time management

Every week we will have a group meeting where we will set task for each one and review what everyone has done in the previous week to make sure we can finish the task on time before the DUE.
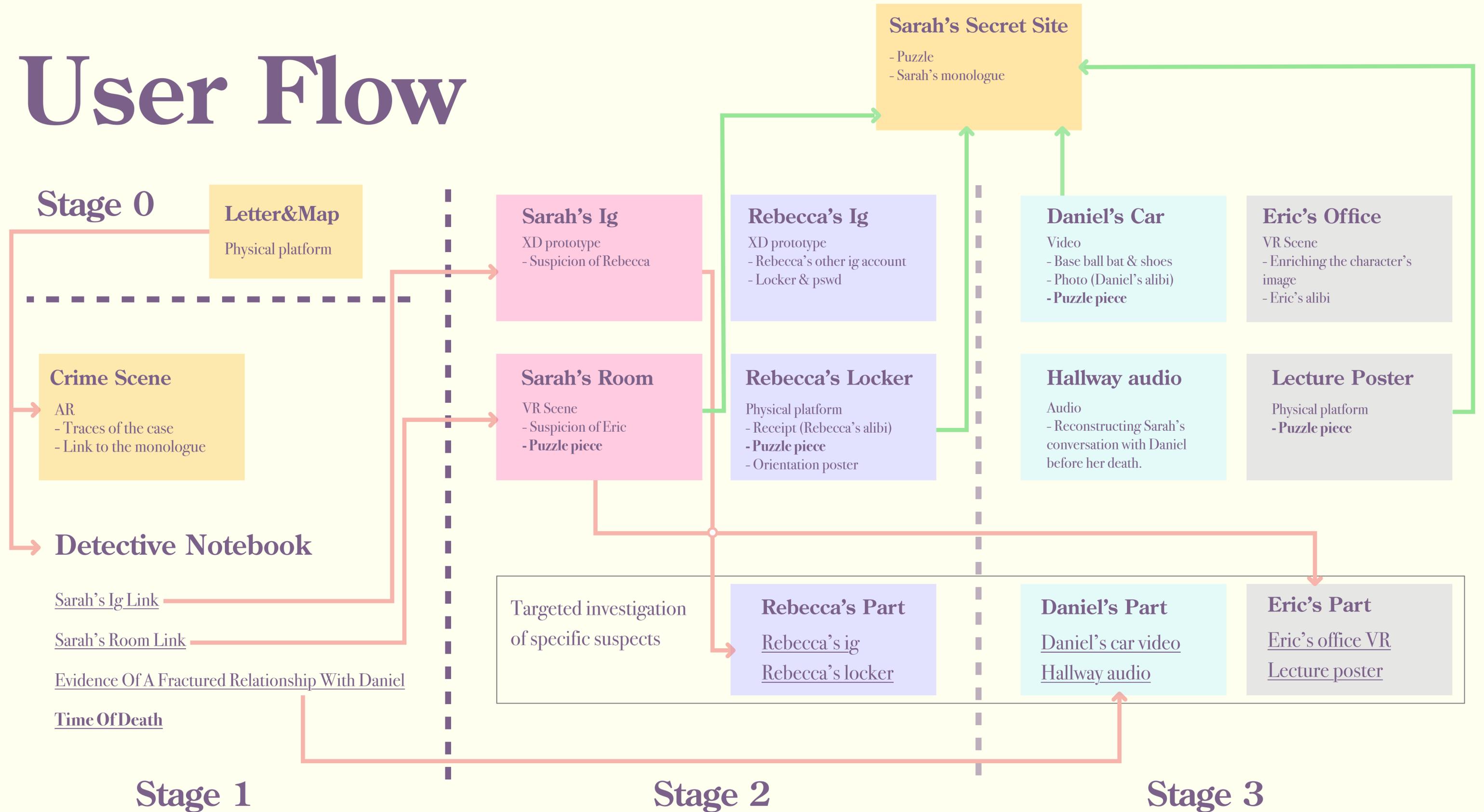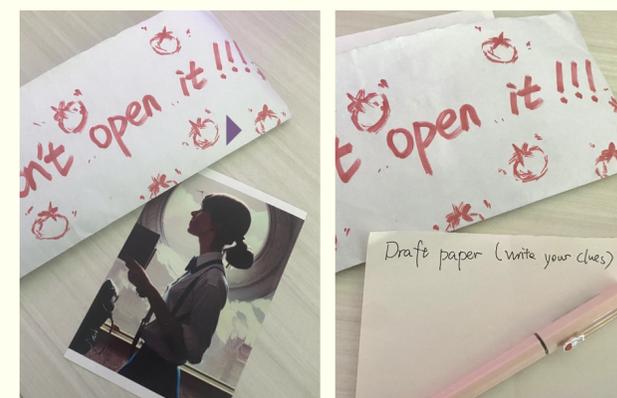
GANTT Chart

Project 3: Develop & Deploy					
Stage 1: AR scene refine	Ruixin&Poppy	100%	3-15-23	3-22-23
Stage 2: Social Media refine	Yinan	100%	3-15-23	3-22-23
Stage 2: VR scene_Sarah's room refine	Ruixin	100%	3-15-23	4-9-23
Stage 2: Detective Notebook Page 2 prototype	Yinan	100%	3-22-23	3-29-23
Stage 2: Detective Notebook website	Yinan	100%	4-5-23	4-9-23
Stage 3: Eric office VR scene	Ruixin	100%	4-5-23	4-9-23
Stage 3: Daniel's car video	Poppy	100%	3-22-23	3-29-23
Stage 3: Daniel's investigation report poster	Poppy	100%	3-15-23	3-22-23
Stage 3: Puzzles design	Ruixin&Poppy	100%	3-22-23	3-29-23
Stage 3: Ending audio	Poppy	100%	3-22-23	3-29-23
User Test	All	100%	4-10-23	4-11-23
All Platforms refinement	All	100%	4-10-23	4-11-23
Presentations & Final deliverables	All	100%	4-10-23	4-11-23

Raci Matrix

Role Assignment

Project 3	Yinan Li	Ruizhe Wang	Ruixin Dai
VR scene built	C	A	R
AR & VR scene refine	C	R	A
Social media platform refine	R	A	I
Physical platform done	R	R	A
Puzzle pieces design	A	R	I
Detective notebook website	R	A	C
Video & audio	I	R	A
User test	R	C	A
Presentations & Final deliverables	I	R	C

User Flow

Stage 0

Letter&Map
Physical platform

Crime Scene
AR
- Traces of the case
- Link to the monologue

Detective Notebook

Sarah's Ig Link

Sarah's Room Link

Evidence Of A Fractured Relationship With Daniel

Time Of Death

Sarah's Ig
XD prototype
- Suspicion of Rebecca

Sarah's Room
VR Scene
- Suspicion of Eric
- **Puzzle piece**

Rebecca's Ig
XD prototype
- Rebecca's other ig account
- Locker & pswd

Rebecca's Locker
Physical platform
- Receipt (Rebecca's alibi)
- **Puzzle piece**
- Orientation poster

Sarah's Secret Site
- Puzzle
- Sarah's monologue

Daniel's Car
Video
- Base ball bat & shoes
- Photo (Daniel's alibi)
- **Puzzle piece**

Eric's Office
VR Scene
- Enriching the character's image
- Eric's alibi

Hallway audio
Audio
- Reconstructing Sarah's conversation with Daniel before her death.

Lecture Poster
Physical platform
- **Puzzle piece**

Targeted investigation of specific suspects

Rebecca's Part
Rebecca's ig
Rebecca's locker

Daniel's Part
Daniel's car video
Hallway audio

Eric's Part
Eric's office VR
Lecture poster

Stage 1

Stage 2

Stage 3

P3 Developed contents

AUTOPSY REPORT

To :
Mr. Jason Gallego

Maych 21, 2023

Subject: Female, 21 years old
Estimated Time of Death: 3-4 p.m.
Cause of Death: Jumping off a building

External Examination:
The deceased is a well-developed and well-nourished female of apparent age 21 years. The body is intact with no obvious signs of trauma other than a slap wound on the left cheek. The wound is a 2-inch contusion with slight swelling and redness.

Internal Examination:
The body was opened, and a thorough internal examination was performed. No significant internal injuries or internal bleeding were observed. The organs appear healthy and show no signs of disease or dysfunction.

Skeletal Examination:
No fractures or dislocations were observed in the skeletal structure.

Toxicological Analysis:
A toxicological analysis was performed, and no signs of drugs, alcohol, or toxic substances were detected.

Conclusion:
Based on the external and internal examination, toxicological analysis, and the circumstances surrounding the death, it is concluded that the cause of death was multiple blunt force trauma due to jumping off a building. The slap wound on the face is considered a minor injury and is not a contributing factor to the cause of death. This death is ruled as suicide.

BIG TOMATO

Dear Detective Jason,

I hope this letter finds you well. I am writing to personally invite you to join an ongoing murder investigation. Your expertise and experience would be greatly valued and appreciated in this matter.

The investigation will take place at the location indicated on the map on the back of this letter. We believe that your involvement could help bring this case to a close and bring justice to the victim's family.

I understand that you are a busy individual, and I would like to assure you that your time and efforts will be greatly appreciated. Your contribution could be the missing piece in solving this case.

Best regards,

Big Tomato Police Service

Please find this place and use our trace investigation tool to scan to find some clues.

Everything you should know about the case in your online notebook.

Good luck!

Rabbit hole

- Invitation Letter
- Autopsy report
- Photo of the deceased Sarah
- Draft paper (puzzles)
- Direction of the crime scene
  - AR investigation tool
  - Detective Notebook
  - Rebecca's Locker (Hidden Clue)

P3 Developed contents

Big Tomato Trace Investigation Tool

Target Image

https://rosydai.8thwall.app/jigsaw/

Demo Video: https://youtube.com/shorts/R4sy2fOQm1M
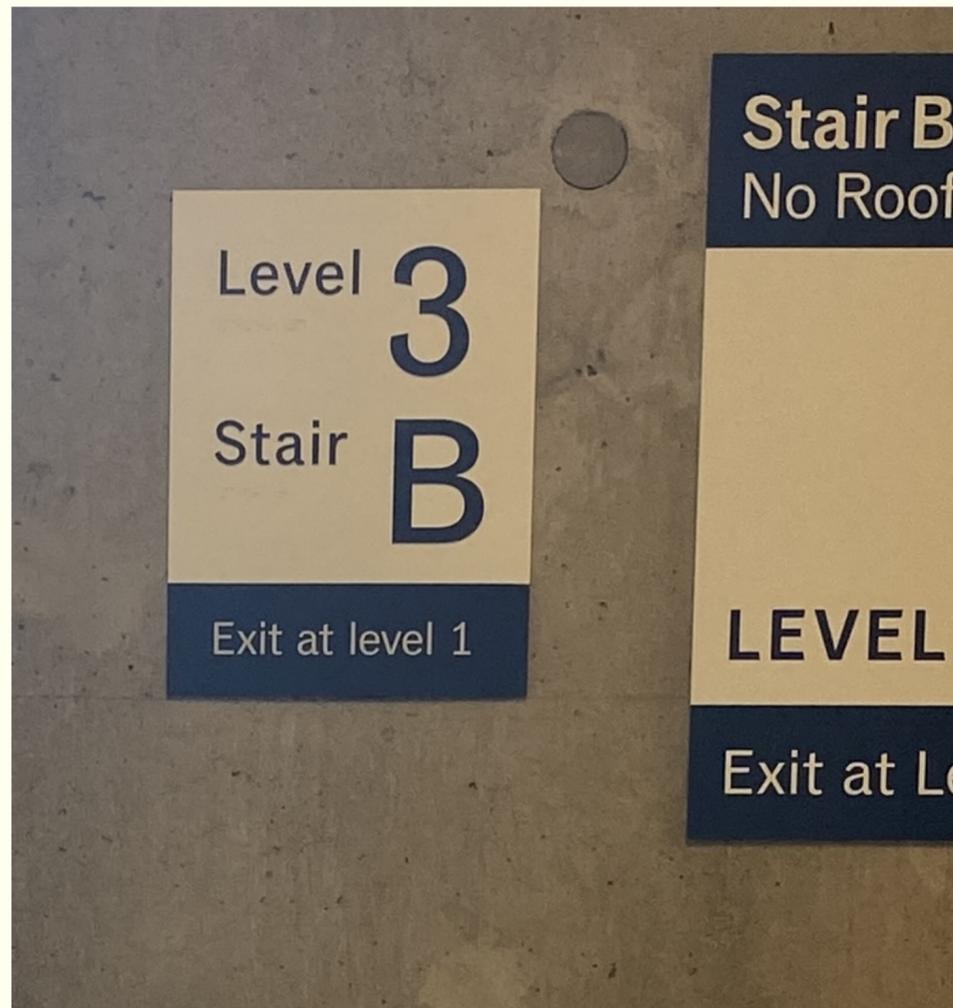
AR (refined)

The trace investigation tool to scan the crime scene

▸ Revealing traces of the crime scene
▸ Hyperlink to Sarah's secret site (puzzle site)
▸ Show a prompt to lead the player to leave the scene when they finish searching

P3 Developed contents

https://sarah.drrrrx.repl.co
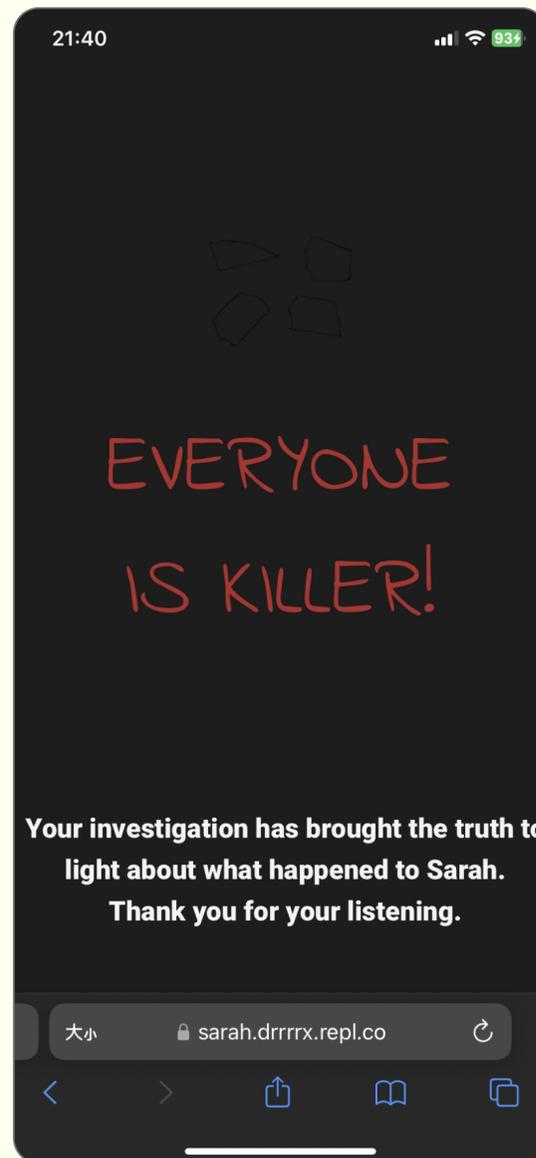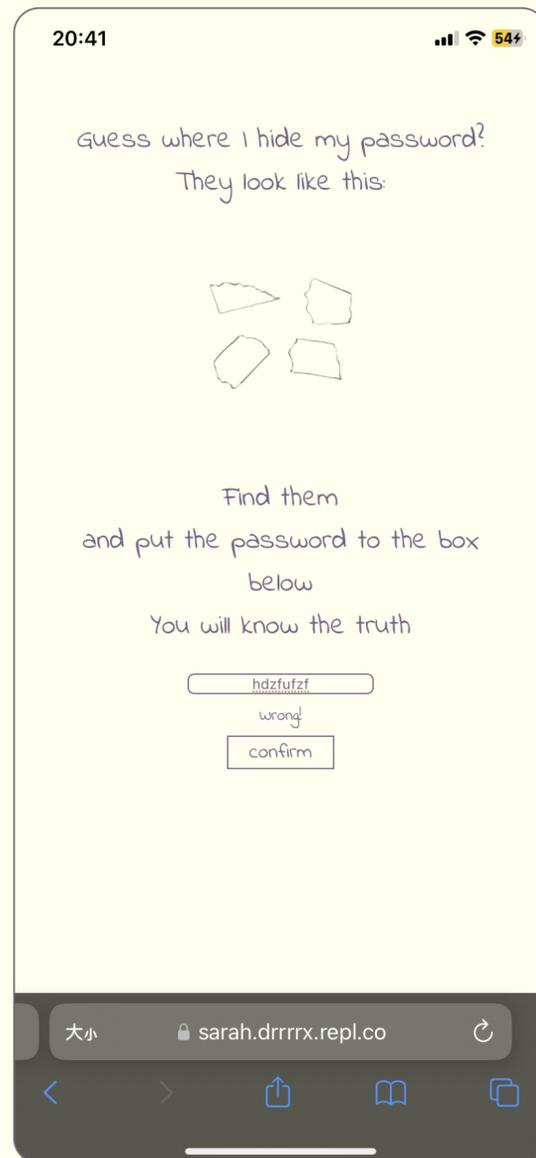
Puzzle Site (Sarah's Secret Site)
Connect the start and the end of the story

▸ Indicate players to find 4 pieces of puzzles
▸ Show a prompt if the player inserts the wrong password
▸ Play the audio of Sarah's monologue with the right password
▸ Show an end-of-story prompt after the audio has finished playing

P3 Developed contents

4 Pieces of Puzzle

- **Ever**: Sarah's room
- **er**: Daniel's car
- **Yonei**: Eric's lecture poster
- **skill**: Rebecca's locker

"Everyone is Killer"

P3 Developed contents

Detective Jason's Notebook

Vertical view

Horizontal view

Submit The Suspect

Having identified one or more suspects, it's time to delve into the Big Tomato Police Department's Intelligence Network to unravel the mystery and reveal the true culprit behind the murder.
Now, enter the FIRST NAME of any suspect you find suspicious to uncover more information about them.
Reminder: When your investigation hits a dead end, you may want to consider if there are any other suspects.

Rebecca | Submit

Investigation of Rebecca — Clues about Rebecca

Rebecca Lee

Rebecca and Sarah have been acquainted since high school, sharing the same class. Strangely, after college, Rebecca ended up being a year older than Sarah.
As a result, their relationship remained superficial and seemingly they did not know each other very well.

We discovered that Rebecca and Sarah's initial reunion in college occurred during the orientation.
Based on insider information, essential clues to the case may be found in Rebecca's LOCKER.

Case Statement — 21-year-old woman falls to her death from a building

ON MARCH 23, 2023, around 3:00 p.m.–4:00p.m., a 21-year-old female fell to her death at Sheridan College. The victim, Sarah Whitton, was a freshman at the college. The fall was initially determined to have occurred in the stairwell of J-wings Stair B Level 3 at the college. At the scene, police found shattered window glass, blood and footprints belonging to two people. Police initially determined that this was a possible homicide.

I, officer Jason Gallego, have been assigned to investigate this case. Further investigation is needed to uncover clues and identify suspects to uncover the truth of the case.

Broken glass

Footprints

I should go into the field and investigate the crime scene and explore the traces of the scene.
(When ever you found the **broken glass, footprints and the link**, you are done with this scene.)
Click here to use the AR tracing tool.

Victim Investigation — Social relations of the deceased

Comments about Sarah

According to the walk-through analysis, Sarah being a good impression to everyone around her. She had just entered college not long ago and soon had many friends. She is positive and outgoing, and loves fashion trends.
Who would conflict with a girl like her?

There is a record in the log of the Big Tomato Police Station that Sarah had reported a case but no police response was recorded. Could this be related to Sarah's cause of death? As the sheriff in charge of this case, it is even more important to take this seriously.

HOME   SUSPECT INVESTIGATION

Submit The Suspect

Having identified one or more suspects, it's time to delve into the Big Tomato Police Department's Intelligence Network to unravel the mystery and reveal the true culprit behind the murder.
Now, enter the FIRST NAME of any suspect you find suspicious to uncover more information about them.
Reminder: When your investigation hits a dead end, you may want to consider if there are any other suspects.

Enter the suspect's first name that you want to investigate | Submit

HOME   SUSPECT INVESTIGATION

Investigation of Eric — Clues about Eric

Eric Davis

During the investigation, we initially identified Sarah's professor Eric as the most peculiar suspect, given that he was one of the few people she had come into contact with prior to her death. However, as the investigation progressed, we uncovered a disturbing revelation about Professor Eric's past.

Comments about Eric

Can you tell us about your husband Eric?

I feel so grateful to have Eric by my side as such a wonderful husband who always puts his

During our visit, it becomes evident that Eric and his wife share a deep affection, and he is a highly family-focused and reliable person.

Detective Notebook
The primary tool throughout the game

▶ Initial clues of the case

▶ Investigating Specific Suspects

https://detective-notebook.webflow.io/

P3 Developed contents

Sarah's room VR (refine)

▸ Reduced the size of the model to make it easier to launch on mobile devices

▸ Interaction with both click and approach event

▸ Adjust details to improve user experience

https://my.spline.design/sarahsroomcopy-fb69cec6af76bc7313341847ddc8e26f/

P3 Developed contents

Daniel's Car

- An investigation report about Sarah
- Key evidence (photo)
- A piece of the puzzle (er)
- Baseball bat and broken glass

P3 Developed contents
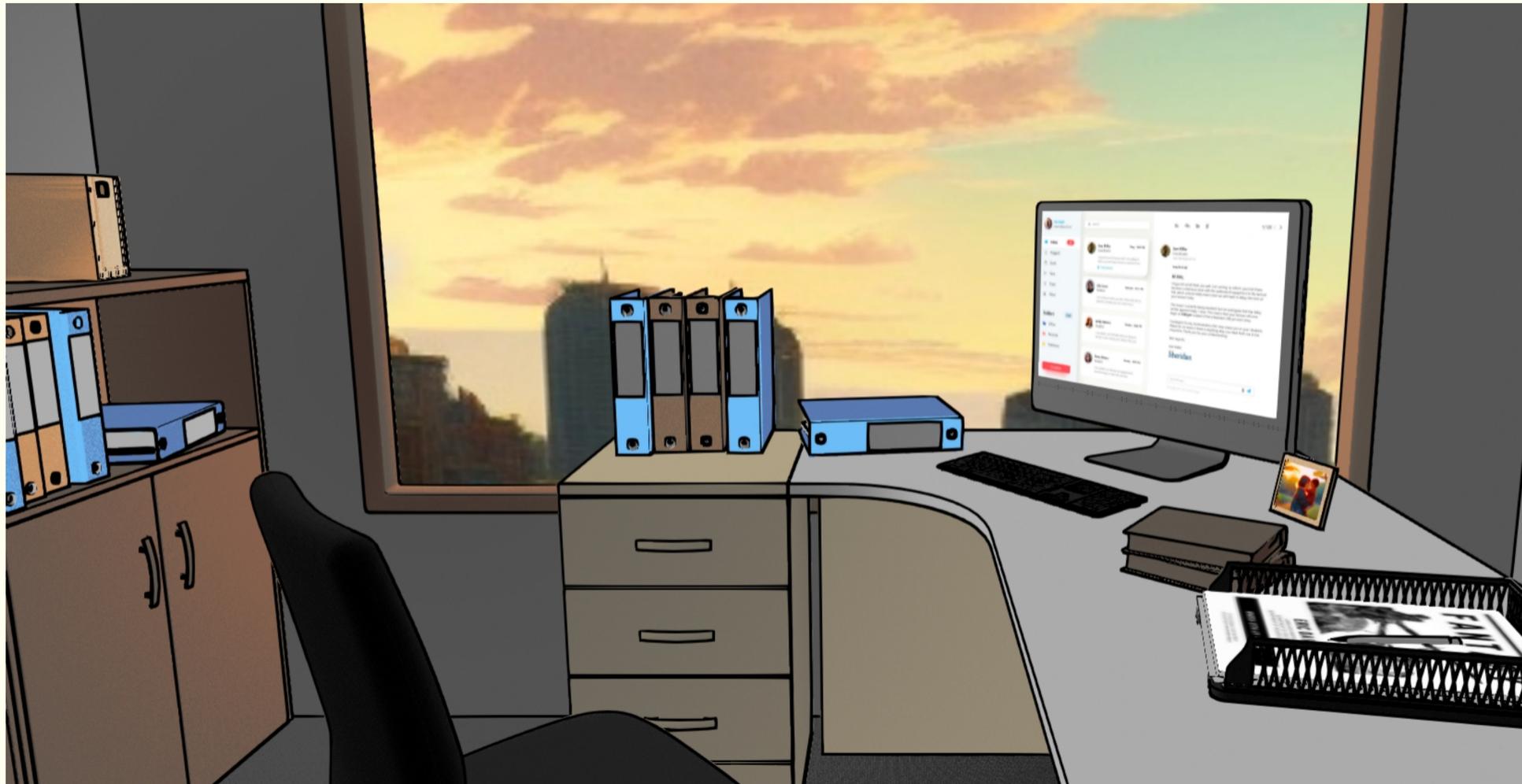
Eric's Office Desk

▸ Enriching character image
  (Eric's child drew him a picture)

▸ Key evidence (lecture time changed)

▸ A piece of the puzzle (Yonei)

https://my.spline.design/ericsoffice-8fe72e0a28af084843d9a1e8d3d32ea9/

P3 Developed contents
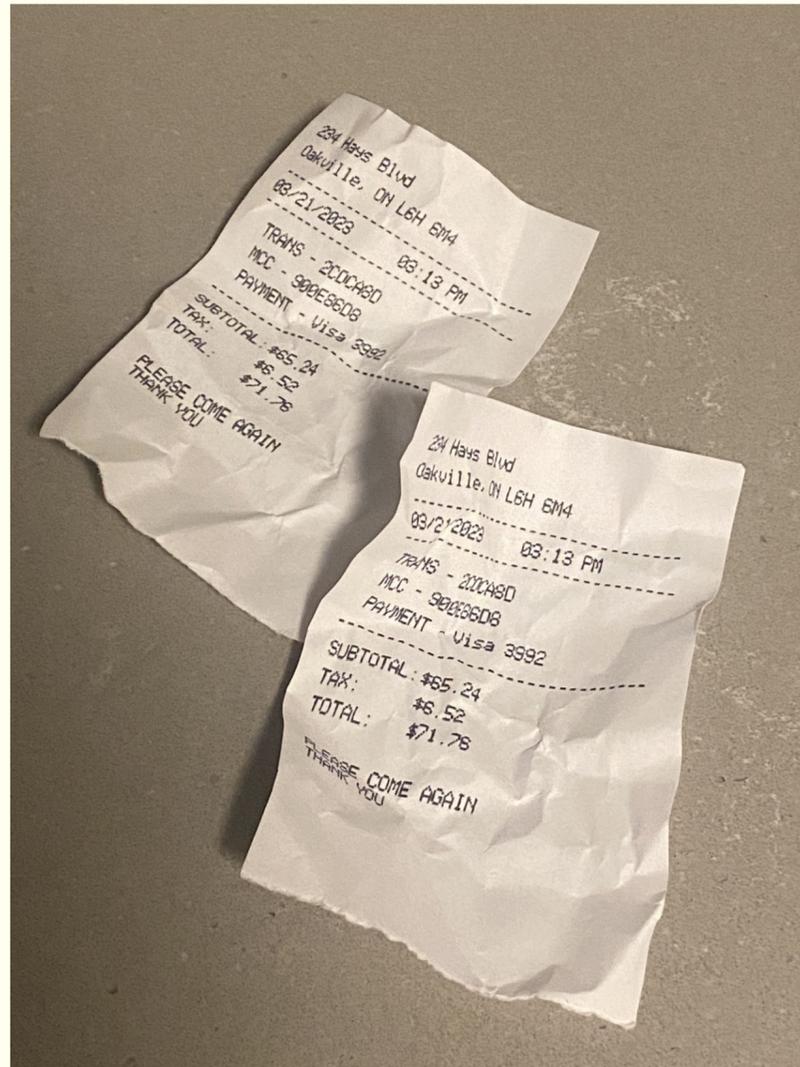
Rebecca's locker

- A piece of the puzzle (skill)
- Key evidence (receipt)
- A group photo of five people had Sarah's face painted black

Users

Name: Qi

Age: 24

Gender: Female

Skill Level: Beginner

Background: Qi enjoys playing detective games for relaxation but prefers easy problems as she does not like solving difficult puzzles that cause stress or frustration. She finds problem-solving enjoyable, but only if it's not too challenging.

Name: Zoey

Age: 21

Gender: Female

Skill Level: Intermediate

Background: Zoey has played a few detective games before and enjoys the challenge they present. She has some experience with puzzles and problem-solving but can sometimes struggle with more complex tasks.

Name: Kerwin

Age: 22

Gender: Male

Skill Level: Advanced

Background: Kerwin has played a lot of detective games and is very skilled at solving puzzles and finding clues. He is used to the mechanics of these games and has a good understanding of what to expect.

User Journey

Stage 0

Relatively easy to find the crime scene

★★★★⯪

Quickly find the crime scene

★★★★★

Easily found the crime scene

★★★★★

Rabbit hole

User Journey

Stage 1

Brocken Glass (√) Footprint (√) Sarah's Secret (×)

★ ★ ★ ½

Brocken Glass (√) Footprint (×) Sarah's Secret (√)

★ ★ ★ ★

Brocken Glass (√) Footprint (√) Sarah's Secret (√)

★ ★ ★ ★ ★

When you finish your searching, you can leave the scene, and continue your investigation in the Detective Notebook.
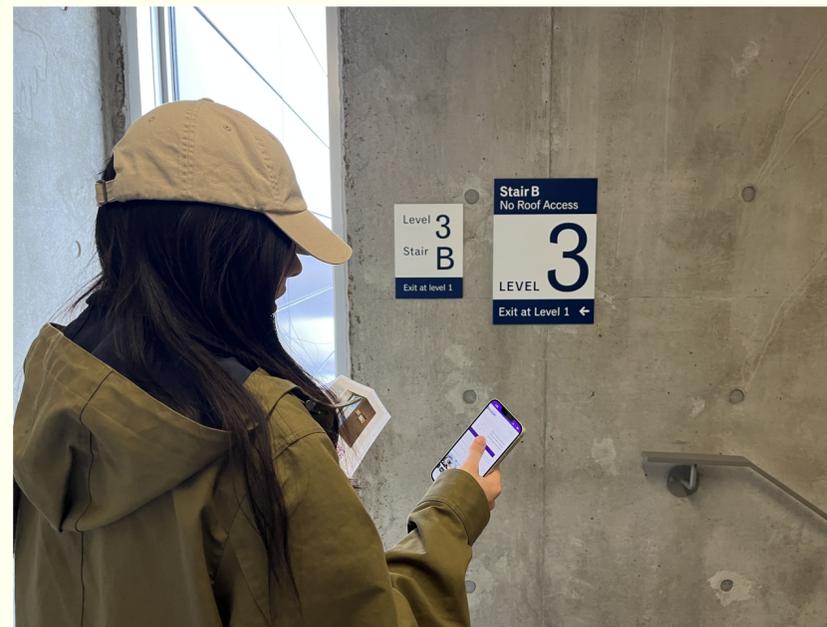
User Journey

Stage 2

Find suspect Rebecca (×) Eric (√) Daniel (√)
Find the puzzle in Sarah's room (√)
★★★⯪

Find suspect Rebecca (√) Eric (×) Daniel (√)
Find the puzzle in Sarah's room (√)
★★⯪

Find suspect Rebecca (√) Eric (√) Daniel (√)
Find the puzzle in Sarah's room (√)
★★★★★

User Journey

Stage 3

Finding out Rebecca is innocent-locker (×)
Finding out Daniel is innocent (×)
Finding out Eric is innocent (√)

★★

Finding out Rebecca is innocent-locker (√)
Finding out Daniel is innocent (×)
Finding out Eric is innocent (√)

★★★

Finding out Rebecca is innocent-locker (√)
Finding out Daniel is innocent (√)
Finding out Eric is innocent (√)

★★★★★

Sam Miller
Coordinator
sam miller@gmail.com

Today 08:45 AM

Hi Eric,

I hope this email finds you well. I am writing to inform you that there has been a technical issue with the audiovisual equipment in the lecture hall, which unfortunately means that we will need to delay the start of your lecture today.

The issue is currently being resolved, but we anticipate that the delay will be approximately 1 hour. This means that your lecture will now begin at **3:00 pm** instead of the scheduled 2:00 pm start time.

I apologize for any inconvenience this may cause you or your students. Please let me know if there is anything else you need from me in the meantime. Thank you for your understanding.

Best regards,

Sam Miller

Sheridan

User Journey

Stage 3

Find the puzzle hidden behind the poster (×)
Find the puzzle in Rebecca's locker (×)
Find the puzzle in Daniel's car (√)

★⯪

Find the puzzle hidden behind the poster (×)
Find the puzzle in Rebecca's locker (√)
Find the puzzle in Daniel's car (√)

★★★

Find the puzzle hidden behind the poster (×)
Find the puzzle in Rebecca's locker (√)
Find the puzzle in Daniel's car (√)

★★★
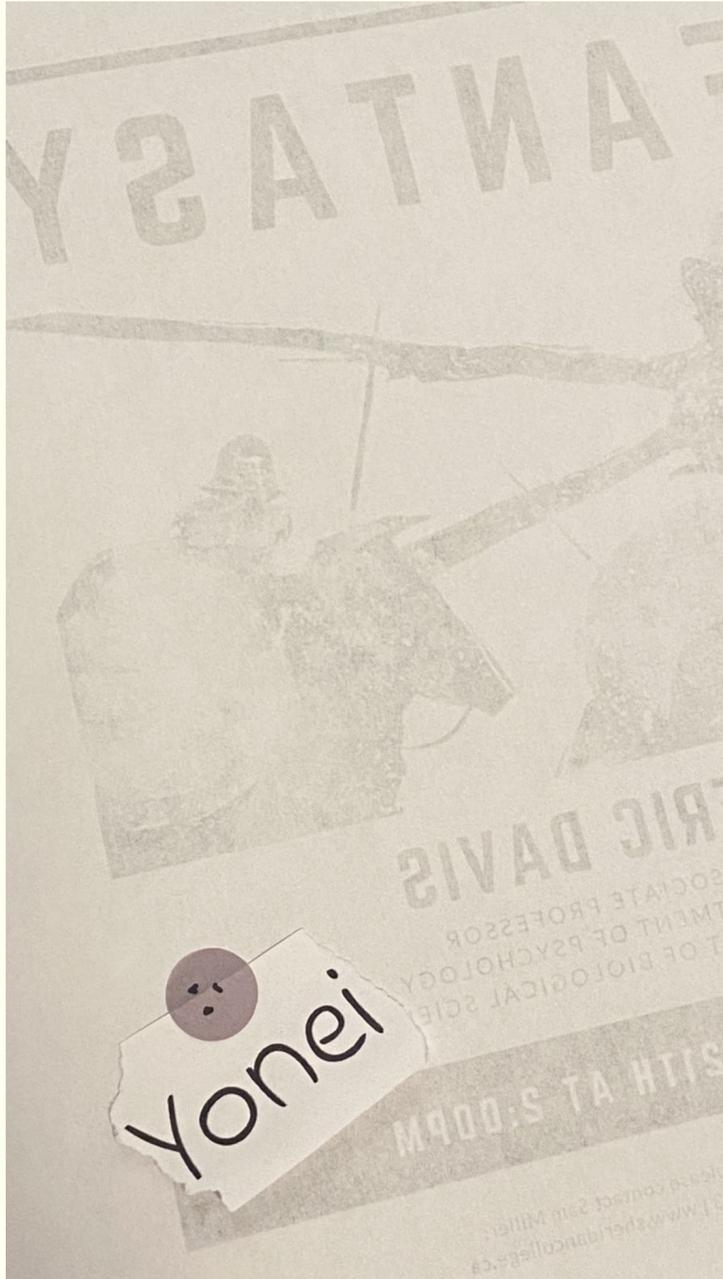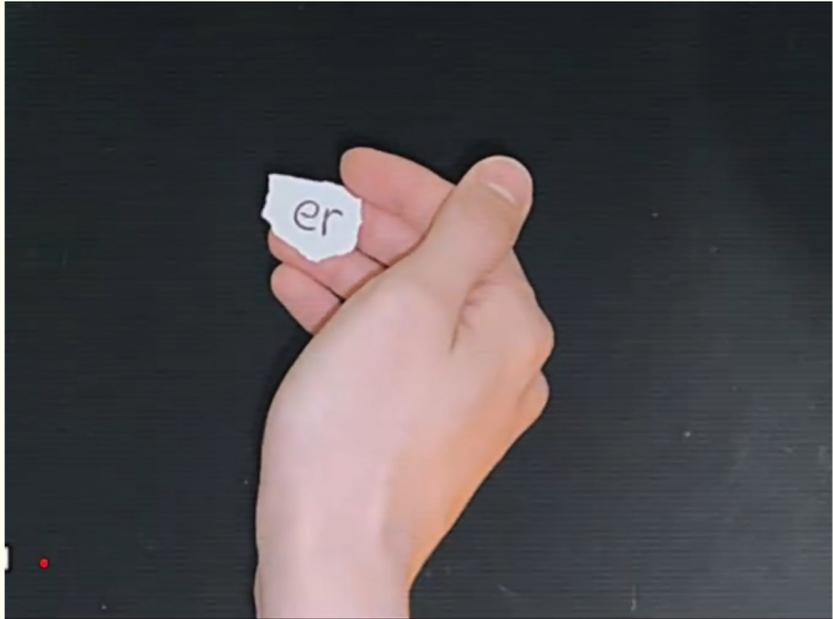
Finding-Insight

Stage 1 - AR Scene

- Users had to screenshot and type in the link(Sarah's secret) written on the wall one by one to access the site, which was inconvenient.
- After completing the search of the crime scene, standing in one place to continue the game feels physically uncomfortable.

→ Clickable hyperlink

→ The AR page reminds players that they can find a place to sit down once they finish searching the crime scene
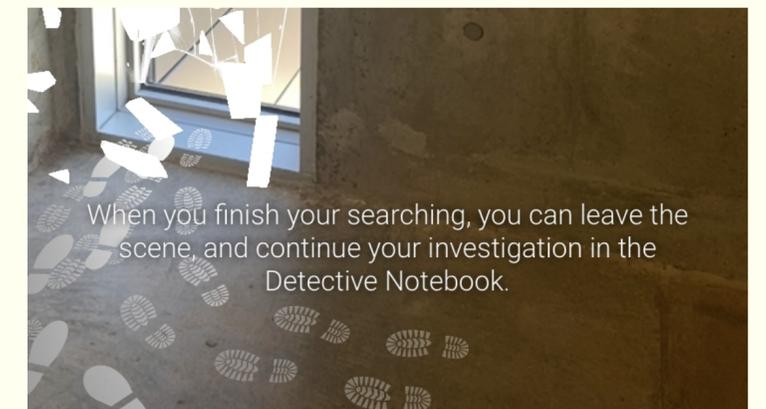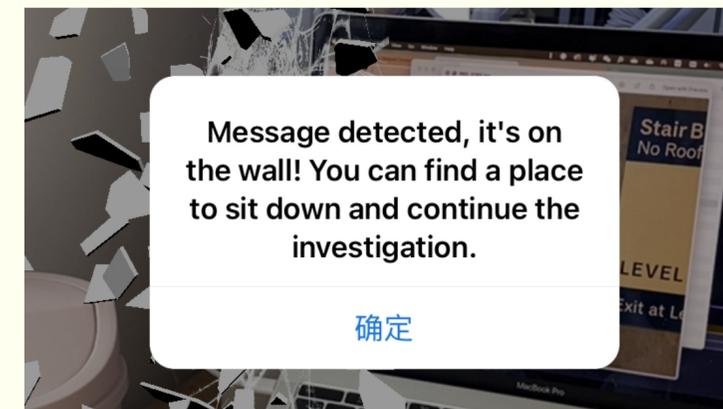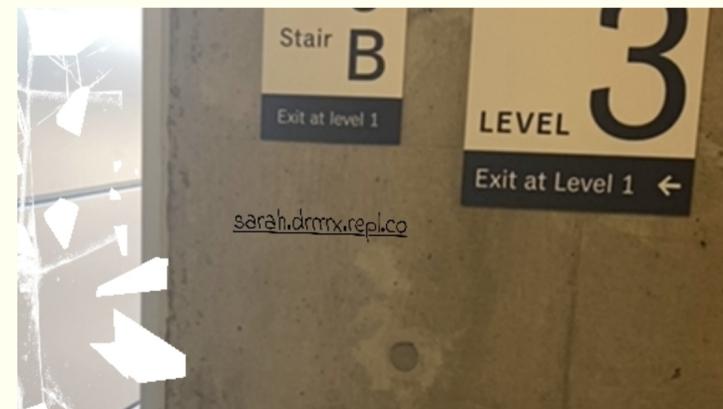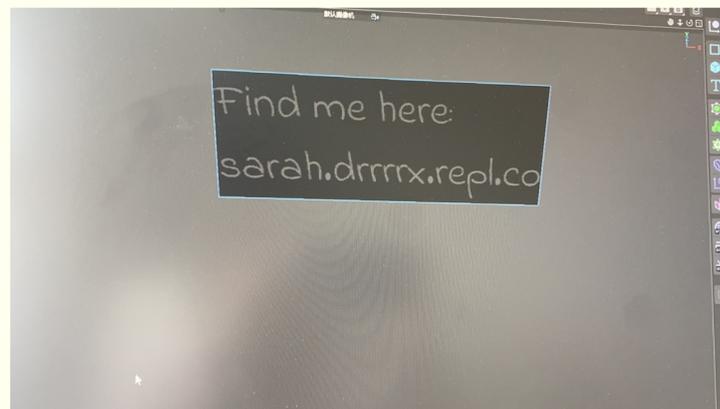
Finding-Insight

Stage 2 - Social Media

▸ Users can't find the clue about messages sent by unknown contacts(Rebecca)

→ Add a new message icon in the upper right corner of the main screen.
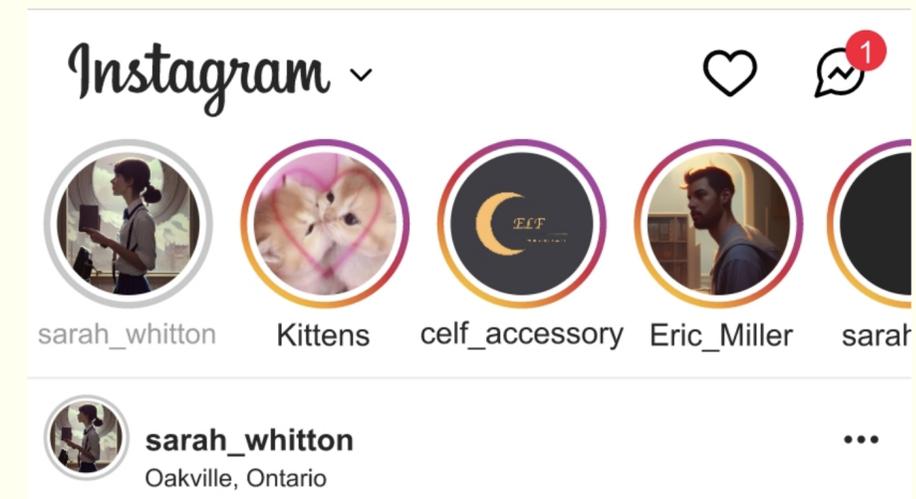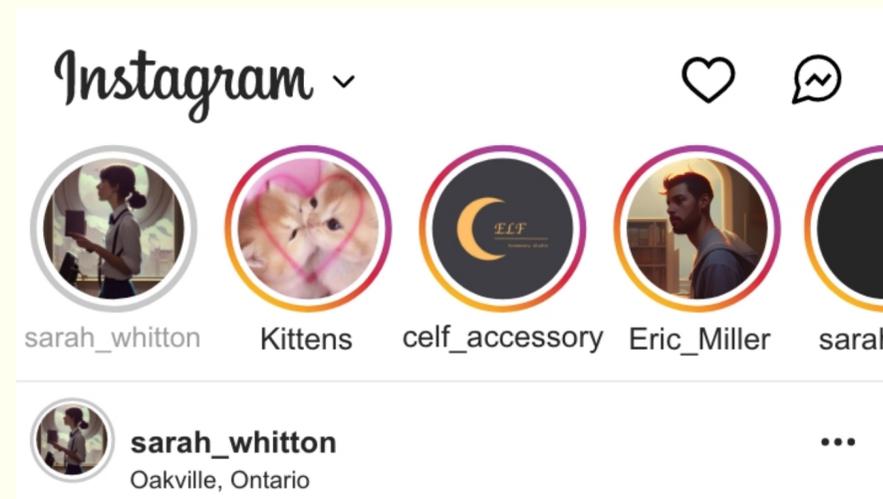
Finding-Insight

Stage 2 - VR Scene

▸ The VR operation isn't smooth enough, requiring users to adjust the screen multiple times to locate clues successfully.

⬇

Adjust the size and position of the buttons to ensure they match better and add a click function, enabling users to interact directly with the clues.
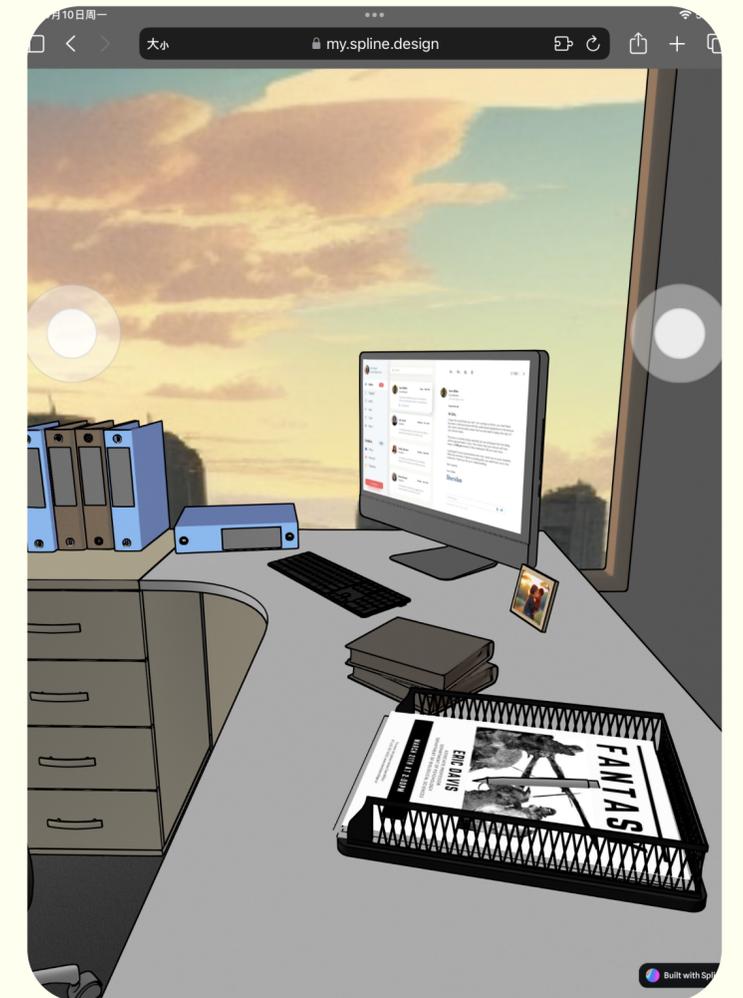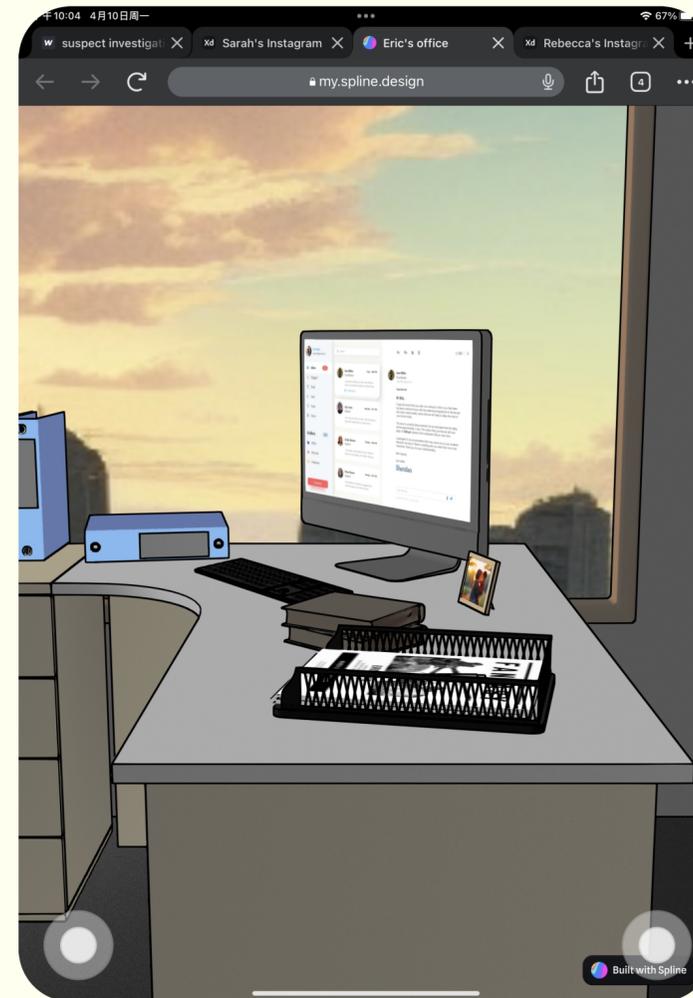
Finding-Insight

Stage 2 - Detective Notebook

▸ Don't know what to do after completing the second stage

→

Add a prompt at the bottom of the homepage directing users that it's time to use the SUSPECT INVESTIGATION page.

Field Investigation deceased personal space

It's time for a field investigation into the personal space of the deceased. There must be some useful clues related to the case.

After obtaining the consent of the deceased's family, I got the pass to enter Sarah's room:

The key of Sarah's room

Sarah's social media

Sarah's social media accounts are logged into her phone.
Social media can reflect some of the characteristics, personality traits, and important chat histories of the deceased. I should do some investigation on this.

Remember: When checking social media messages, I should always not to miss any messages sent by USERS WHO ARE NOT BEING FOLLOWED.

Sarah Whitton's social media

Finding-Insight

Stage 2 - Detective Notebook

▸ The user failed due to enter the suspect's full name when investigating.

→ Emphasize to the users that only the first name is required to conduct the investigation.

Submit The Suspect

Having identified one or more suspects, it's time to delve into the Big Tomato Police Department's Intelligence Network to unravel the mystery and reveal the true culprit behind the murder.

Now, enter the name of any suspect you find suspicious to uncover more information about them.

| Enter the suspect's first name that you want to investigate. | Submit |

Submit The Suspect

Having identified one or more suspects, it's time to delve into the Big Tomato Police Department's Intelligence Network to unravel the mystery and reveal the true culprit behind the murder.
Now, enter the FIRST NAME of any suspect you find suspicious to uncover more information about them.
Reminder: When your investigation hits a dead end, you may want to consider if there are any other suspects.

| Enter the suspect's first name that you want to investigate. | Submit |

Finding-Insight

Stage 2 - Detective Notebook

▸ Users are fatigued from excessive reading.

▸ Users mistake unimportant information as the main clue.

Improve the clarity of the content hierarchy. Move some content to the invitation envelope.

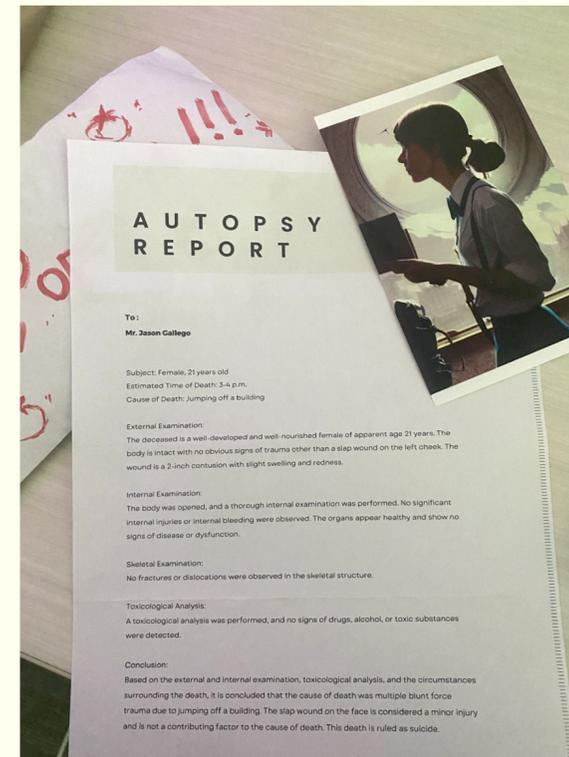Highlight key clues (in bold), while removing any extraneous or unimportant information.

Finding-Insight

Stage 2 - Detective Notebook

▸ The information for the deceased is unclear, and there is an excessive amount of information on the homepage.

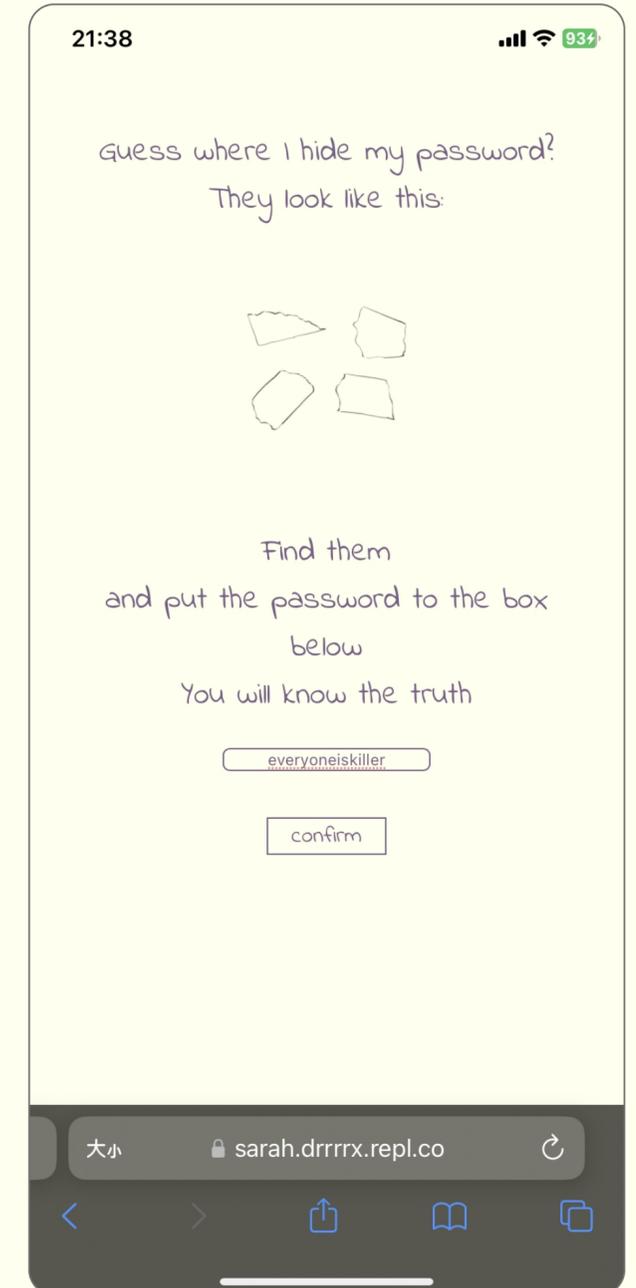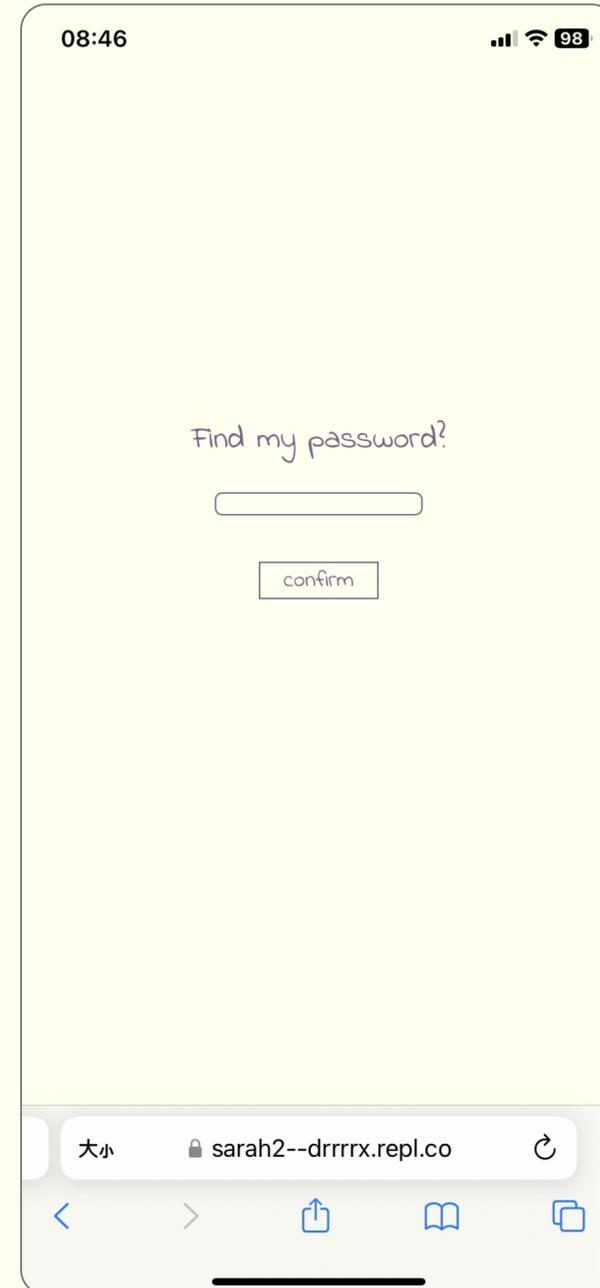Put the autopsy report and the deceased Sarah's photo to Stage 0(envelope)

Finding-Insight

Stage 3 - Puzzle Website

▸ Users are unable to connect the initial link
  (Sarah's secret) with the final puzzle
  (the password).

Refine the page of Sarah's secret.

Finding-Insight

Stage 2 - Physical Poster

▸ Users can't find the poster for Eric's lecture. (Can't find the puzzle behind it)

⬇

???We need to figure out

Finding-Insight

Stage 3

▸ Recalling puzzles that are hidden in various physical and digital formats simultaneously can be challenging for users.

⬇

Provide users with pen and paper in the envelope at the beginning of the game to enhance the game experience.

Sum-up

‣ After user testing, we realized that different user types have various adaptations to our game. Some players successfully found the hidden clues, while others often lost their heads. Our target players need to be very logical and intensely curious. During our test, some users searching for clues in VR either didn't collect enough clues to get to the next step or wandered around in VR, not knowing if they had gathered all the clues.

‣ The game has a lot of walking around tasks that require spanning the entire campus; there is also a lot of text reading that requires players to sift through information to find useful clues. Players must be very fond/enjoyable of detective games or risk losing patience.

‣ So far, we have yet to get the player to complete the entire game without our help. Players will encounter difficulties or dead ends at different game stages. If we have more time, we will continue to iterate the whole project. We would say there won't be a time when the process will reach 100%.