

# HOME

Hall of Mental-Health Experiences



# TABLE OF CONTENTS

**THE TEAM .....5**

**INTRODUCTION .....6**

Core Concept .....6

- LIST OF MENTAL HEALTH TOPICS .....7

- CONSENT LANGUAGE .....7

    Trigger Warnings .....7

    List of Sensory Warnings .....7

**NARRATIVE FLOW .....8**

**ATRIUM .....10**

- WORLD DESIGN .....12

    Mood Board .....12

    Concepts .....13

    Map .....14

- VISUAL ASSETS .....15

- SOUND ASSETS .....16

**GALLERY .....18**

- WORLD DESIGN .....20

    Mood Board .....20

    Map .....21

- VISUAL ASSETS .....22

- SOUND ASSETS .....23

**PANIC DISORDER .....24**

- WORLD DESIGN .....26

    Mood Board .....26

    Map .....27

- EXPERIENCE SCRIPT .....28

- NARRATIVE ASSETS .....30

    Artist Statement .....30

    Gallery- Mental Illness Description Board .....31

    Gallery- Treatments Board .....31

- VISUAL ASSETS .....32

- SOUND ASSETS .....36

    Voice Lines .....37

**SCHIZOPHRENIA .....38**

- WORLD DESIGN .....40

    Mood Board .....40

    Map .....41

- EXPERIENCE SCRIPT .....42

- NARRATIVE ASSETS .....44

    Artist Statement .....44

    Gallery- Mental Illness Description Board .....45

    Gallery- Treatments Board .....45

- VISUAL ASSETS .....46

- SOUND ASSETS .....50

    Voice Lines .....51

**DEREALIZATION/ DEPERSONALIZATION .....52**

- WORLD DESIGN .....54

    Mood Board .....54

    Map .....55

- EXPERIENCE SCRIPT .....56

- NARRATIVE ASSETS .....58

    Artist Statement .....58

    Gallery- Mental Illness Description Board .....59

    Gallery- Treatments Board .....59

- VISUAL ASSETS .....60

- SOUND ASSETS .....64

**POST-TRAUMATIC STRESS DISORDER .....66**

- WORLD DESIGN .....68

    Mood Board .....68

    Map .....69

- EXPERIENCE SCRIPT .....70

- NARRATIVE ASSETS .....72

    Artist Statement .....72

    Gallery- Mental Illness Description Board .....73

    Gallery- Treatments Board .....73

- VISUAL ASSETS .....74

- SOUND ASSETS .....78

**OBSESSIVE-COMPULSIVE DISORDER .....80**

- WORLD DESIGN .....82

    Mood Board .....83

    Map .....84

- EXPERIENCE SCRIPT .....84

- NARRATIVE ASSETS .....85

    Artist Statement .....85

    Gallery- Mental Illness Description Board .....86

    Gallery- Treatments Board .....86

- VISUAL ASSETS .....88

- SOUND ASSETS .....94

    Voice Lines .....95

**COPING ROOM ..... 96**  
- WORLD DESIGN ..... 98  
    Mood Board ..... 98  
    Map ..... 89  
- NARRATIVE ASSETS ..... 100  
- VISUAL ASSETS ..... 100  
- SOUND ASSETS ..... 102  
- MECHANICS ..... 103

**TECHNICAL DESIGN ..... 104**  
- TECHNICAL REQUIREMENTS ..... 104  
- CONTROLLER BUTTONS ..... 105  
- SYSTEMS ..... 106  
- USER INTERFACE (UI) ..... 107

**RESOURCES ..... 110**

# THE TEAM

**Design  
LEAD**

Evan Mason

-

Maddy Kwan  
Mitch Kogan  
Kamran Saini

**Art  
LEADS**

Shannon Kelly & Amrit Sooklal

-

Daniel Zhang  
Patrick Arenas  
Yankeer (Coco) Xu  
Mitch Kogan  
Dongjian (Joey) Wu  
Kamran Saini

**Programming  
LEAD**

Joaquin De Losada

-

Matthew MacNeil

**Sound  
LEAD**

William Lyons

-

Eugene Payne  
Dongjian (Joey) Wu

**Producer**  
Norma Rodriguez

**Creative Director**  
Maddy Kwan

# INTRODUCTION CORE CONCEPT

HOME is a VR museum experience that explores five different mental illnesses: OCD, PTSD, DPDR, Panic Disorder, and Schizophrenia. HOME seeks to unveil the stigmas of mental illness by providing a simulated experience of them. Venture into these immersive experiences, which emulate aspects of each mental illness.

Visitors will tour museum spaces dedicated to understanding individual symptoms in VR. Visitors will then be able to recover in a specially designed coping room to guide them through a calming strategy to bring them back from the experience.

Are you ready to take a leap into HOME?

# LIST OF MENTAL HEALTH TOPICS

HOME be covering the following Mental Illnesses in the project:

- > Panic Disorder
- > Schizophrenia
- > Depersonalization/ Derealization (DPDR)
- > Post-Traumatic Stress Disorder (PTSD)
- > Obsessive-Compulsive Disorder (OCD)

## CONSENT LANGUAGE Trigger Warnings

The trigger warnings for each experience will be written out in the artist statement attached to the section's painting (the entrance to the experiences). The warnings will also be read aloud by the origami narrator.

### Example (Panic Disorder Room- MVP):

This room will emulate panic attacks. Please be advised that the room will contain sounds and visuals some may find distressing related to the experience, including loud sounds, bright lights, tight spaces and simulated tunnel vision. There will be a calming room utilizing coping skills after the experience to be used in the event of distress, and the experience can be ended at any time.

## List of Sensory Warnings

- |  |                                |
|--|--------------------------------|
| > Loud Sounds (Sudden Loud Noises)             | > Simulated Flashback Memories |
| > Bright Lights (Strobing and Sensory Flashes) | > Depiction of aggression      |
| > Tight Spaces (Claustrophobia)                | > Depiction of fire            |
| > Depersonalization/Out-of-Body Experience     | > Simulated intrusive thoughts |
| > Simulated Hallucinations                     |                                |

# NARRATIVE FLOW

Our core objective is to create an experience for people to understand mental illness better. HOME is about sharing the experience of someone struggling with mental illness whom you do not know but hopefully will understand. The project seeks to offer accurate experiences to foster a greater sense of compassion and understanding. We want to be able to generate empathy through vivid virtual reality experiences. We want to create a project to spur a broader conversation about mental health, which is not talked about enough.

*This is our HOME, and you are welcome in it.*

The visitor is spawned in the centre of the atrium with the option to navigate the space via teleporting. Around the atrium are five archways surrounding the visitor; they can then select from five different mental illness sections to enter to learn and get the whole visceral experience.

Each section will be composed of a Gallery with clinical information describing the mental illness and relevant information regarding symptoms, treatment, and coping methods. A large painting at the end of the room will allow the visitor to enter the experience simulation once they have read/heard the experience description and trigger warnings. Through the painting, the visitor will enter an "experience" of the mental illness, which will be a loose representation of what a person might experience.

Some rooms will be interactive; others will be more static (*see design flow for detailed room descriptions*). At any point during the experience, the visitor can "escape" by clicking their emergency exit button, which will bring them to a coping room. The escape button will trigger a prompt that reads "Are you sure?" to avoid accidental clicking. If the visitor does not wish to escape, the experience will continue its natural course, and, by the end, the visitor will exit into the coping room. There the visitor will complete a coping exercise and learn about managing symptoms associated with this mental illness. Once the visitor finishes the coping room, they can return to the atrium with their emergency exit button and choose a new section to explore.



# ATRIUM

A 3D architectural rendering of a large, circular atrium. The floor is a light-colored hexagon with six radiating paths leading to different levels. The walls are dark and feature six large archways, each with a set of stairs leading up to it. The ceiling is a light blue sky dome. The word "ATRIUM" is written in large, white, serif capital letters in the upper left corner.

The Atrium is HOME's central hub. The hexagonal room will have six large archways leading to various museum sections. Five archways will lead into each mental illness section, while the last section will lead to the credits room. Above the visitor is a large sky dome that brightens the entire space. Visitors can navigate to whichever section they want, leading them into the Gallery for that section. After completing the exercise in the coping room, the visitor will be returned to the center of the Atrium.

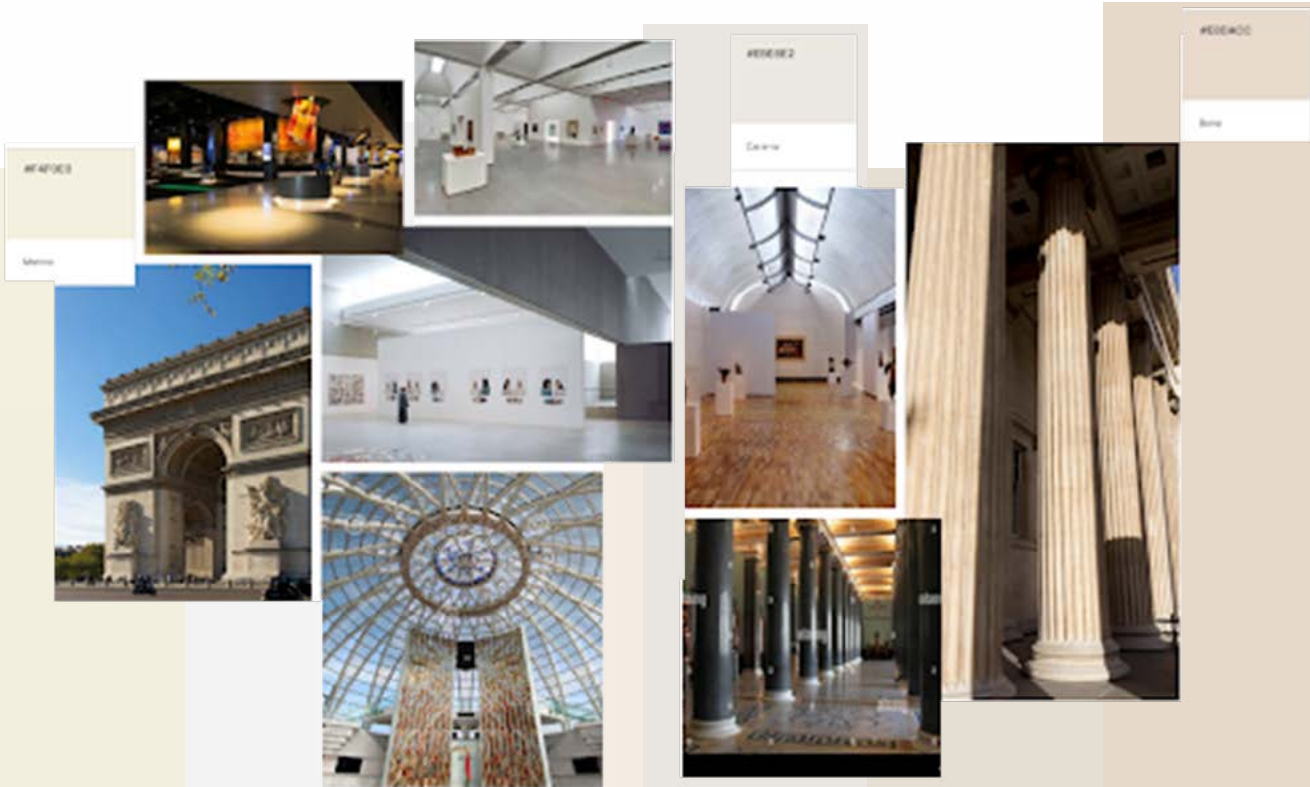


# WORLD DESIGN

Mood Board

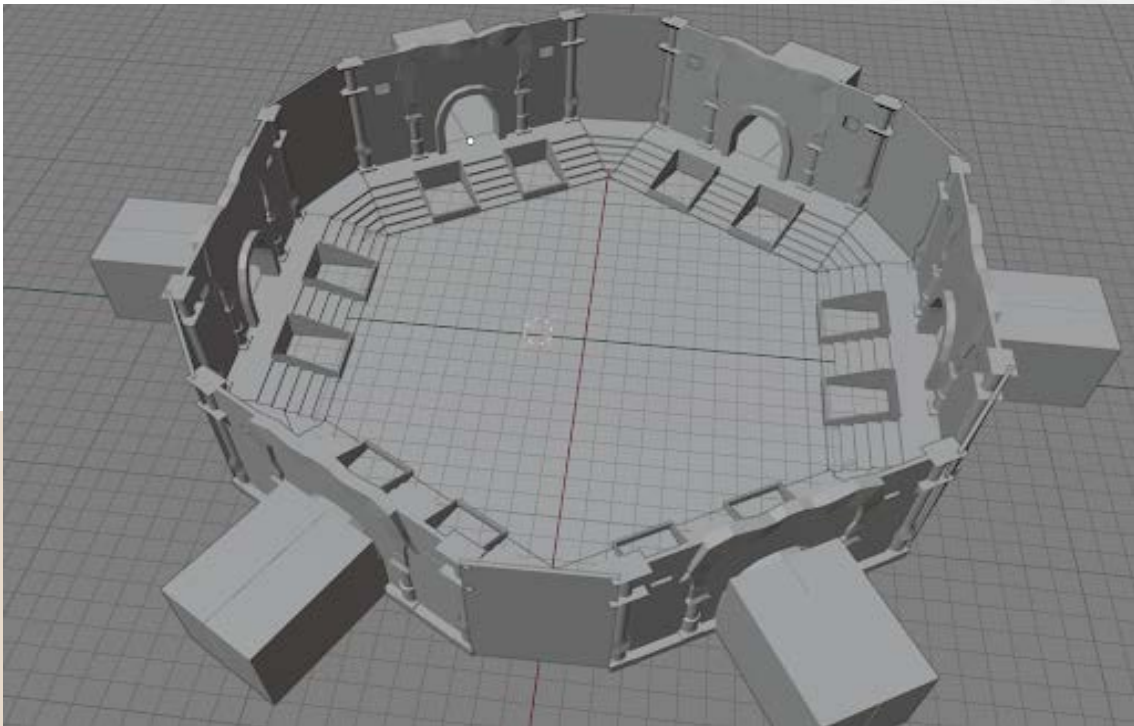
## ART STYLE

Grand in scale with Renaissance Architecture, high walls with glass dome roof. The large space allows the visitor to explore while feeling relaxed and calm. The lighting is natural and bright.



F4F0E0      F5F5F4      F6EEE3      EBE8E2      E7E0D3      E8DACC

# CONCEPTS



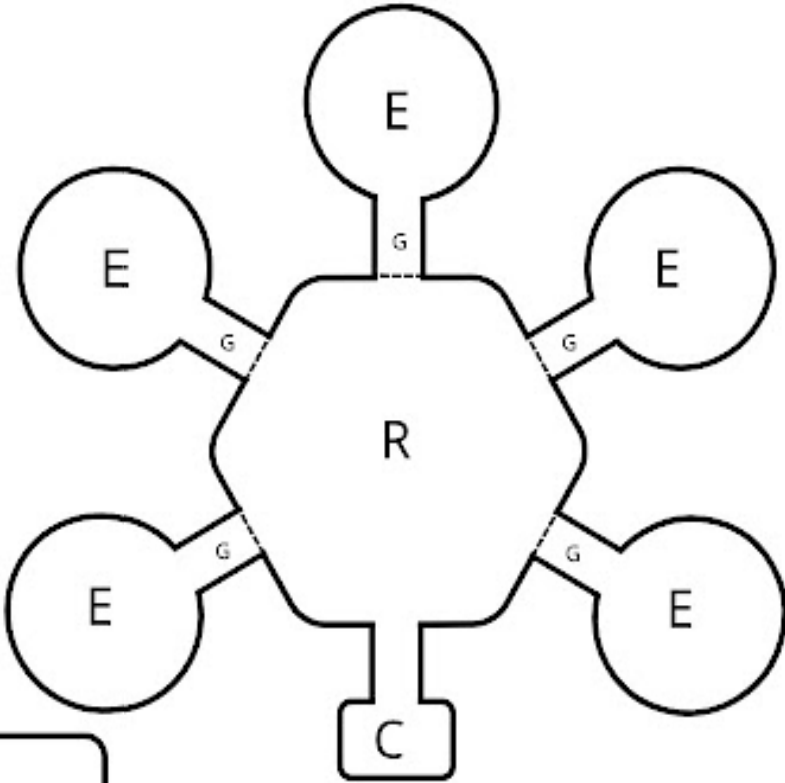
Concept 1 - Atrium Shape



Concept 2 - Archway and Trim



# MAP



Legend

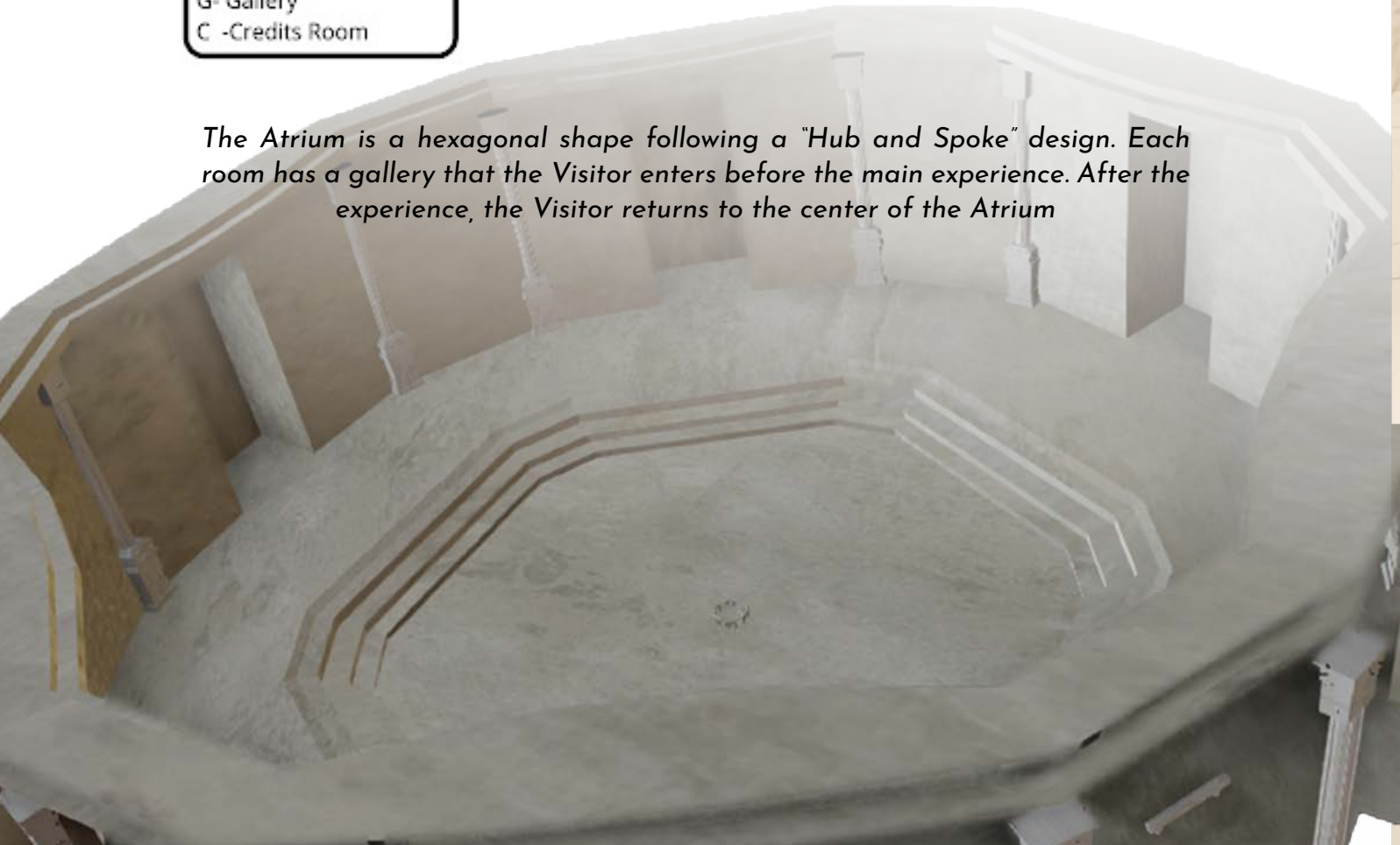
E - Experence

R - Respawn Location

G- Gallery

C -Credits Room

The Atrium is a hexagonal shape following a "Hub and Spoke" design. Each room has a gallery that the Visitor enters before the main experience. After the experience, the Visitor returns to the center of the Atrium



# VISUAL ASSETS

## ARCHWAY

Large archway that shows the entrance to the sections (includes a nameplate with the section title)

## BANNERS

Banners listing the rooms



## PILLARS

Decorative Pillars that line wall corners and borders

## SMALL GARDENS

Small gardens with plants



# SOUND ASSETS

The Atrium is a soothing and neutral explorative space to allow the visitor a safe space to explore the available information without urgency. The focus is on the sparse ambient sounds, such as things one might expect to hear during a walk in the woods on a particularly nice day. This soundscape is accompanied by a very subtle and familiar melody which does not draw focus onto itself but helps to prevent any periods of silence from being uncomfortable or awkward.



**Ambient Melody**  
*Background music*

Familiar and calming, not intended to draw the visitor’s attention away from the space.



**Entrance Melody**  
*Background music*

Causes a sense of safety and grandeur to be felt when first entering the atrium.



**Bird Chirp**  
*Ambient background effect*

Overhead the birds can be heard around the atrium creating a feeling of openness.



**Generic Forest Insects**  
*Ambient background effect*

Crickets, etc. Can be heard in the Atrium in the distance amongst the foliage.



**Tree Blowing**  
*Ambient background effect*

A calming breeze passes through one of the trees in the atrium causing it to rustle above you.



**Footsteps**  
*Interaction noise*

Footsteps on top of rougher and softer terrain found within the atrium.



# GALLERY

The Gallery will be the informational hub for the mental illness before they enter the experience. As the visitor enters the Gallery on the left and the right, they will see wall displays they can teleport to via set teleport points. The left-side wall describes the mental illness, and the right-side wall has common treatments and coping methods. If the visitor enters a teleport point, this will trigger the Origami Narrator to appear beside the information panel being viewed and will read the signs aloud.

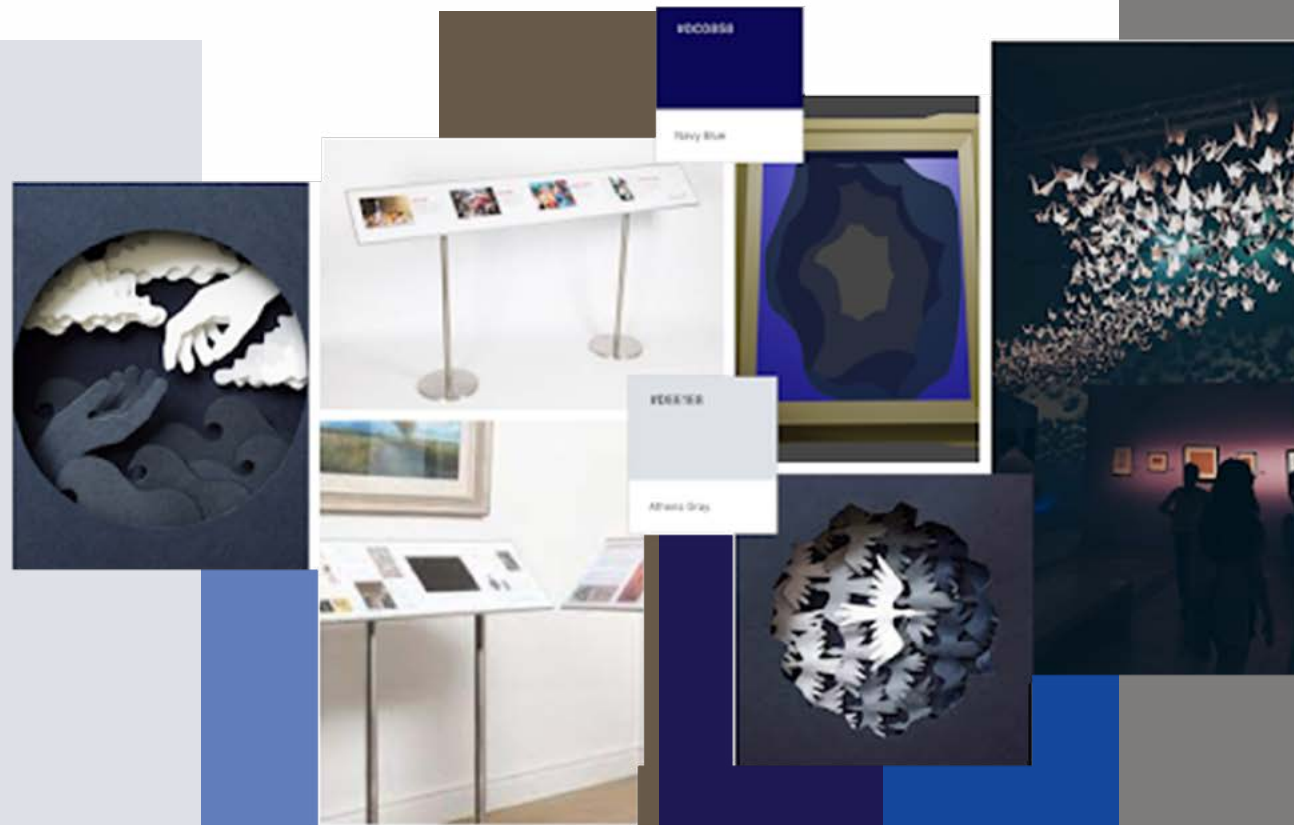
On the back wall, a giant painting representing the selected mental illness will act as the door to enter the experience. If the visitor would like to enter, they can interact with the entrance to trigger an "artist statement" pop-up, which will tell the visitor what the experience is and state the trigger warnings. The visitor must click "consent" if they want to continue, or the door will not let them in. Once clicking consent, the painting will open up as if opening the gateway through the paper painting and the visitor will be spawned into the experience space.

# WORLD DESIGN

## Mood Board

### ART STYLE

Clean and simple gallery room. The walls are lined with information, large enough for the visitor to read comfortably. The painting at the end of the hall uses a layered paper style held in an ornate frame.



DEE1E8

627EBD

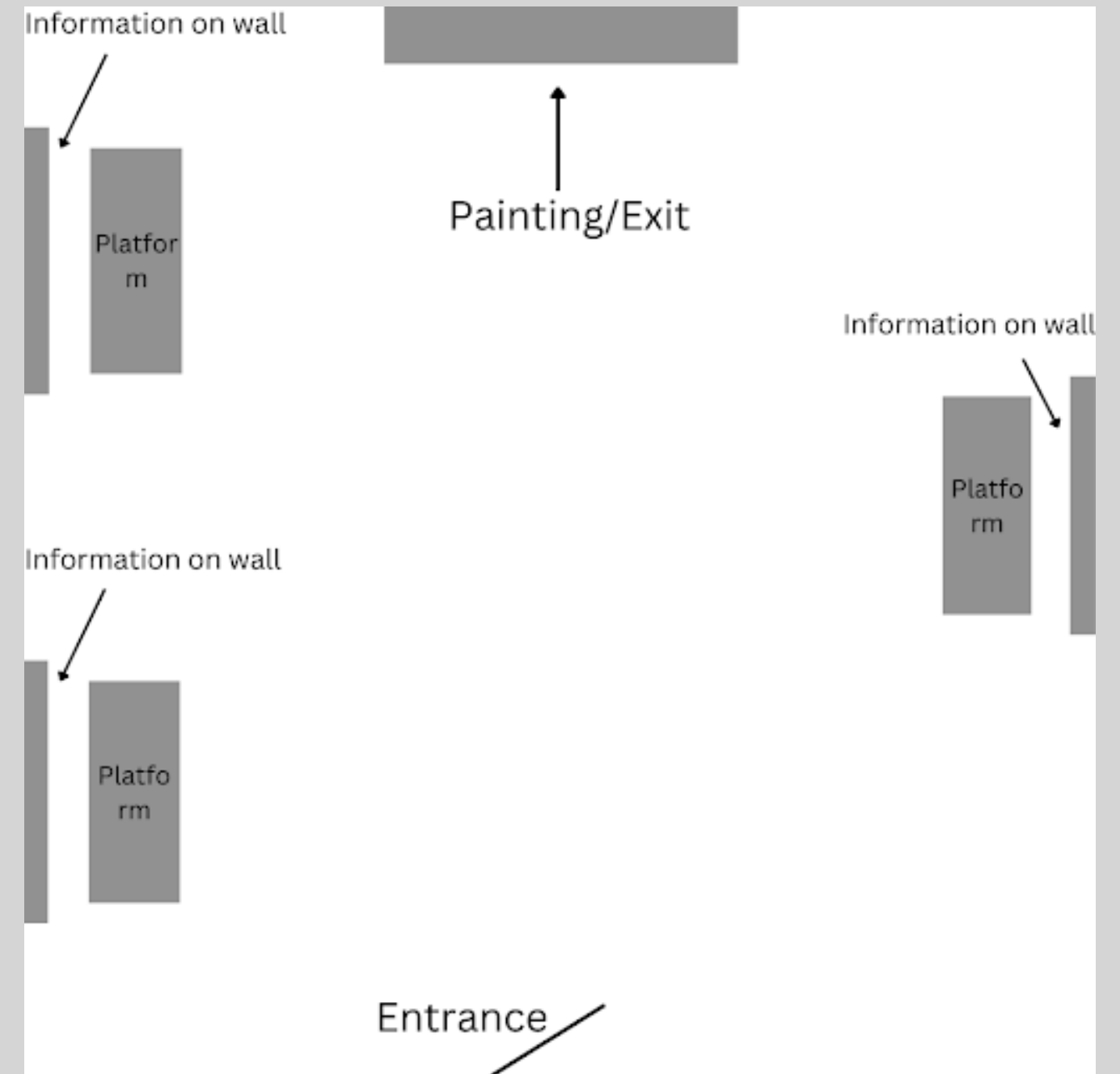
67594A

OC0858

0946A0

7F7E7C

## MAP



Entrance from the Atrium. Each wall can be teleported to via teleport point so visitor will be facing the information on the walls. Left and right have identically designed information boards, the back wall has a large painting that leads to the Experience.

(for narrative assets see each individual room)



# VISUAL ASSETS

## PAPER ART PIECE (PAINTING)

A piece of art appeared to be made out of layered paper that acts as the entrance to the experience

## INFORMATION ON WALL PANELS

Panels of information about the mental illness on the walls

## INFORMATION ON FREE STANDING PANELS

Freestanding podiums with information on the table-top

## ORIGAMI NARRATOR (LIL FRIEND)

Little origami animal that narrates the panels of information. They will appear to the left of each panel once the visitor enters the teleport point

# SOUND ASSETS



**Soft Music**  
*Background music*

The music in this room will be present, but not overbearing. Inspirations could come from lo-fi hip hop, as well as animal crossing nighttime music



**UI Noises**  
*Interaction noise*

The UI noises will be similarly soft, however the “bloops” should be present, to inform the visitor than an interaction has taken place



**Narration**  
*Interaction noise*

If the visitors enters teleport point, the signs in the gallery will be read out loud. Narrator will have a calm and welcoming voice.



**Pop Up Noise**  
*Interaction noise*

This noise will play when the artist statement pop up has been triggered



**Painting Door Noise**  
*Interaction noise*

As the painting door opens, shifting paper will play as the panels open up

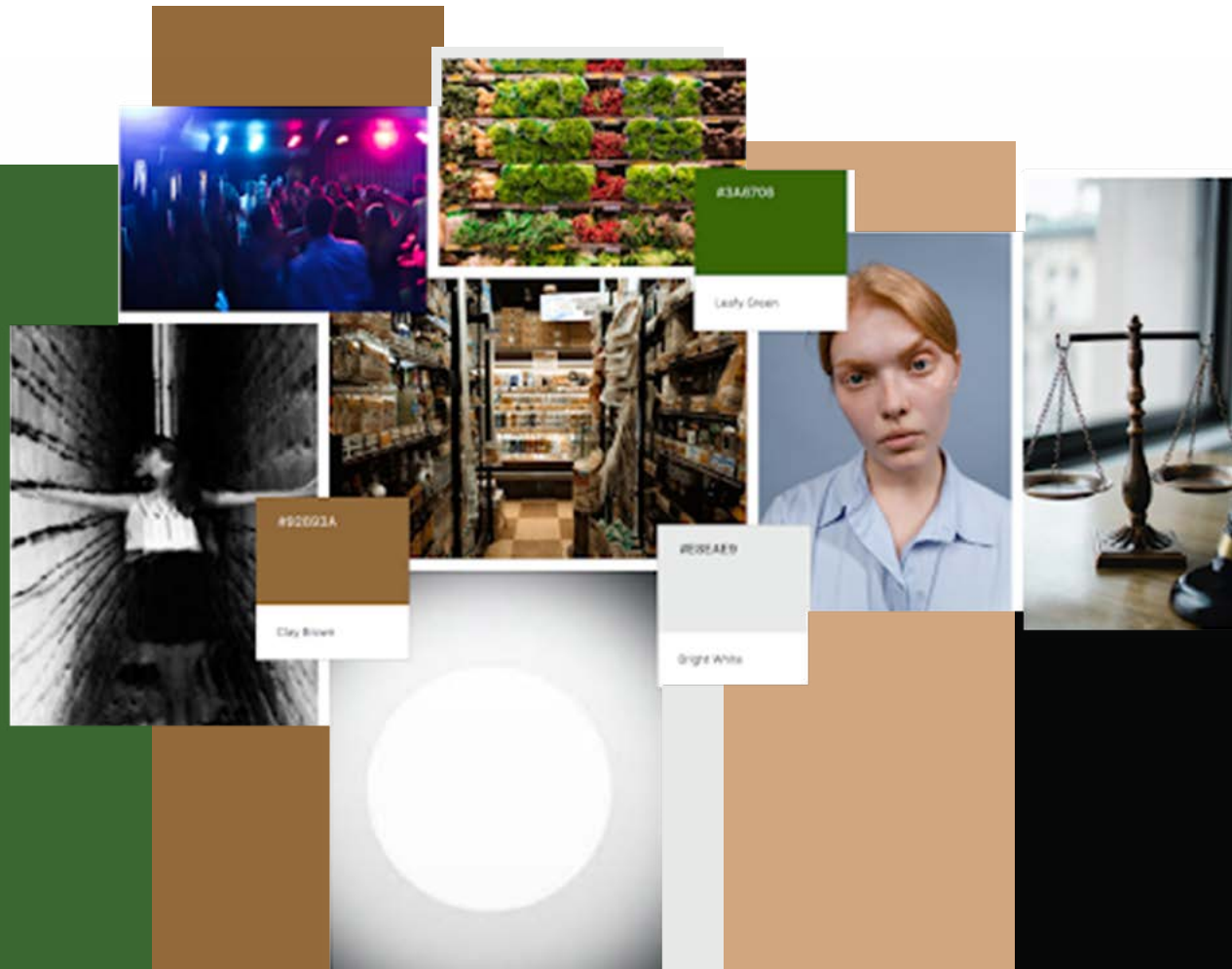
# PANIC DISORDER

The panic disorder experience will simulate a panic attack in a grocery store. The visitor will receive a text message stating that they need to go pick up some eggs upon spawning into the store. As they walk through various aisles, panic attack symptoms will begin to worsen. The lights will become more intense, and the sounds will become louder, amplifying smaller noises like the buzzing of lights. To create a claustrophobic feeling, the ceiling will begin to slow lower towards the visitor and they will begin to have "physical symptoms" like audible heart beating, haptic vibrations, and a black vignette causing tunnel vision. Certain parts of the grocery aisles will be blocked by NPCs or wet floor signs, creating a maze-like environment. The visitor will have the ability to check out their items at the cash register near the eggs, however to simulate panic and urgency, the visitor will not be stopped if they choose to leave the store without paying for the eggs. At any point the visitor can turn around to the exit and leave the experience or use their emergency exit button to leave.

*[This is this project's MVP (Minimum Viable Product)]*



Stereotypical North American Grocery store with gridline aisles that are cluttered and busy. The textures in the floors and shelves will be tiled and overlapping creating a maze-like atmosphere. Bright warm white lights that will progressively get brighter. Though colours and textures are basic and unassuming, the space should not feel too dark and border into horror.



3A6706

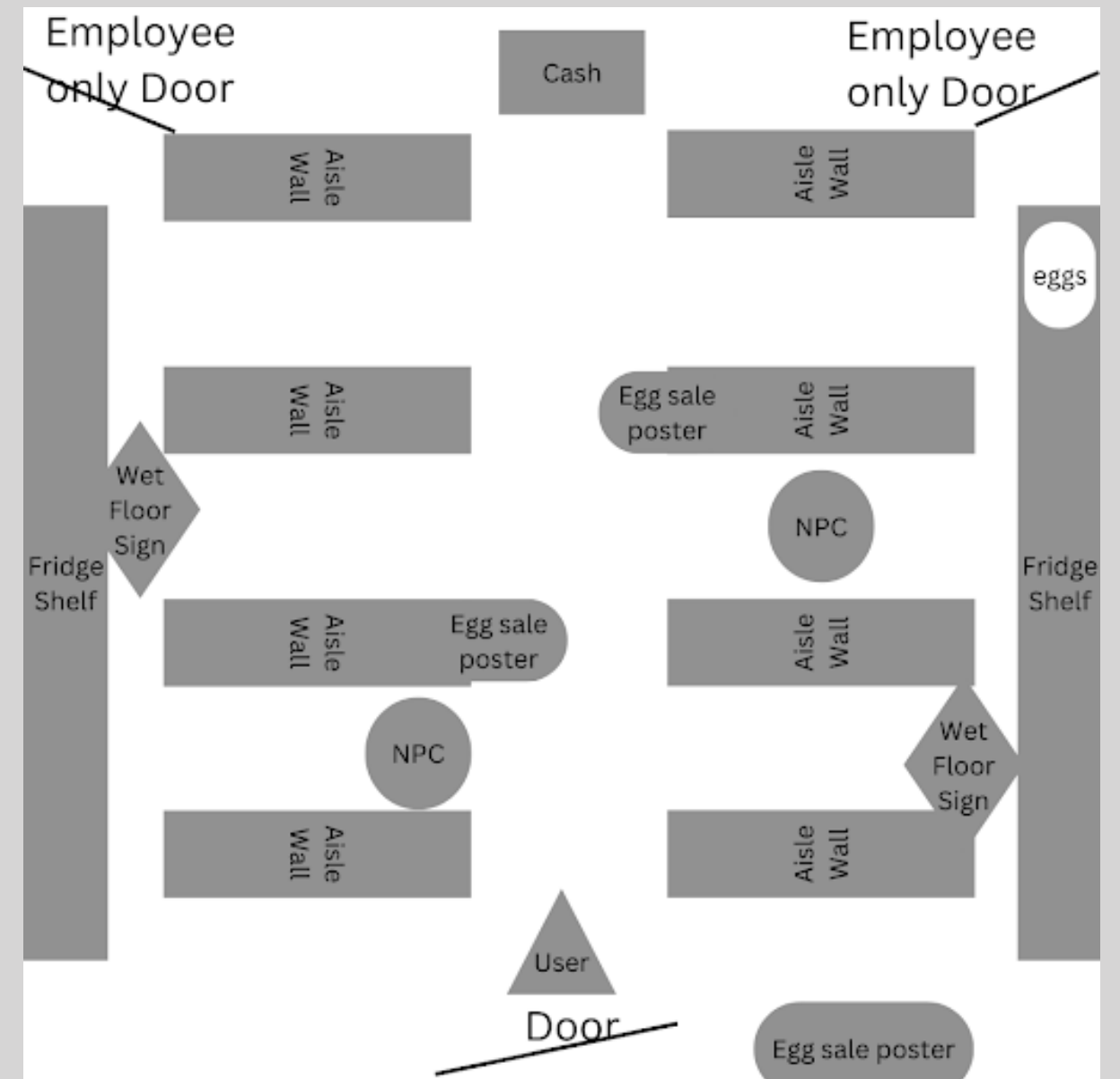
92693A

E8EAE9

D1A67F

060607

# MAP



*The Panic Disorder room has a rectangular shape. Starting from the entrance, the Visitor will see aisle walls and shelves on both sides, and a cash register at the end of the main aisle. Scattered between side aisles will be NPCs and wet floor signs that block the way of the visitor. Eggs will be located at the top right aisle with many signs reminding the visitor of their goal to buy eggs.*



# EXPERIENCE SCRIPT

## INITIAL STATE (~5):

The visitor is spawned at the entrance of the grocery store. An audible door “ding” sounds as the visitor has “entered the store” (this should alert the visitor that there is a door behind them). Upon entering a text message appears on their left ---- vision reading “Hey, do you mind grabbing some Eggs from the store?” accompanied by a text chime. In front of them, they see a cash register with an NPC standing behind it. The surrounding aisles are open for exploration, but have NPCs and wet floor signs scattered preventing some traversing. Exit door behind will be highlighted as interactable to indicate they can leave at any point. The sounds of shoppers’ chatter and store music are initially present. All other sounds (squeaky wheels, cash register noises, buzzing lights) should be present but at an extremely low volume as to be treated like white noise that the visitor would most likely not notice).

## PHASE 1 (~10):

As they start exploring the grocery store in search of the eggs (located at top right of the map), the sounds of squeaking wheels, cash register, buzzing of lights, and NPCs chatter (crying baby, Karens complaining, idle chatter, etc.) will slowly raise in volume (10%). The lights will also begin to get brighter slowly (10%).

## PHASE 2 (~10):

Ceiling will begin to slowly move down towards the visitor. Squeaking wheels, cash register, buzzing lights and intensity of lights continue to increase to about 30%. A new text message will appear reading “Did you get the eggs yet?” to create more urgency.

## PHASE 3 (~10):

Ceiling continues to close in. NPCs begin talking about the visitor (ex. “Look at that person. What are they doing?”), creating a sense of judgment and claustrophobic feeling. Tunnel visions (vingette) slowly sets in around visitor’s vision (10%). Sounds and lights reach 60% intensity.

## PHASE 4 (~10):

Visitor will begin to hear their heartbeat and jagged breathing. Ceiling will continue to slowly descend until the hanging fluorescent lights are about a head away from the visitor in height. Tunnel vision will reach 30% intensity or enough to significantly block peripheral vision FOV will get smaller to make the visitor feel more claustrophobic. A final text message will appear saying “What’s taking so long?” however it will be placed behind the vingette effect to emulate the visitor being too overwhelmed to be able to check their phone.

## GRABBING EGGS (CAN OCCUR AT ANY POINT IN THE EXPERIENCE):

When the visitor finds the eggs they will be clearly indicated as an interactable item with a highlighted glow. The visitor can interact (“grab”) them using the trigger button. With the eggs in hand, the visitor will experience a haptic response (trembling controller) to simulate body shaking. At this point, the cash register will gain a highlight indicating it can be interacted with to “pay” for the eggs. The exit door will remain highlighted to exit at any point.

## PAYING FOR EGGS (CAN OCCUR ONLY ONCE THE EGGS ARE GRABBED) :

At the cash register (highlighted), the visitor can use their trigger button to pay for the eggs. The eggs will remain in the visitors hand during this interaction. The sounds of a loud cash register ding will indicate that the item is paid for. The highlight will then disappear.

## EXIT OPTIONS:

- > Go all the way to find the eggs, experience all or some levels of the panic attack, pay for the eggs, and then go back to the exit
- > Go all the way to find the eggs, experience all or some levels of the panic attack, and then go back to the exit
- > Reach any point of the experience, decide to stop and use the “emergency Escape button” on your controller
- > Reach any point of the experience and decide to stop by leaving through the exit doors

# NARRATIVE ASSETS

## Artist Statement

This experience will put you in the shoes of an individual with a Panic Disorder. It will simulate some of the symptoms of a panic attack as you make your way through a grocery store. Your task will be to locate and purchase a carton of eggs somewhere within the store; however, this is not the main goal. While going through this experience, observe what is happening to your body, senses, and emotions. Panic attacks are scary and stressful experiences that can make everyday tasks more difficult.

Please be advised that the room will contain sounds and visuals some may find distressing related to the experience, including loud sounds, bright lights, and claustrophobic spaces. At any point in the experience, if you feel uncomfortable with continuing, you can use your emergency button to exit the room. By clicking the emergency exit button, you will be brought to a separate calming room, guiding you through a clinically proven coping exercise.

[I Consent] | [I do not Consent]

## Gallery–Mental Illness Description Board

A panic attack is a sudden episode of intense fear that triggers severe physical reactions with no apparent cause. When panic attacks occur, one might think they're losing control, having a heart attack, or even dying.

Many people have just one or two panic attacks in their lifetimes, and the problem goes away, but if someone were to have recurrent, unexpected panic attacks and spent long periods in fear of another attack, they may have a panic disorder. One of the biggest symptoms of panic attacks is the intense fear that they may have another. The affected person may fear having panic attacks so much that they'll avoid certain situations where they may occur.

Panic attacks typically include a sense of impending doom or danger, fear of loss of control, and physical symptoms such as tightness in your throat, headaches, and pounding heartbeat.<sup>1</sup>

## Gallery– Treatments Board

Many psychological treatments, such as **relaxation training, meditation, biofeedback and stress management, can help with panic disorder**. Many people with panic disorders also benefit from **supportive counselling**. However, experts agree that the most effective form of treatment for panic disorder is cognitive behavioral therapy (CBT), a form of therapy based on the idea that you can learn to change distorted behavioral patterns. **Medications such as SSRI'S, SNRI'S and Benzodiazepines** have also proven helpful and most people with a panic disorder will receive medications and CBT to improve their conditions.<sup>2</sup>

## Gallery– Coping Mechanisms

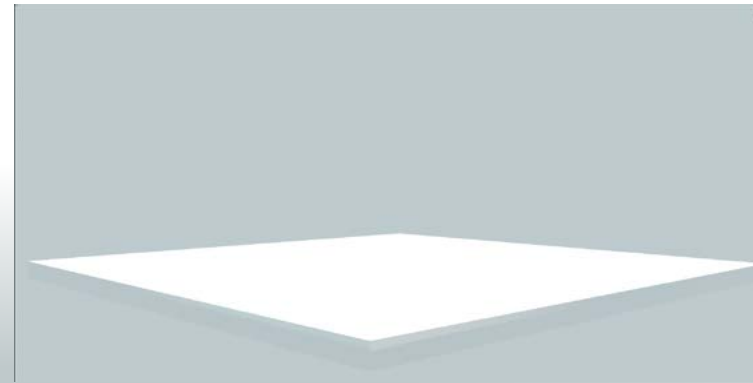
One grounding technique that can help when in a panic attack is the 5-4-3-2-1 exercise. In this exercise someone goes through all five senses individually and use them to ground themselves to reality. First one focuses on five things they can see, then four things they can touch, three things they can hear, two things they can smell and finally one thing they can taste. To avoid stress, if one can't think of something for a category they can remember their favourite of each sense.<sup>3</sup>

<sup>1</sup> Mayo Clinic. (2018, May 4). Panic attacks and panic disorder. <https://www.mayoclinic.org/diseases-conditions/panic-attacks/symptoms-causes/syc-20376021>

<sup>2</sup> CAMH. (n.d.). Panic Disorder. <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/panic-disorder>

<sup>3</sup> Sherman Counseling. (n.d). How to Ground Yourself during an Anxiety Attack | Anxiety Treatment Wisconsin. <https://www.shermanconsulting.net/2018/06/05/grounding-methods-anxiety-attacks/>

# VISUAL ASSETS



RENDER BY:

## AISLE SHELVES

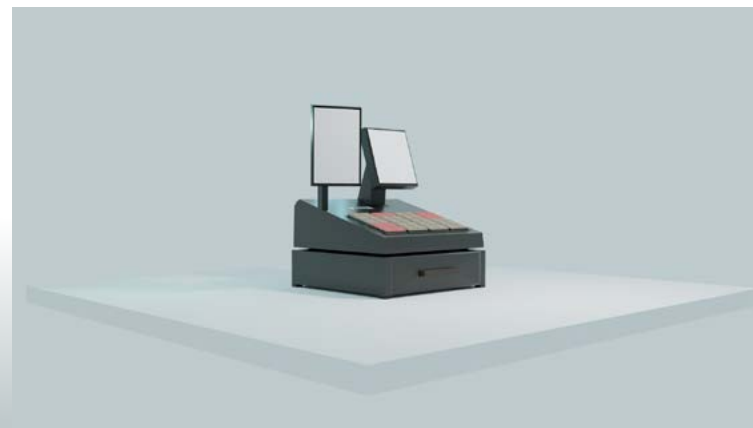
Shelves with items making the store appear fuller. It is essential that they match the design of the rest of the room (can be just a texture)

## CARTS

This is where the squeaking sound will come from, it will not be intractable, but it will become more prominent as the scene goes on



RENDER BY: AMRIT SOOKLAL



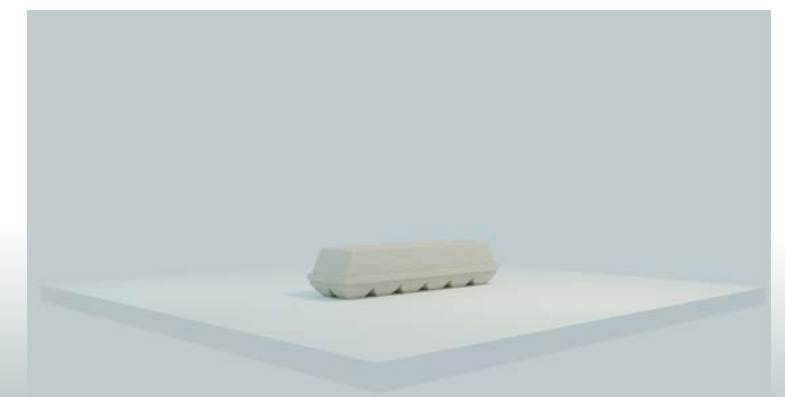
RENDER BY: DANIEL ZHANG

## CASH REGISTER

What the visitor will interact with to pay for the eggs.

## EGG CARTON

A carton of eggs on a pedestal, the goal of the shopping trip, interactable



RENDER BY: PATRICK ARENAS





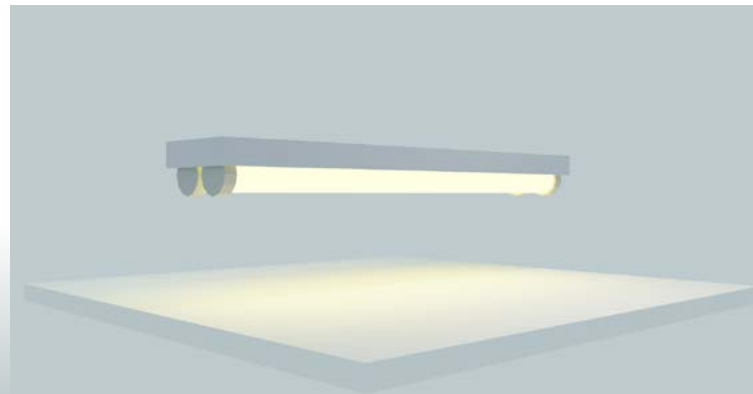
RENDER BY: AMRIT SOOKLAL

### EMPLOYEE ONLY DOORS

A door that the visitor cannot interact with, it will have a sign on it that reads "employees only"

### HANGING LIGHTS

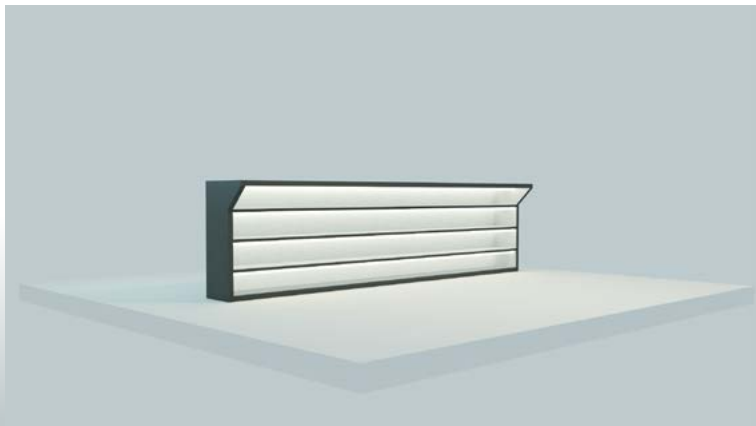
Store lights that hang from the ceiling that buzz



RENDER BY: DONGJIAN (JOEY) WU

### REFRIGERATED SHELF

A shelf in the store dedicated for items that must be refrigerated



RENDER BY: DONGJIAN (JOEY) WU

### WET FLOOR SIGN

Wet Floor signs block the way of the visitor



RENDER BY: AMRIT SOOKLAL



RENDER BY: SHANNON KELLY & PATRICK ARENAS

### EGG SALE SIGNS

A sign that hangs at the top of the store that both adds theming and reminds the visitor what they are looking for

### EXIT SIGN/EXIT DOOR

Automatic sliding doors, the official exit of the experience, interactable



RENDER BY: SHANNON KELLY

### NPC

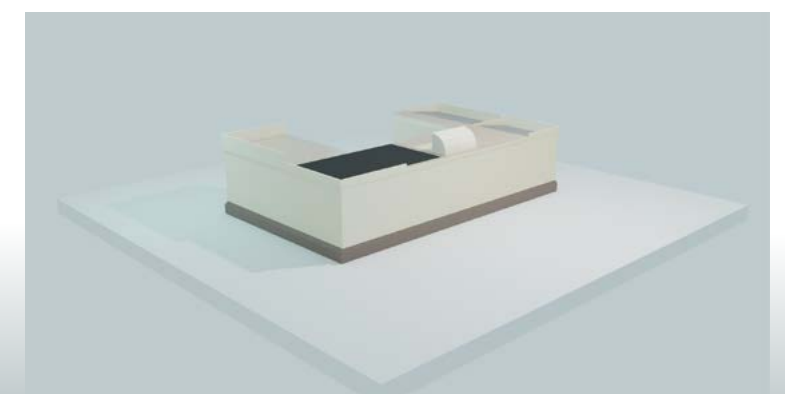
Non-player character block the way of the visitor, staring at the visitor, and talking



RENDERS BY: DANIEL ZHANG

### CASH TABLE

Generic store table that you go to pay in.



RENDER BY: DANIEL ZHANG

# SOUND ASSETS

The panic room audio is designed to get a feeling of normality at first. The auditory cues and music create the sense of a shop which could exist anywhere. This is then followed by the intense section of the experience in which the sounds either dissipate or considerably rise in intensity, to the point of almost distortion, paired with the visuals to help simulate the feeling of a panic disorder.



**Ambient Store Music**  
*Ambient into intense music*

Ambient background music, similar to that of elevator music which then gets progressively more intense with the experience.



**Automatic Door**  
*Ambient background effect*

The sound of an automatic door opening as the visitor enters the store



**Background Chatter**  
*Ambient background effect*

Sounds of many people speaking to one another while shopping which then gets progressively more intense with the experience.



**Breathing Noises**  
*Ambient background effect*

Starts slightly heavier but becomes jagged and intense as the experience does so.



**Buzzing Light Ambience**  
*Ambient background effect*

The sound of fluorescent lights buzzing, gets louder as the experience goes on.



**Cart Noises**  
*Ambient background effect*

The sound of the cartwheels moving occasionally squeaking.



**Cash Register - Open - Close**  
*Ambient background effect*  
Sound of an item being scanned at a store register.



**Entrance Jingle**  
*Ambient background effect*  
Sound of a store bell jingling as the visitor walks through the automatic doors.



**Sneaker Steps**  
*Interaction noise*  
Sneakers squeaking across the plated floor of the grocery store as the player walks.



**Heartbeat**  
*Ambient background effect*  
Sound of the characters heartbeat, gets louder as the experience goes on



**Text Alert**  
*UI noise*  
A soft bing signifying a text message

## Voice Lines

### IDLE CHATTER

- > Where's the bread?
- > Yeah, I'd try that.
- > Hold on a minute
- > Hmm, what else do I need?

### JUDGEMENTAL LINES

- > What are they doing?
- > Look at them
- > Why are they doing that?
- > What's wrong with them?
- > Are they okay?
- > They need help

# SCHIZOPHRENIA

The schizophrenia room is set in the middle of an office, with the visitor sitting in an office cubicle. Everyone in the adjacent cubicles can be seen and heard working. After receiving an email from their boss concerned about their absence (a nod to the negative symptoms of schizophrenia) the visitor will begin to experience visual and auditory hallucinations, which no other co-workers will acknowledge.

The hallucinations will begin smaller and less evident with the voice of their boss yelling and a faint radio tune in the background. However, the hallucinations will increase to shadows along the wall, a mug that seems to fall but doesn't actually fall (respawning on the desk), and a fire that appears on the opposite wall. The "visitor's negative thoughts" will also become auditory through the voice of their boss, following a theme of their delusion that their workplace is rooting for their failure. The experience ends after all 4 phases or if the visitor clicks the emergency exit button.

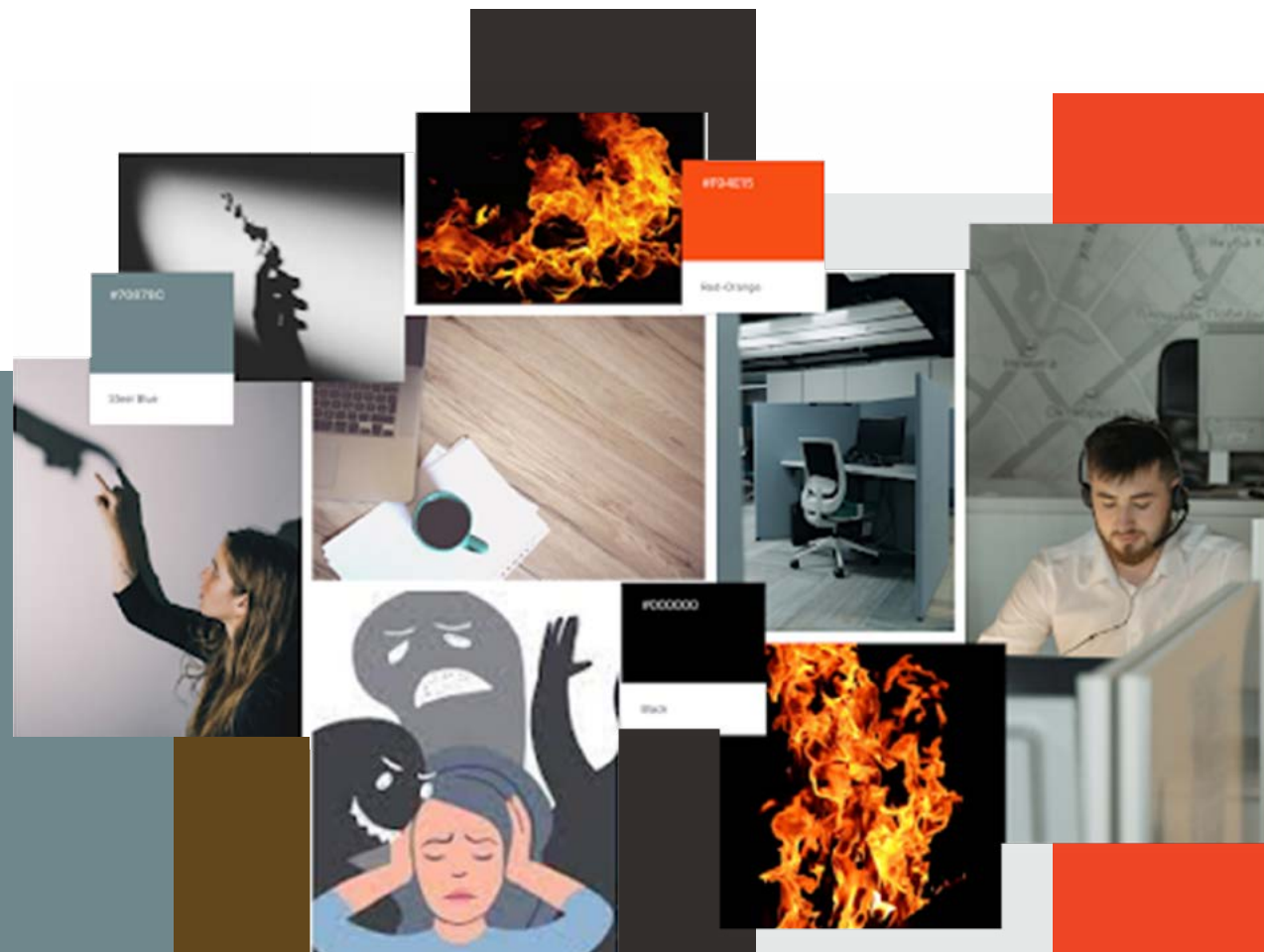


# WORLD DESIGN

## Mood Board

### ART STYLE

A windowless office with identical cubicles spaced evenly throughout the room. The room is lit consistently with cool white light. The cubicle is mostly enclosed with high walls. The desk is impersonal, with only a computer and a mug.



70878C

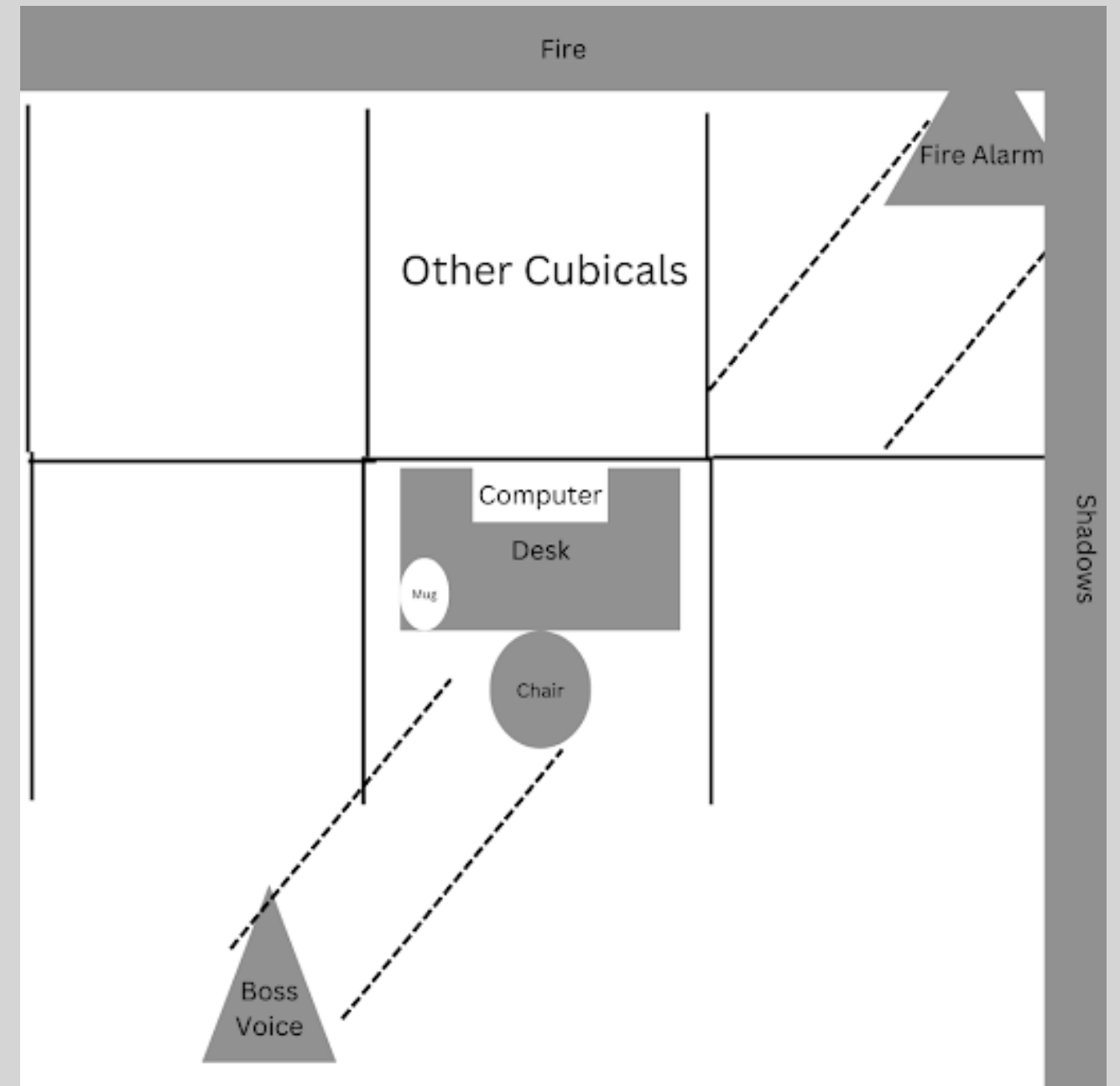
634717

342F2D

E6E8E8

FF4319

## MAP



The Schizophrenia room allows the Visitor to explore the room based on the POV of the Visitor sitting on the chair(restricted). The Visitor will first see the desk with a computer in front of them, and the fire alarm is at the top right of their view. Through the room progression, voices will be heard behind them, shadow people will appear on the right wall, and fire will appear on the front wall.

# EXPERIENCE SCRIPT

## INITIAL STATE:

The visitor seated at a cubicle desk. The computer is in front of the visitor, a coffee mug beside it. The computer will have a "new email screen icon on it". If the visitor looks around, they can see other cubicles and see legs under other people's desks signifying that they are occupied and hear the sounds of keyboards clicking which will not stop for the entire experience. A highlighted UI signifier will surround the computer, encouraging them to click the mouse/computer to "open their email". This will open the email on the screen, but also cause a pop-up UI which lets the visitor see the email more clearly (designed like a email tab). To close it, they can click the X button which will set off the first phase.

## PHASE 1 (~15S):

The voice of a boss figure says, "Hey, you're late again" behind the visitor; if they turn around, they will see nobody is there. "What are you doing," again, no one is there to say it. In the faint background, they will hear a song with a radio crackle despite no radio being in sight. Finally, the voice will say "Get back to work", again no NPC visibly saying this.

## PHASE 2 (~10S):

Two to three's people's shadows appear to pass along the office room's walls, but no people are there to cause a shadow. The shadows will start on the side of the wall closest to the visitor smaller, then progressively get bigger as they reach the other end (as if the people are getting closer to the light source). The radio still plays on; it goes in a loop, signifying something is a bit off.

## PHASE 3 (~15S):

Radio stops. The mug on the desk begins to move toward the edge of the desk. Even if the visitor tries to grab it, it will fall and seem like it will crash on the floor, but it instead disappears and respawns on the desk as if it never moved. Interspersed with this cup falling, internal negative thoughts start becoming auditory in the voice of the boss (ex. "They think you're a failure", "They want to see you fail", "It's their fault the boss is angry.").

## PHASE 4 (~15S):

Fire appears on the wall, and the Visitor hears and sees the fire alarm blaring red/flashing. However, the very obvious sounds of keyboard typing continue, and no other coworkers try to leave the building to show it is a hallucination. Voice changes more towards things like "You're not safe," "You need to get out," "RUN."

## EXIT OPTIONS:

- > Experience the entire 4 Phases, and then the screen fades to black, and you are brought to the coping room
- > Click the emergency exit button and be brought immediately to the coping room.

# NARRATIVE ASSETS

## Artist Statement

This room will simulate an example of visual and auditory hallucinations someone with Schizophrenia may experience. You will be sat down in an office cubicle with no goal other than to observe what happens around you. Check in with how the hallucinations makes you feel, and how you picture reality within the space.

Please be advised that the room will contain sounds and visuals some may find distressing related to the experience, including loud sounds, flashing lights, intrusive thoughts and delusions, simulated fire, and simulated hallucinations. At any point in the experience, if you feel uncomfortable with continuing, you can use your emergency button to exit the room. By clicking the emergency exit button, you will be brought to a separate calming room, guiding you through a clinically proven coping exercise.

**[I Consent] | [I do not Consent]**

## Gallery–Mental Illness Description Board

Schizophrenia is a mental illness that is diagnosed when someone has at least two of the following five symptoms; hallucinations, delusions, disorganized thinking/speech, disorganized behavior or catatonia (a symptom that affects the persons ability to move and react to stimuli) and negative symptoms such as losing interest in previous hobbies and lack of concentration.<sup>1, 2</sup>

## Gallery– Treatments Board

Schizophrenia can be managed with a combination of antipsychotic medications and therapies. Second-generation antipsychotics such as Abilify and Risperidone are often considered first as they have less side effects but first-generation and injectable antipsychotics can be used instead. Individual psychotherapy is commonly used in conjunction with medications. If schizophrenia is proving to be treatment resistant electroconvulsive therapy (ECT), a therapy in which someone is put under anesthesia and small electric currents are used to set off a controlled seizure, may be used.<sup>1, 3</sup>

## Gallery– Coping Mechanisms

Coping skills for schizophrenia is all about keeping yourself grounded in reality. You can use your senses for this, doing things such as playing with playdough or putty, smelling candles or using a heating pad. Another useful coping strategy is having an emotional support animal. While a person needs a doctors note in order to allow emotional support animals into living places that typically don't allow pets any animal/pet can help ease a person's life. For people with schizophrenia particularly, ESA's can help them to recognize reality by what the animal responds and doesn't respond to. Some psychiatric service animals can even be trained to alert to a person whether something is real or a hallucination when asked.<sup>4, 5</sup>

<sup>1</sup> NAMI. (n.d). Home. <https://nami.org/home>

<sup>2</sup> Diagnostic and statistical manual of mental disorders : DSM-5. (5th ed.). (2013). American Psychiatric Association.

<sup>3</sup> CAMH. (n.d). Electroconvulsive therapy (ECT). <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/electroconvulsive-therapy>

<sup>4</sup> Nestler, A. (2022, Oct 12). Five Schizophrenia Coping Skills I Can't Live Without. NAMI. <https://www.nami.org/Blogs/NAMI-Blog/October-2022/Five-Schizophrenia-Coping-Skills-I-Can-t-Live-Without>

<sup>5</sup> US Service Animals. (n.d). Psychiatric Service Dogs | What They Do & How They Help. <https://us-serviceanimals.org/blog/psychiatric-service-dogs/>



# VISUAL ASSETS



RENDER BY: AMRIT SOOKLAL

## COMPUTER

Standard modern office computer, much like the PCs in the computer commons. It will need to show a screen that will change as the experience goes on.

## COFFEE MUG

Basic coffee mug that has a handle. This asset will fall off the desk during the experience but does not need to be able to shatter



RENDER BY: YANKEER (COCO) XU



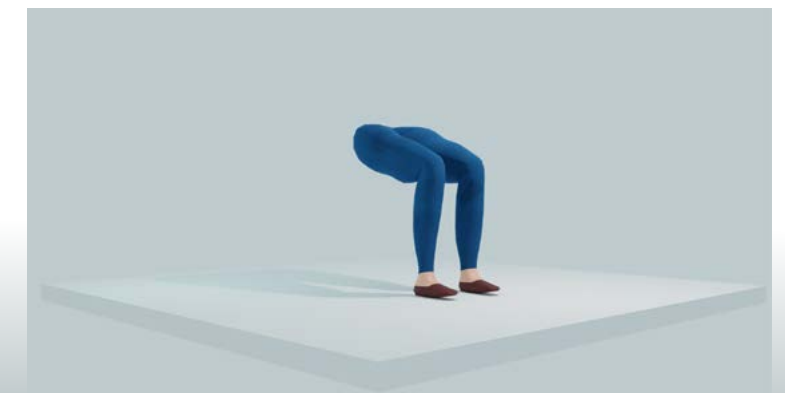
COMPILED BY: SHANNON KELLY

## CUBICLE DESK

A simple desk that is big enough to hold the coffee mug, the keyboard, and the monitor. It should be simple as not to detract from the experience itself

## LEGS UNDER DESKS

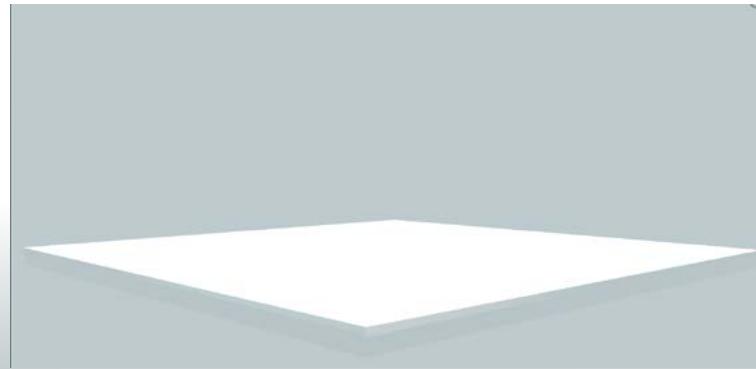
These would act as NPCs; however, to increase the feeling of solitude, only legs will be shown



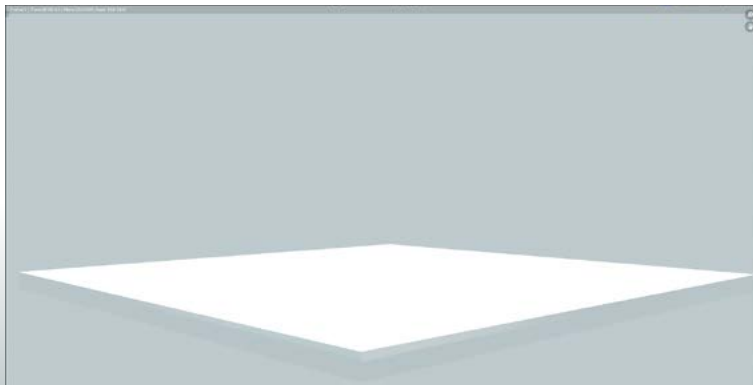
RENDER BY: DANIEL ZHANG

## SHADOWS

Shadows appear along the wall past the visitor, but no NPCs cause them. They are used to simulate visual hallucinations.



LIGHT BOUNCE



SHADER

## FIRE ON WALLS

The walls will appear to be on fire at the end of the experience, as to stimulate visual hallucinations

## CHAIR

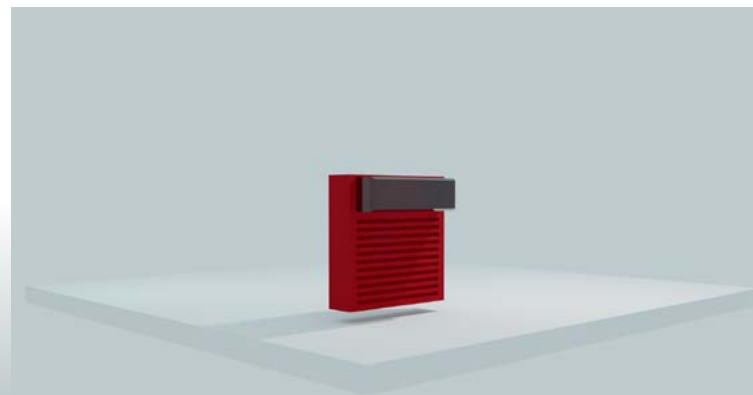
An office chair that the visitor is sitting on



RENDER BY: DONGJIAN (JOEY) WU

## FIRE ALARM

A standard circular fire alarm, will blare red at the end of the experience to stimulate visual and auditory hallucinations



RENDER BY: PATRICK ARENAS



# SOUND ASSETS

The sound assets are designed to create the feeling of grounded reality being distorted in uncomfortable ways that characterize schizophrenia, familiar sounds being heard in unlikely or impossible spaces. This includes the auditory experience of one’s workplace catching fire contrasted by the sounds of all of one’s coworkers continuing as if they are unaware of this apparent danger.



**Clicking keyboards**  
*Ambient background effect*

Sound of clicking keyboards designed to show that there are people in other cubicles



**Voice**  
*Voice over*

The voice of the boss voicing the characters thoughts



**Radio**  
*Distorted background music*

Loop of the chorus of a song with slight radio static



**Fire Alarm**  
*Ambient background effect*

Fire alarm, loud enough to cause concern in the visitor but not enough to drown out the other sounds



**Fire**  
*Ambient background effect*  
An open flame crackling



**Mouse Click**  
*UI Sound*  
A click of the mouse

# Voice Lines

## BOSS VOICE

- > Hey! You’re late again
- > What are you doing?
- > Get back to work

## INNER VOICE

- > They think you’re crazy
- > You’re not safe
- > You need to get out
- > Go, Run
- > They think your a failure
- >They wanna see you fail
- > It’s their fault the boss is angry
- > They wanna see you get hurt
- > They want to see you burn



# DEPERSONALIZATION/ DEREALIZATION

(DPDR)

The depersonalization room will be set in a bathroom where the visitor is tasked with brushing their teeth in front of the mirror. As they begin, their vision will blur and become "dream-like" with a hazy filter. The sounds of brushing teeth and dripping water will slowly fade as the white noise overpowers into an isolating soundscape. The colours of the room will then become desaturated. Between simulated blinks, the visitor will notice their "reflection" (the avatar) becoming distorted until it finally ends at a blank mannequin. At this point, visitors lose autonomy as their vision goes from normal FOV to a doubled FOV.

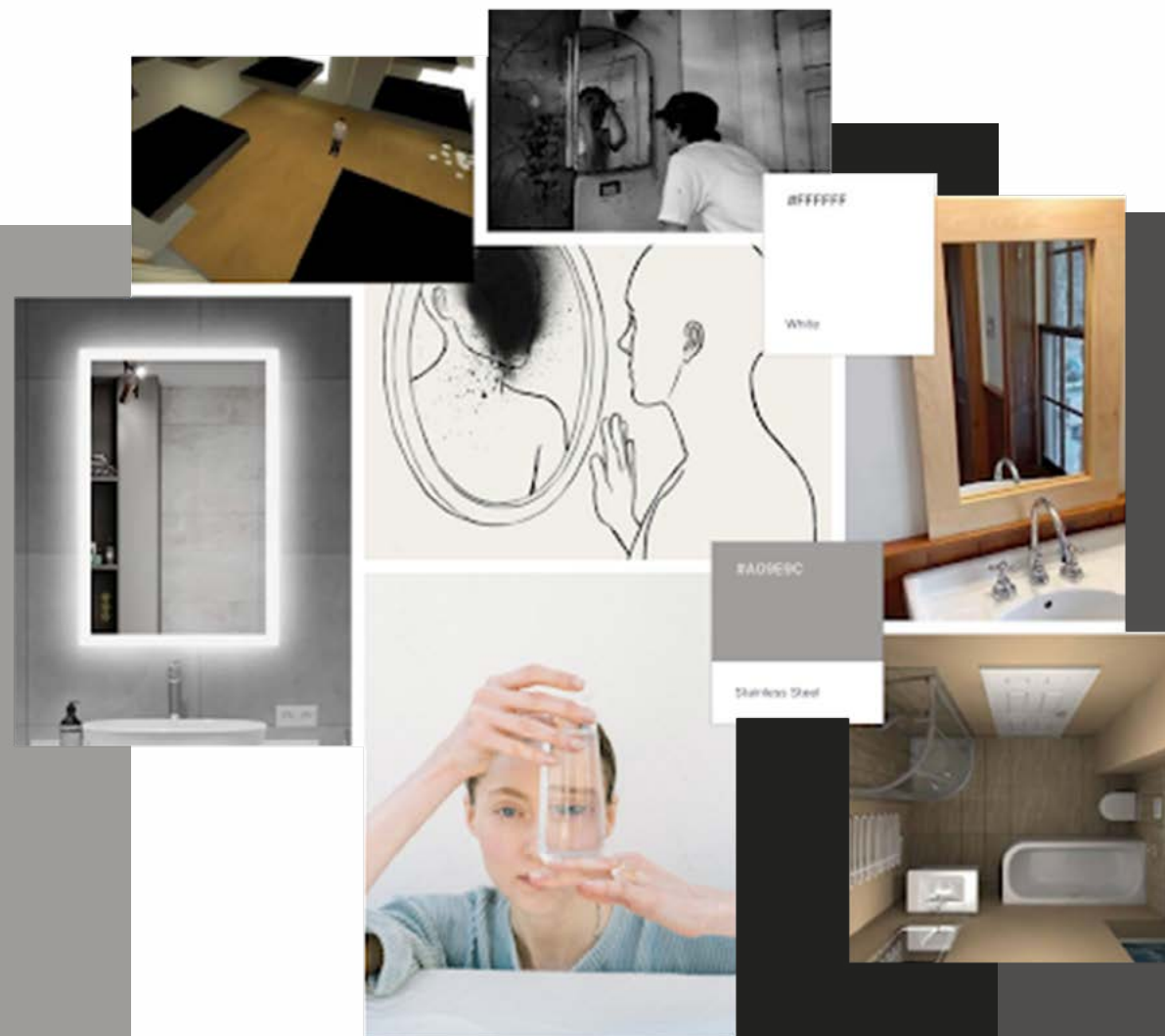


# WORLD DESIGN

## Mood Board

### ART STYLE

A simple, modern gray tiled bathroom. The room is damp, monochromatic, sterile, and with uncomfortable edges. Cold and detached with cool white lighting. Only the toothbrush, cup and shower curtains are bolder colours, which will eventually fade into de-saturation



A09E9C

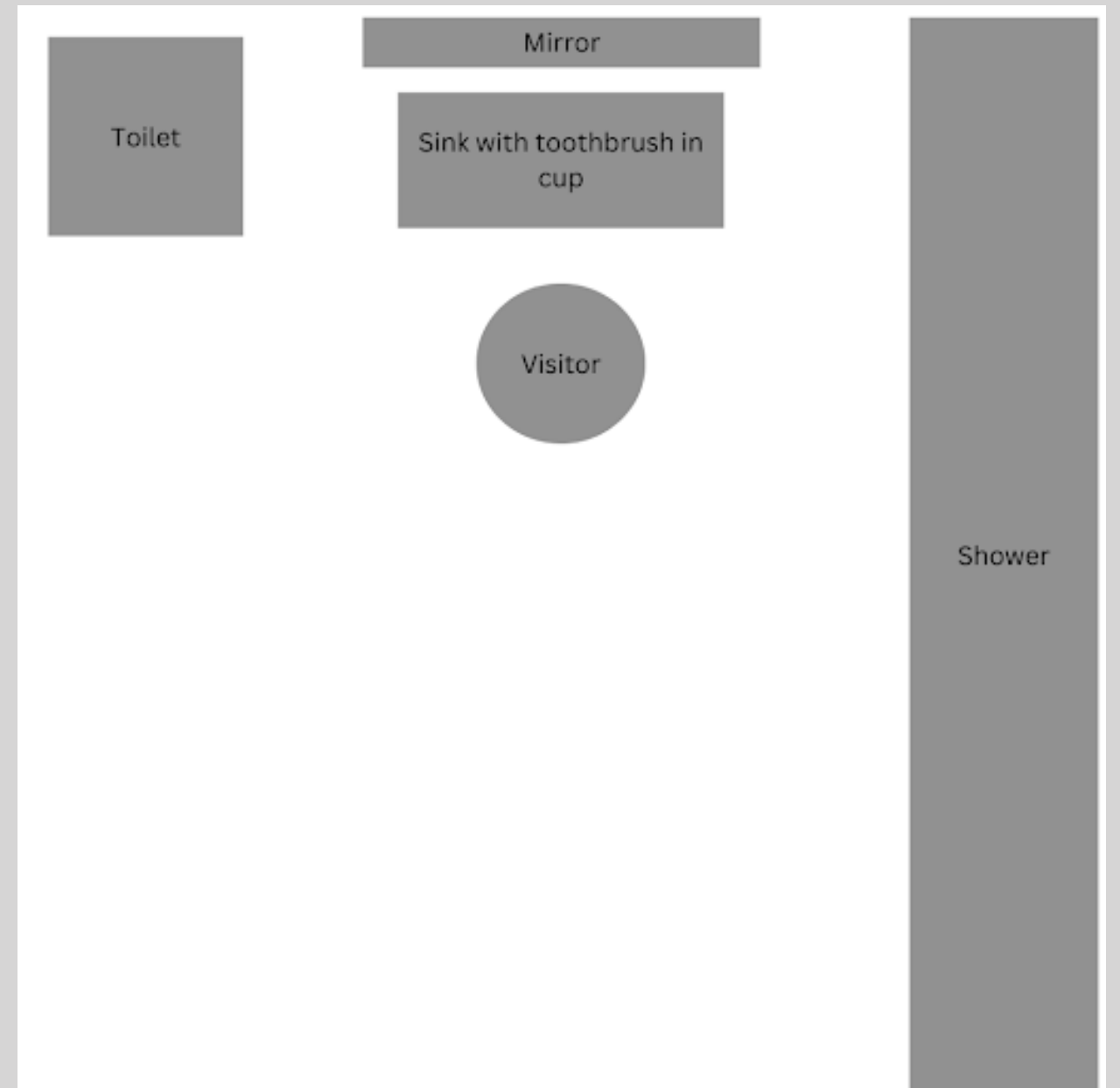
FFFFFFF

BCA083

232221

504F4D

## MAP



*A square bathroom with common household fixtures. The visitor will be situated in from of the sink and mirror with a toilet to their left and a closed shower to their right*

# EXPERIENCE SCRIPT

## INITIAL STATE:

The visitor is spawned in front of the bathroom sink with a mirror that reflects from the shoulders up. A toothbrush sits in a cup on the sink with an indication to pick it up (UI highlight). To their right, a shower is closed by a curtain. They can hear the sounds of water slowly dripping from that ear. To the left is a toilet; it makes no noise.

## PHASE 1 (VISITOR PICKS UP TOOTHBRUSH ~10S):

Once the visitor grabs the toothbrush, if they lift the brush to their mouth, the sound of teeth brushing occurs. After about 10 seconds, the visitor's vision will become slightly blurring and a "dream-like" haze filter will coat their vision. The dripping noises and brushing teeth noises will slowly fade out. In its place, a white noise track will begin to play.

## PHASE 2 (~10S):

The room will slowly lose color as the visitor's vision desaturates (not full black and white, but a dull coloring). A simulated blink (quick black screen) will occur, leaving in its place a new avatar that is slightly distorted from the previous which the visitor can see in the mirror.

## PHASE 3 (~10S):

Another blink occurs and the avatar is replaced with a blank mannequin (no face) who is brushing their teeth. The visitor loses autonomy (can't move arms, and instead, the arms will move to brush their teeth on autopilot) and the FOV changes from 60 (or whatever the base FOV is) to 120 (or double the original FOV). Fades to black after 10 seconds of this and ends the experience.

## PHASE 4 (~15S):

Fire appears on the wall, and the Visitor hears and sees the fire alarm blaring red/flashing. However, the very obvious sounds of keyboard typing continue, and no other coworkers try to leave the building to show it is a hallucination. Voice changes more towards things like "You're not safe," "You need to get out," "RUN."

## EXIT OPTIONS:

- > Experience the entire 3 Phases, and then the screen fades to black, and you are brought to the coping room
- > Click the emergency exit button and be brought immediately to the coping room.



# NARRATIVE ASSETS

## Artist Statement

This experience will place you in the shoes of someone with DPDR. Set in a bathroom, your goal will be to brush your teeth. Throughout this task you will notice your reality begin to shift as you experience what dissociation, and disconnectedness from reality and the self might feel like.

Please be advised that the room will contain visuals some may find distressing related to the experience, including distorted vision and reality. At any point in the experience, if you feel uncomfortable with continuing, you can use your emergency button to exit the room. By clicking the emergency exit button, you will be brought to a separate calming room, guiding you through a clinically proven coping exercise.

**[I Consent] | [I do not Consent]**

## Gallery–Mental Illness Description Board

Depersonalization-Derealization Disorder occurs when a person persistently or repeatedly has the feeling that they're observing themselves from outside their body (depersonalization) or have a sense that things around them aren't real (derealization), or both occur. Feelings of depersonalization and derealization can be very disturbing and may feel like you're living in a dream.

Many people have a passing experience of depersonalization or derealization at some point. But when these feelings keep occurring or never completely go away, and interfere with a person's ability to function, it's considered depersonalization-derealization disorder.<sup>1, 2, 3, 4</sup>

## Gallery– Treatments Board

There is no medication for DPDR but someone with DPDR may be given medication for related depression or anxiety. There are also many options for therapies and other treatment options such as Cognitive Behavioural Therapy (CBT), a therapy which focuses on changing patterns in thinking and behaviors, Dialectic Behavioural Therapy (DBT), a therapy which focuses on managing emotions, Family therapy and creative therapies such as art or music therapy.<sup>2, 3</sup>

## Gallery– Coping Mechanisms

One coping strategy people who struggle with DPDR can use is an art therapy exercise where someone can draw an outline of their body and then use art supplies to visually represent how they are feeling physically and emotionally. This gives you time to connect to yourself and how your feeling, something someone with DPDR may find difficult.<sup>3, 5</sup>

1 Mayo Clinic. (2017, May 16). Depersonalization-derealization disorder. <https://www.mayoclinic.org/diseases-conditions/depersonalization-derealization-disorder/symptoms-causes/syc-20352911#:~:text=Depersonalization%2Dderealization%2Disorder%20occurs%20when,%20real%2C%20or%20both>

2 Cleveland Clinic. (2020, October 15). Depersonalization/Derealization Disorder. <https://my.cleveland-clinic.org/health/diseases/9791-depersonalizationderealization-disorder>

3 Raypole, C. (2019, February 1). Understanding Depersonalization and Derealization Disorder. Healthline. <https://www.healthline.com/health/depersonalization-disorder>

4 Diagnostic and statistical manual of mental disorders : DSM-5. (5th ed.). (2013). American Psychiatric Association.

5 Art Therapy Resources. (n.d). Case Study: Art Therapy for a Client with Dissociation Issues. <https://arttherapyresources.com.au/dissociation/>

# VISUAL ASSETS



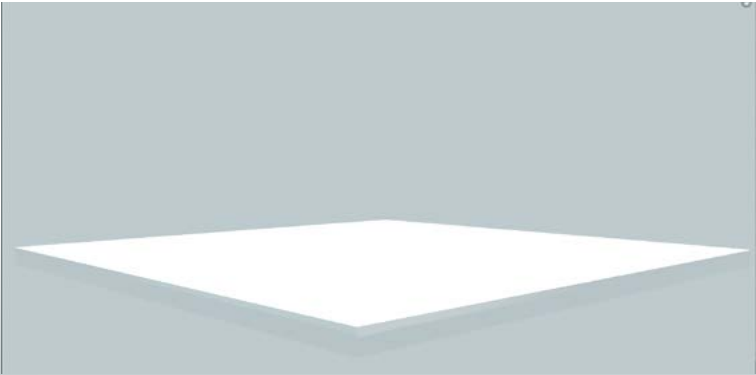
**TOILET**

Toilet Model, not interactable

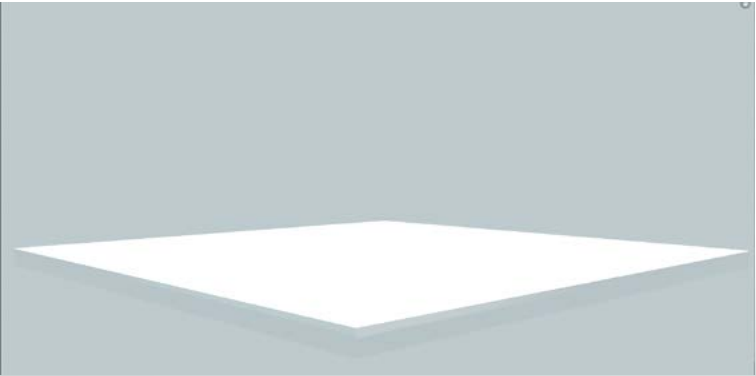
RENDER BY: DONGJIAN (JOEY) WU

**PLAYER MODEL 1**

Standard Player Model



RENDER BY:



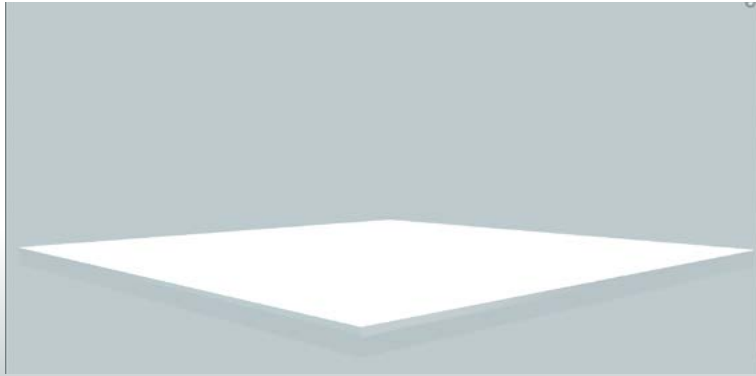
**PLAYER MODEL 2**

Slightly modified player model (wider head, unusual arms etc)

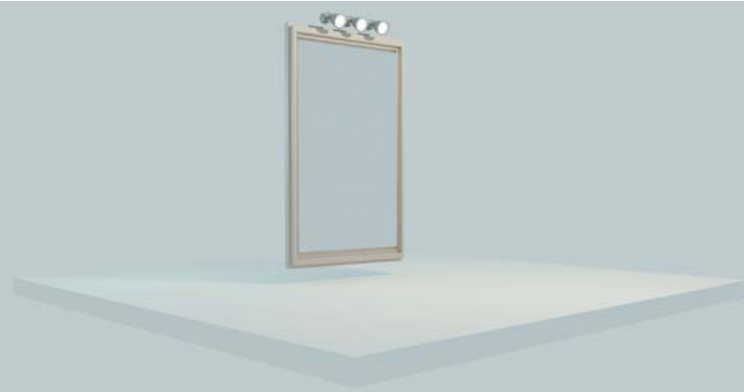
COMPILED BY:

**PLAYER MODEL 3**

Blank face player model



RENDER BY:



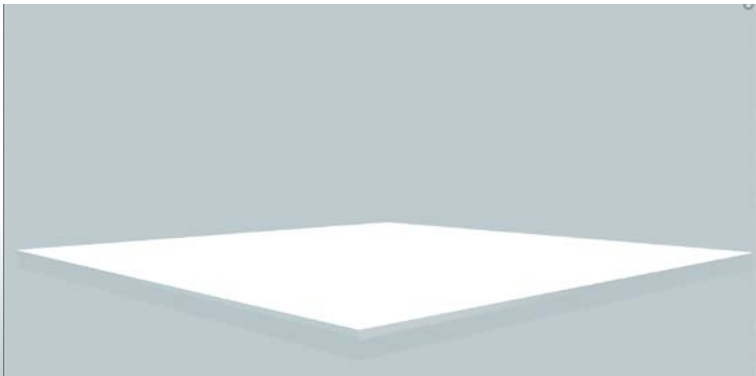
**MIRROR**

Mirror, reflects the avatar and distorts the avatar when the depersonalization begins

RENDER BY:

**TOOTHBRUSH**

Toothbrush which triggers brushing sound, interactable



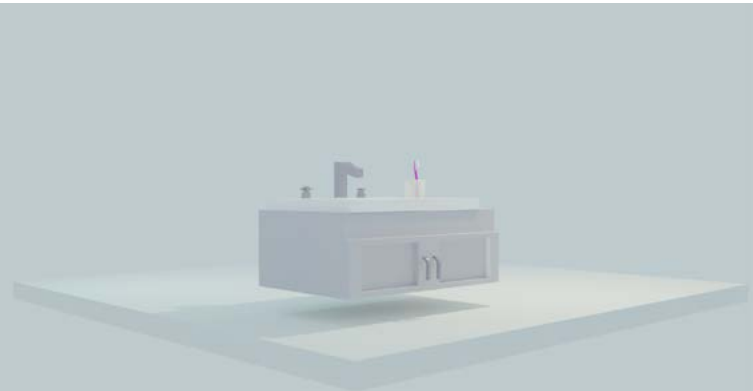
RENDER BY:



**SHOWER**

Shower curtain covering what is assumed to be a shower, not interactable

COMPILED BY: KAMRAN SAINI



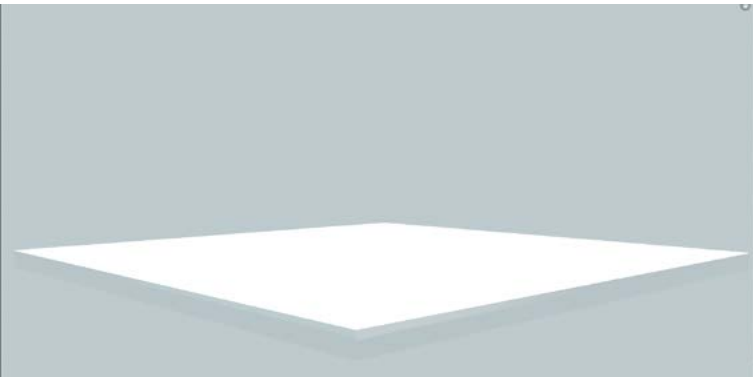
**SINK**

Sink model, not interactable, holds toothbrush cup

RENDER BY: MITCH KOGAN

**CUP**

Holds toothbrush in initial state



RENDER BY: YANKEER (COCO) XU



# SOUND ASSETS



**Teeth brushing**  
*Ambient effect*

Brushing teeth SFX that plays when the toothbrush is held up to the face



**White Noise**  
*Background effect*

As the visitor’s vision goes blurry echoing, reverbing white noise starts



**Dripping Water**  
*Ambient effect*

Water dripping from the shower tap

# (PTSD) POST-TRAUMATIC STRESS DISORDER

For the PTSD experience room, the visitor will spawn in a dorm room on a bed. The simulation will be set in the morning as the visitor has to get up to go to class. As they "wake" the alarm clock beside them will trigger a flashback that brings them to an alternate memory scene, depicting a moment in childhood where they witness domestic abuse. The flashback will end bringing the visitor back into the dorm room where they will be in a disoriented state, trying to exit the dorm door. At the door they will again be triggered into a flashback, this time with a vague figure approaching them. The final return to the dorm room will put the visitor back in their bed, unable to go to class, and ending the experience.

# WORLD DESIGN

## Mood Board

### ART STYLE

Dim warmly lit dorm room, simple textures. Flashbacks are darker, with spotlight lighting on important areas.



1D2020

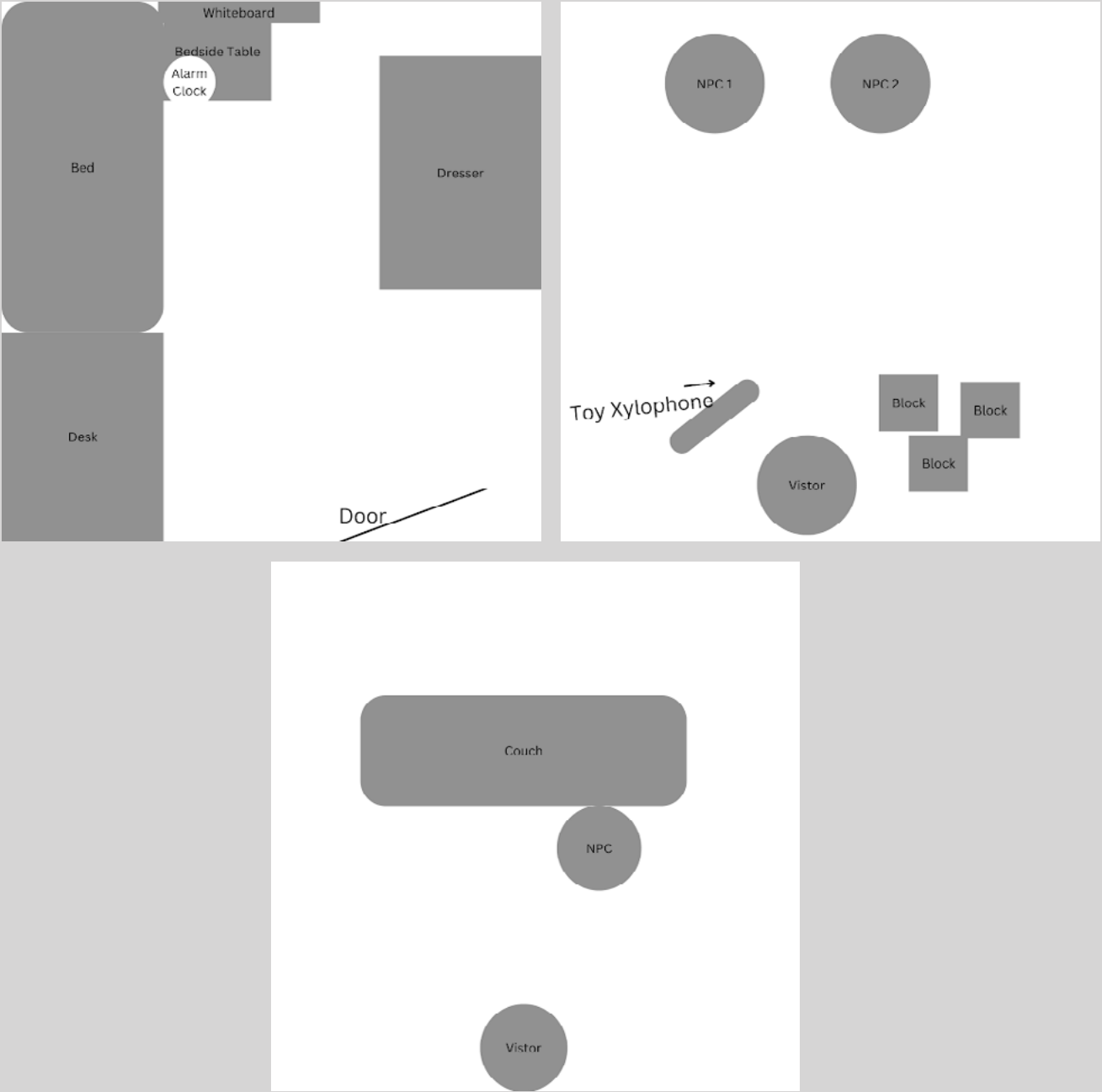
524D71

47682C

D8BFA3

EF3054

# MAP



Visitor is spawned in a university dorm room with a bed in one corner, a side table with alarm clock and white board, a dresser on the far wall and a desk. The door is in the opposite corner of the bed the visitor starts in. Flashback 1 has two NPCs arguing in the distance and a toy xylophone and blocks nearby the visitor. Flashback 2 only has a couch in the middle of the space and an approaching NPC.



# EXPERIENCE SCRIPT

**INITIAL STATE:**

The visitor spawns in a university dorm room. They are sitting on the bed against a wall, unable to move. To their right there is a nightstand with an alarm clock, it reads 7:29. Across from them is a door to leave into the hallway. The room also has a desk, a dresser, and a white board that has the visitor’s schedule (they have class at 8:00). The room is quiet at first.

**PHASE 1 (FLASHBACK 1 ~10S):**

After 5s, the alarm suddenly goes off showing the clock at 7:30. As it blares, the visitor’s vision will fade to black (like they are blinking) and are respawned in a void-like room. The room is empty, a dark gray space surrounds them with only children’s toys in front of them and two NPCs (parents). In a muffled dream-like effect, the visitor will watch their parents in an argument (though no words can be made out). The scene will fade to black again and stay black as sounds of heart beats and the alarm will fade back in.

**PHASE 2 (RETURN TO DORM):**

The black fade will end bringing them back into the dorm room, this time standing with the alarm cutting off once they are back. The sounds of a shallow slow breathing and heart beats can be heard. The alarm will now read 7:45. The door will be highlighted indicating they have to leave for class. As the visitor walks toward the door, the sounds of idle unintelligible chatter of students in the hallway will get louder. The second they “grab” the door with the trigger button, the sound of the door clicking with sound, and their vision will fade to black again.

**PHASE 3 (FLASHBACK 2 ~10):**

The visitor is spawned back into the void-like room, this time only a couch sits in front of them and a new NPC sits on the couch. They will hear the words “come here” as the NPC motions for the visitor. Then the NPC will slowly get up and start moving toward the visitor until they are in front of the visitor and the scene fades back to black. As the room fades to black, the sounds of the chatter fade back in on a low volume.

**ENDING STATE:**

The visitor respawns in the dorm room fading out of the black, this time back in the bed they started in. They can no longer move again. The alarm reads 8:00. After a few seconds the room fades to black and the experience ends.

**EXIT OPTIONS:**

- > Go through the entire experience sequence and then fade to black into the coping room
  
- > Visitor clicks the emergency exit button and is taken to the coping room

# NARRATIVE ASSETS

## Artist Statement

In this room, you will experience PTSD flashbacks triggered through a student's morning trying to get out of their room for class. You will be tasked with walking towards the exit door and leaving the room, however flashback will hinder your ability to make it there easily. These flashbacks will depict visualizations of a traumatizing moment that has caused this experience of PTSD. This simulation is an example of what one might experience with Complex PTSD or C-PTSD specifically.

Please be advised that the room will contain audio and visuals some may find distressing related to the experience, including loud alarm sounds, isolating spaces, depictions of aggression, simulated flashbacks and allusion to abuse. At any point in the experience, if you feel uncomfortable with continuing, you can use your emergency button to exit the room. By clicking the emergency exit button, you will be brought to a separate calming room, guiding you through a clinically proven coping exercise.

**[I Consent] | [I do not Consent]**

## Gallery–Mental Illness Description Board

Post-traumatic stress disorder or PTSD is a mental health condition that's triggered by a traumatizing event, either experiencing it or witnessing it. Symptoms may include flashbacks, nightmares and severe anxiety, as well as uncontrollable thoughts about the event. Complex PTSD or C-PTSD, a form of PTSD in which someone experiences ongoing trauma that lasts months or years as their triggering events. C-PTSD being a newer discovery it is not an official diagnosis but there are many studies proving its existence and its differences from PTSD.<sup>1, 2</sup>

## Gallery– Treatments Board

The focus of PTSD treatment is on psychotherapies with medication such as SSRI's (Selective Serotonin Reuptake Inhibitors) and SNRI's (Serotonin Norepinephrine Reuptake Inhibitors) as an option to aid in recovery. The different psychotherapies available to help people with PTSD include CPT (Cognitive Processing Therapy), a therapy which works to change thoughts a person may be having about trauma they experienced, and PE (Prolonged Exposure), a therapy that teaches a person to gradually process feelings and memories about trauma that may have been avoided.<sup>3</sup>

## Gallery– Coping Mechanisms

One coping strategy people with PTSD can use is guided meditation. Guided meditation is done when you listen to someone else's voice lead you through a relaxing mental image or situation. Guided meditation can be found on websites which focus on it such as <https://www.mindful.org/category/meditation/guided-meditation/> and the <https://www.headspace.com/> as well as on media platforms like YouTube. Another strategy that can help people with PTSD is psychiatric service dogs or PSD's. PSD's can do a variety of tasks to help people with PTSD such as guiding their handler to a safe quiet space when needed, or doing deep pressure therapy. Deep pressure therapy is done when a service dog uses their weight to relax the handler's nervous system.<sup>4, 5, 6, 7</sup>

1 Mayo Clinic. (2018, July 6). Post-traumatic stress disorder (PTSD). <https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967>

2 NHS. (2022, May 13). Complex PTSD - Post-traumatic stress disorder. <https://www.nhs.uk/mental-health/conditions/post-traumatic-stress-disorder-ptsd/complex/>

3 APA. (2020, June). PTSD Treatments. <https://www.apa.org/ptsd-guideline/treatments>

4 Cohut, M. (2017, October 20). Five ways to cope with PTSD. MedicalNewsToday. <https://www.medicalnewstoday.com/articles/319824>

5 Aspen Service Dogs. (n.d). PTSD Service Dogs. <https://aspenservicedogs.com/ptsd-service-dogs/>

6 Declutter The Mind. (n.d). Guided Meditation for PTSD. <https://declutterthemind.com/guided-meditation/ptsd/>

7 Fong, R. (2021, April 28). Deep Pressure Therapy (DPT). <https://www.servicedogtrainingschool.org/blog/deep-pressure-therapy>

# VISUAL ASSETS

## ALARM CLOCK

This alarm clock will be small, as it will have to be on the nightstand. This alarm clock should not be out of the ordinary, however it should be a focal point of the room. The alarm will begin by reading 7:29, followed by 7:30, than change to 7:45, than 8:00 at the end of the experience

## DESK

An item to add atmosphere to the room

## NIGHTSTAND

This nightstand will be next to the bed, and will be under the alarm clock

## DRESSER

An item to add atmosphere to the room



**WHITEBOARD**

Will be posted on the wall. On it will be a texture reading "CLASS 8:00 AM"

**TOY BLOCKS**

Wooden toy blocks. They should be multiple colors and shapes.

**PARENT NPCS**

Two NPCs that will be animated. They should look non-distinct and shadowy, and appear taller than the visitor

**FLASHBACK 2 NPC**

This non distinct NPC will be animated as well. It should be different than the NPCs from earlier, but they should still be taller than the visitor

**VOID ROOM**

An empty, dark gray space. Should be large, but not imposing.

**TOY XYLOPHONE**

A miniature xylophone. The mallets should be nearby

**DOOR**

The door leading out of the room. After the first flashback, the door will be highlighted, indicating that the visitor will need to interact with it.

**COUCH**

This will be in the second flashback, and the non distinct NPC will sit on it before their animation.

# SOUND ASSETS



**Heartbeat**  
*Ambient effect*

Loud heartbeat to indicate intense stress



**Alarm Clock**  
*Background effect*

Alarm sound to emulate an electronic alarm clock



**Door Handle**  
*Ambient effect*

Door handle click and squeak to indicate a door opening



**Hallway Chatter**  
*Ambient effect*

Distant chatter sound effects to emulate a busy dorm house hallway



**Angry Parent Voice Lines**  
*Background effect*

Voice acting done by [name] and [name] to emulate a domestic dispute between spouses.



**Shaky/Shallow Breathing**  
*Ambient effect*

Shaky/ Shallow breathing to indicate panic after an intense flashback

# OBSESSIVE-COMPULSIVE DISORDER (OCD)

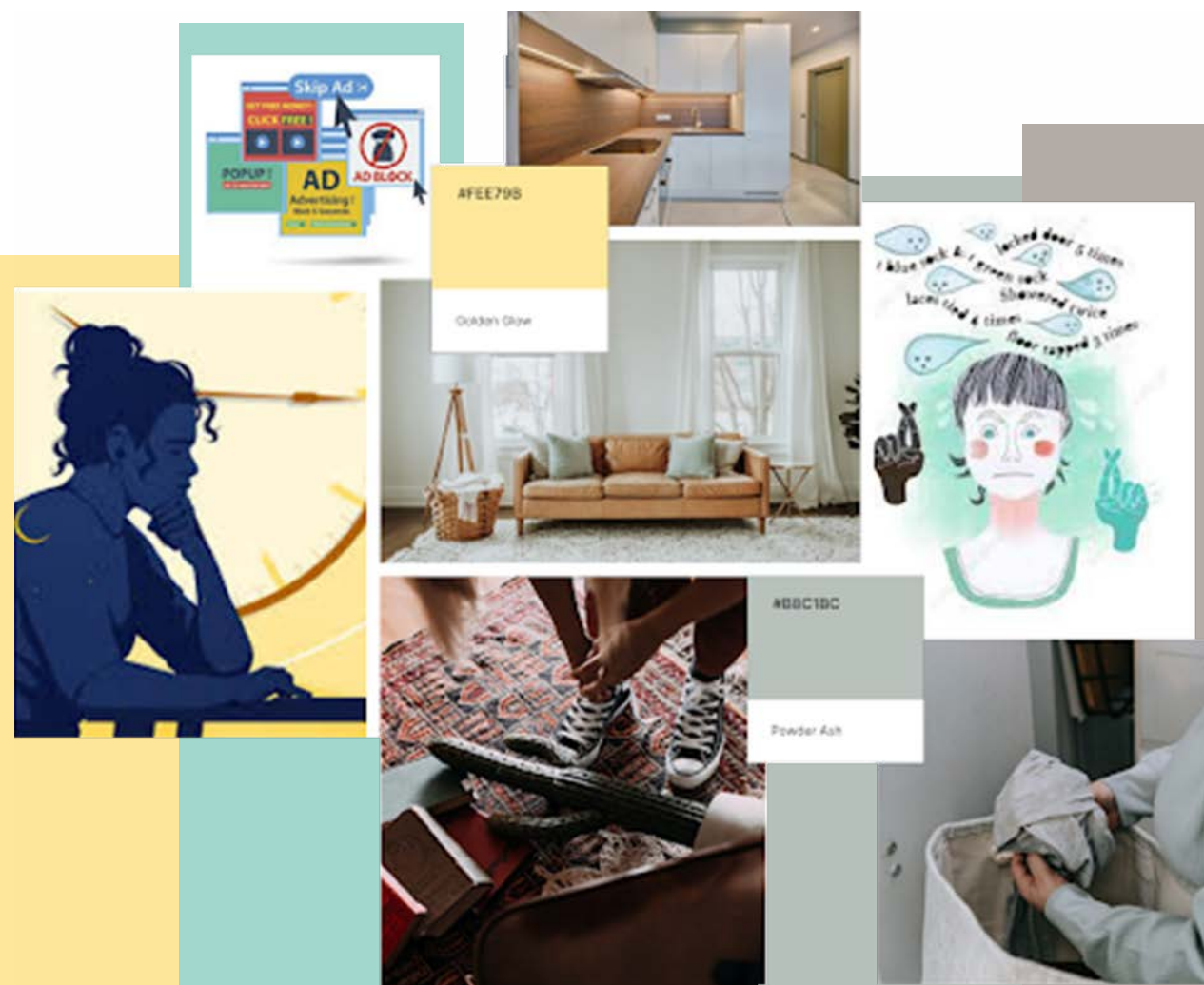
The visitor will be spawned in a living room where they will be tasked with cleaning up the five pieces of clothing on the floor. After they pick up their first clothing item, every 10 seconds, they will be interrupted with an obsessive thought and a "compulsion task" that must be completed before they can return to the clothing task (ex. Check the door lock, adjust the tv volume, check the stove). They have as much time as they need to complete the compulsive task, however within 5 seconds physical symptoms like heart beating, shaky breathing and more frequent obsessive thoughts will be heard. After completing the compulsive task, they will have 10 seconds to continue picking up clothing before the cycle repeats itself. The experience will end after all five items are picked up or if they exit to the coping room early.

# WORLD DESIGN

## Mood Board

### ART STYLE

Open concept main floor with kitchen and living room. The decorations are cozy, and the furniture lived in. The OCD pop-ups will resemble computer error messages attached to the visitor's vision.



FEE79B

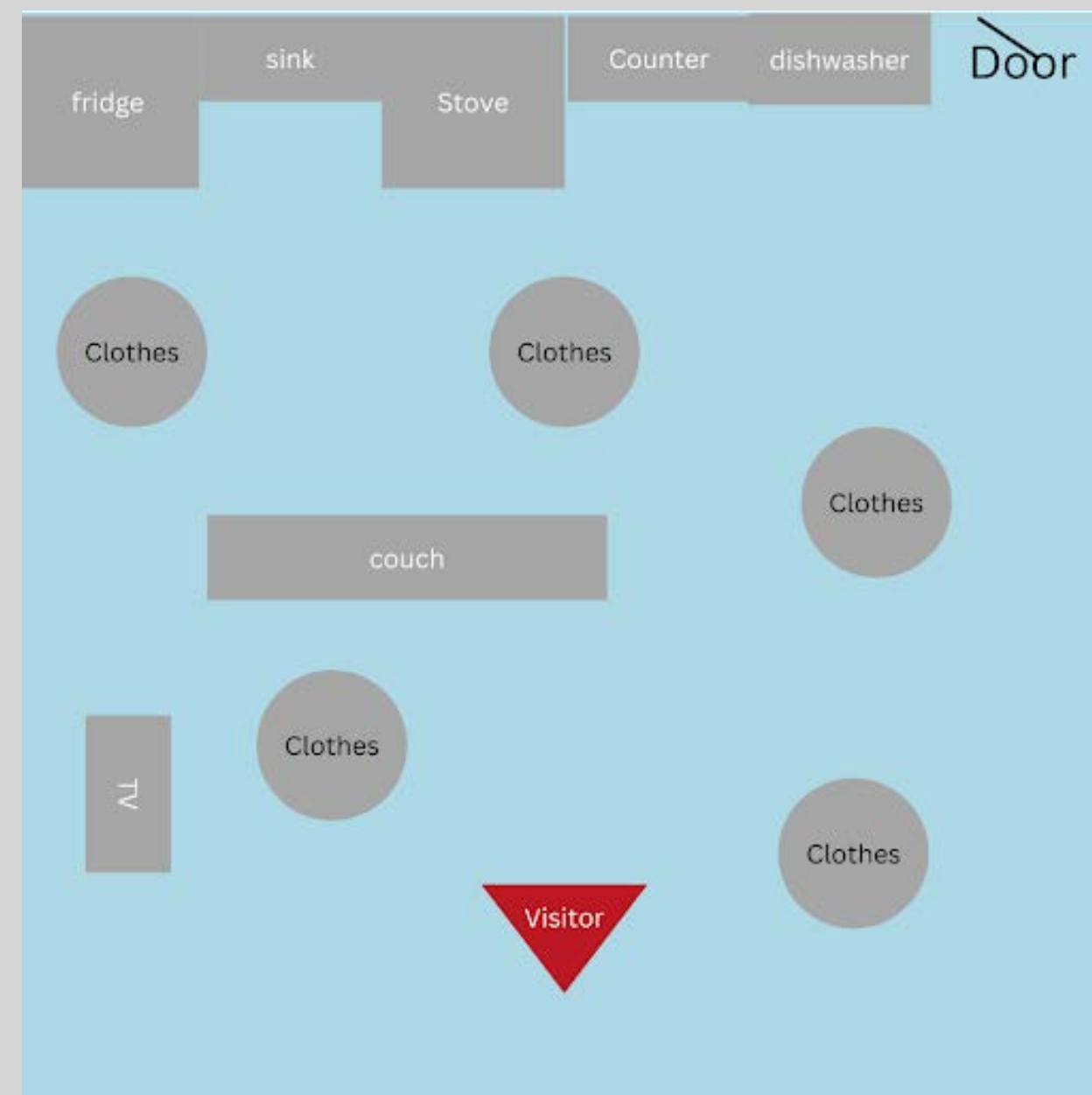
9CE3D1

B58D6E

B8C1BC

B4ADA7

## MAP



*A living room with basic furniture and piles of clothes on the floor. Pop-ups tasks will distract the visitor from picking up the clothes.*



# EXPERIENCE SCRIPT

## INITIAL STATE:

The visitor is spawned in the middle of an open-concept main floor (living room/kitchen). 5 pieces of clothing lay on the floor and are highlighted to be picked up.

## REPETITION PHASES:

Once initial clothing is picked up, after 10 seconds, an obsessive thought will be heard and followed by a "computer error" popup that will appear at the top of their vision, indicating that they have to do a separate task before they can finish picking up the clothes (they will go unhighlighted). After 5 seconds, if the visitor has not completed the compulsion, they will hear a heartbeat, shaking breath and their controllers will begin vibrating to emulate shaking hands. The obsessive thoughts will continue the entire time until the task is complete. Once a task is finished, the visitor will have 10 seconds to get a piece of clothing or risk another compulsion task appearing.

## COMPULSION TASK:

These tasks will loop around if the visitor still has clothes to pick up after completing all three tasks. The obsessive thoughts that play will be linked to the compulsion they have to complete

**1. Lock the Door:** The door knob will be highlighted. The visitor must click their trigger button to lock the door knob; however when they do, an error sound will play and the message will change to "that's not right, try it again", "that didn't feel like it was right, again". Each door lock will also cause a locking sound to play to indicate that the door is actually being locked each time. The door will end up being locked 4 times before the error message can be satisfied.

**2. Change the volume of the TV:** The TV will have a volume indicator set at an odd number (0-25), and to complete the task, the visitor has to change the volume to an even number by interacting with the TV via trigger buttons. If the visitor gets this compulsion again, it will switch to having to be a number with a 5 in it (alternating between evens and 5s)

**3. Check the Stove:** The stove will be highlighted; the visitor must interact with the stove to "check" if it is on to complete the task

## EXIT OPTIONS:

> Pick up all the clothes on the floor, and the scene will fade away to the coping room

> Click the emergency exit button at any point to leave the room and go to the coping room

# NARRATIVE ASSETS

## Artist Statement

You will be placed in the shoes of someone who has OCD. You will be spawned in the middle of a living room with the task of picking up the clothing around the room. However, throughout the experience you will be faced with side tasks which represent a compulsion that one with OCD might have in response to obsessive thoughts.

Please be advised that the room will contain auditory and visual elements some may find distressing related to the experience, including obsessive thoughts, simulated compulsions and frustrating task management. At any point in the experience, if you feel uncomfortable with continuing, you can use your emergency button to exit the room. By clicking the emergency exit button, you will be brought to a separate calming room, guiding you through a clinically proven coping exercise.

**[I Consent] | [I do not Consent]**

## Gallery–Mental Illness Description Board

Obsessive-compulsive disorder or OCD is a chronic, and long-lasting disorder in which a person has uncontrollable, reoccurring obsessions and/or compulsions that they feel the urge to repeat over and over. Obsessions are repeated thoughts, urges, or mental images that cause anxiety. Compulsions are repetitive behaviors that a person with OCD feels the urge to do in response to an obsessive thought. Not all rituals or habits are compulsions. But a person with OCD generally: Can't control his or her thoughts or behaviors, even when those thoughts or behaviors are recognized as excessive and experiences significant problems in their daily life due to these thoughts or behaviors.<sup>1, 2, 3</sup>

## Gallery– Treatments Board

OCD is typically treated by a combination of Exposure and Response Prevention (ERP), a type of therapy that allows the participant to, in a controlled environment, trigger obsessions and then refuse to do the following compulsion as well as a type of medications called Selective Serotonin Reuptake Inhibitors (SSRI's).<sup>3, 4</sup>

## Gallery– Coping Mechanisms

One coping strategy that people with OCD can use is attention refocusing. When someone feels the urge to do a compulsion they can refocus their attention physically or mentally. Examples of physical refocusing are jumping jacks, going for a walk or using a fidget toy and examples of mental refocusing are listing everything you see, listing everything in a category such as colours or soft drinks or spelling words backwards. Anything that distracts you and you have to focus on to accomplish can be used as attention refocusing.<sup>5</sup>

1 NIH. (n.d). Obsessive-Compulsive Disorder. <https://www.nimh.nih.gov/health/topics/obsessive-compulsive-disorder-ocd>

2 Robinson, D. & Raypole, C. (2021, December 22). Everything You Need to Know About Obsessive-Compulsive Disorder. Healthline. <https://www.healthline.com/health/ocd/social-signs>

3 IOCDF. (n.d). <https://iocdf.org/>

4 Robinson, D. & Raypole, C. (2021, December 22). Everything You Need to Know About Obsessive-Compulsive Disorder. Healthline. <https://www.healthline.com/health/ocd/social-signs>

5 Family Psych. (2017, July 10). 7 Strategies to Cope With OCD. <https://familypsychnj.com/2017/07/7-strategies-cope-ocd/>

VISUAL ASSETS

T-SHIRT

This is one of the clothes that the visitor will be asked to pick up in the initial phase. As such, it will be interactable. Moreover, it will be in a disorganized clump on the ground

SWEATPANTS

This is one of the clothes that the visitor will be asked to pick up in the initial phase. As such, it will be interactable. Moreover, it will be in a disorganized clump on the ground

SWEATER

This is one of the clothes that the visitor will be asked to pick up in the initial phase. As such, it will be interactable. Moreover, it will be in a disorganized clump on the ground

**JEANS**

This is one of the clothes that the visitor will be asked to pick up in the initial phase. As such, it will be interactable. Moreover, it will be in a disorganized clump on the ground

**SOCKS**

This is one of the clothes that the visitor will be asked to pick up in the initial phase. As such, it will be interactable. Moreover, it will be in a disorganized clump on the ground

**POP UP ERROR MESSAGE (UI)**

This will appear during the repetition phases. Aesthetically it will look like the windows error message

**DOOR**

This will have a turning door lock on it, that will be intractable during compulsion task 1

**STOVE**

This stove will have an interactable dial, that will come into play at the final compulsion task

**FRIDGE**

This will be in the room to add a sense of aesthetic and realism to the space

**COUCH**

This will be in the room to add a sense of aesthetic and realism to the space



**TV**

This TV will have interactable volume controls that will come into play in the compulsion task

**WINDOWS**

This will be in the room to add a sense of aesthetic and realism to the space

**COUNTERS**

This will be in the room to add a sense of aesthetic and realism to the space

# SOUND ASSETS



## Clothes rustling

*Ambient effect*

The rustling of fabric, for when you pick up the clothes



## Error sound

*Ambient effect*

A simple, computery orchestral hit, not dissimilar to the windows xp error sound



## TV

*Ambient effect*

A loop of a scene of a tv show playing in the background



## Volume Control Sound

*Ambient effect*

Sound of the volume being changed on the TV



## Door Lock

*Background effect*

Sound of the door locking plays when the visitor interacts with it



## Stove Checking Sound

*Ambient effect*

Sound that plays when the stove is checked. It will be a UI-sounding "completion" audio that reassures the visitor that the stove is off (Should not sound like the actual stove is being turned on or off)



## Obsessive thoughts

*Ambient effect*

Voice line that plays after 10 seconds of the experience beginning.



## Heartbeat

*Ambient effect*

Sound that plays when the visitor does not complete a compulsion within five seconds. It will be a steady, slow, heartbeat



## Shaking breath

*Background effect*

Sound that plays when the visitor does not complete a compulsion within five seconds. It will sound nervous and winded

## Voice Lines

- > Are you sure the stove is off?
- > Your house is gonna burn down if you don't check the stove
- > Are you really gonna risk it, just check
- > Your families gonna get hurt if you leave the tv on a wrong number, you know it's bad luck
- > Did you lock the door?
- > There's an intruder coming, you have to lock the door
- > I can't believe I'm doing this right now
- > Ugh, I don't want to be doing this

# COPING ROOM

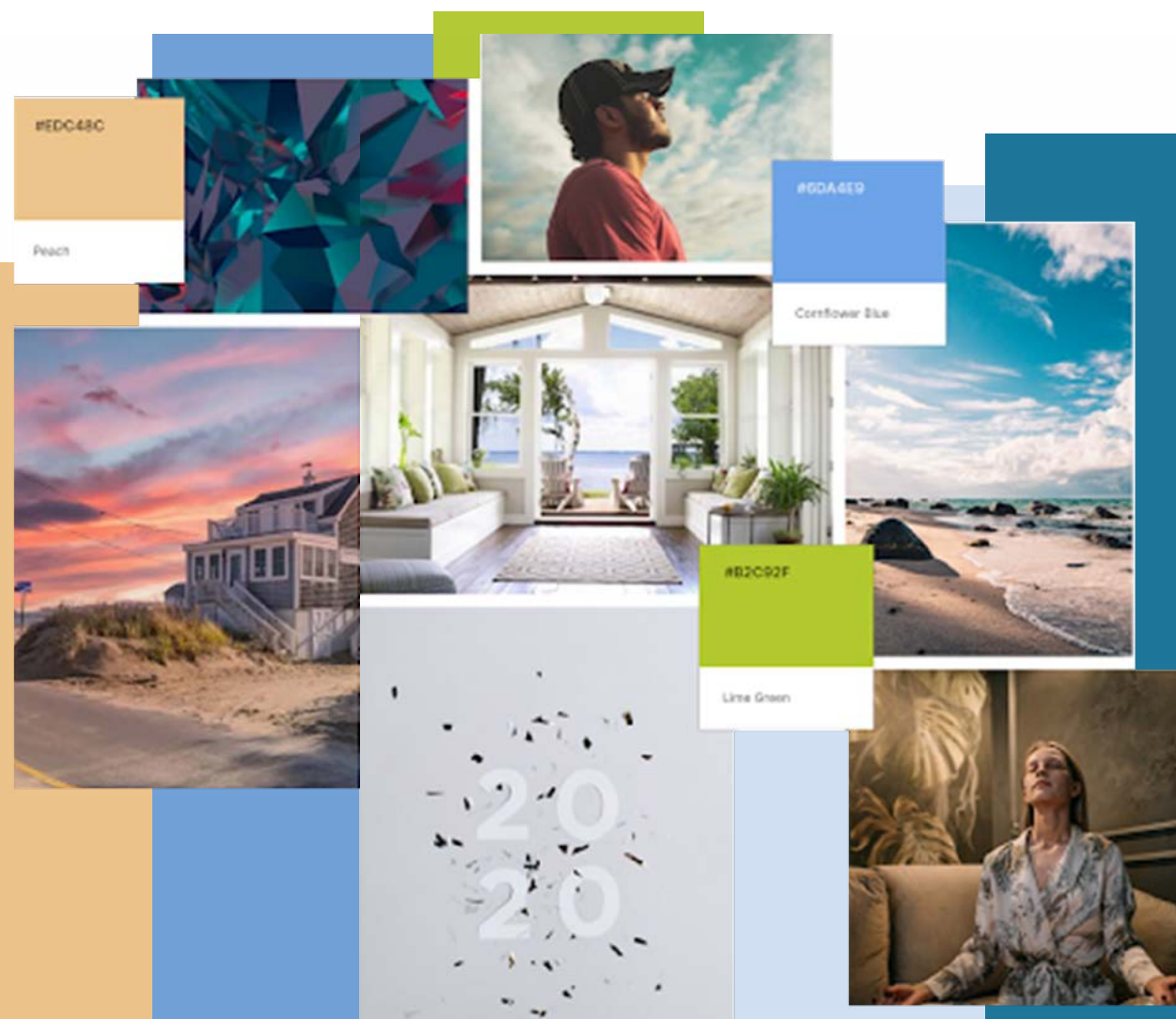
The Coping Room will be set in a beach house. The relaxing space will serve as a debrief and escape after the intense experiences that the visitor will go through. After each mental illness experience, the visitor will be brought to this Coping Room and led through a calming breathing exercise. To guide them, the visitor will see a UI Square modelled after the Box Breathing technique accompanied by the origami narrator reading out instructions for the exercise in a calming manner. The Box will expand and contract in rhythm with the box breathing timing, with short one word instructions at the center of the UI to indicate what the visitor should be doing. The visitor can stay in this room to meditate as long as they'd like until they are ready to go back to the Atrium. To leave, they click the same exit button.

# WORLD DESIGN

## Mood Board

### ART STYLE

Open concept main floor with kitchen and living room. The decorations are cozy, and the furniture lived in. The OCD pop-ups will resemble computer error messages attached to the visitor's vision.



EDC48C

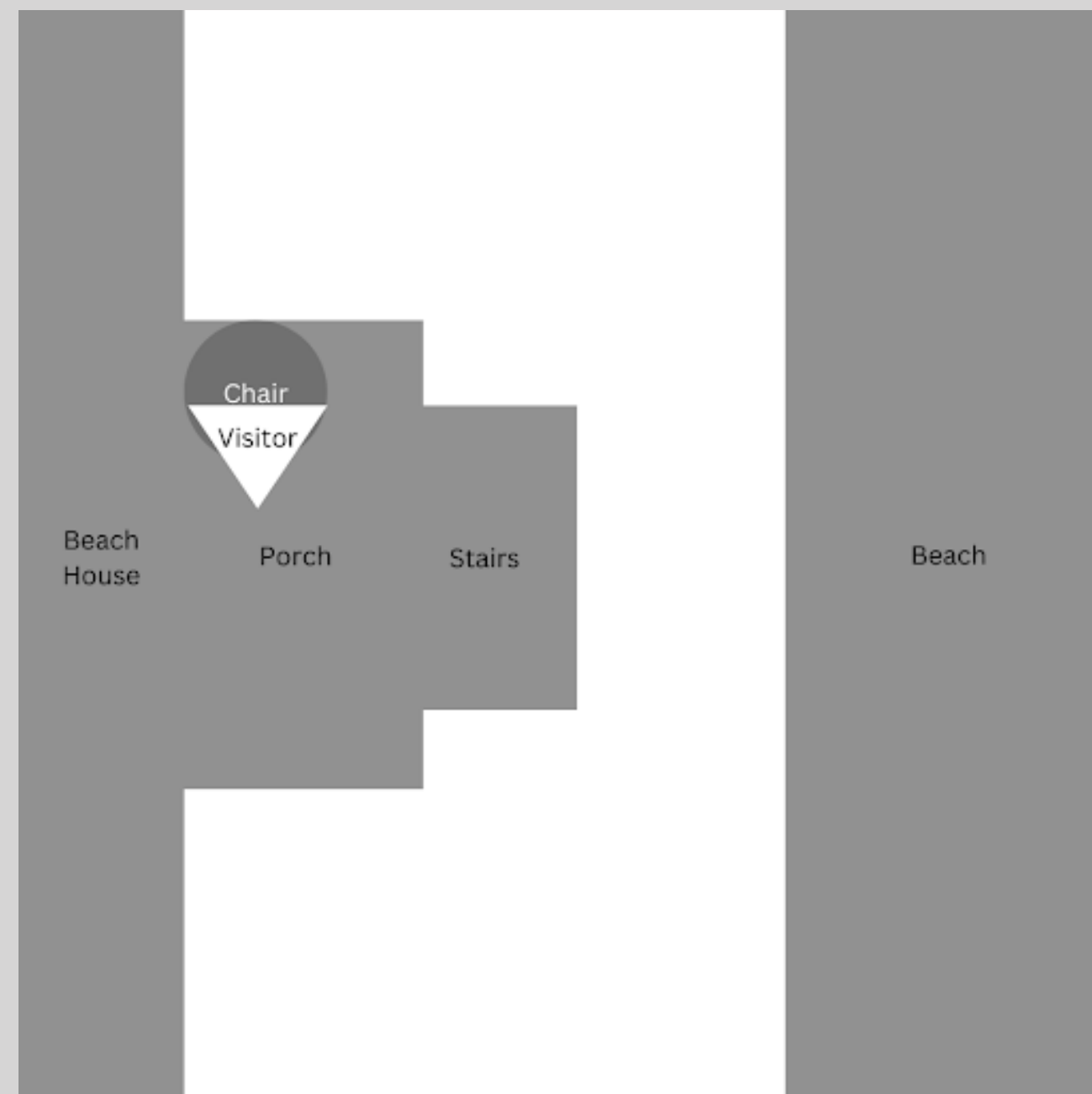
6DA4E9

B2C92F

DOE2FA

21759A

## MAP



*A living room with basic furniture and piles of clothes on the floor. Pop-ups tasks will distract the visitor from picking up the clothes.*



# NARRATIVE ASSETS

## VISUAL ASSETS

WAVES

They will be animated to go calmly back-wards and forwards in time with the breathing exercise

PORCH

This will be where the visitor is sitting, as it will be looking over the waves

STAIRS

The stairs will come from the porch down to the beach

BEAN BAG

This comfortable seat will be on the porch, as this is where the experience will take place

BEACH HOUSE WALL

This wall will be behind the player, and it will contain an opaque window, as well as vines travelling up the wall

# SOUND ASSETS



## Guiding Voice

*Narration*

- > A meditative voice explaining how to do box breathing



## Calming Music

*Background Music*

- > Calming music playing over the whole experience



## Wave Noises

*Ambient Background Effect*

- > Sound of the waves crashing



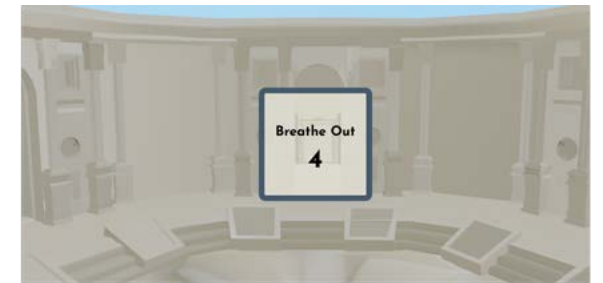
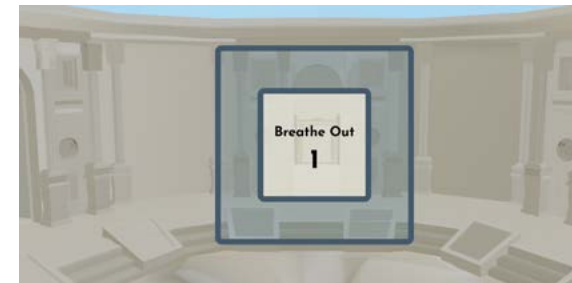
## Seagulls

*Ambient Background Effect*

- > Gentle cawing of seagulls

# MECHANICS

- > Calm sounds (Level manager)
- > Box Breathing UI (Square)
  - > Picture Examples (*to be finalized and replaced*)



- > Box Breathing Audio ("Breathe In [4 seconds], Hold [4s], Breathe Out [4s] & Hold [4s]")
  - > Link for following video  
Conscious Works. (2020, July 13). Box Breathing - 1 minute in length [Video]. YouTube. <https://www.youtube.com/watch?v=n6RbW2LtdFs>
  - > Information on Box Breathing  
Gotter, A. (2020, June 17). Box Breathing. Healthline. <https://www.healthline.com/health/box-breathing>

# TECHNICAL DESIGN

## Technical Requirements:

Unity Version: 2021.3.8f1  
 VR Headset: Oculus Quest 2 (Tethered Headset)  
 Physical Requirements: A VR-ready computer

**TDD**

**Github Repository**

## CONTROLLER BUTTONS

- > Joysticks
  - > (Moves the player forward in the direction they are facing),
  - > (Moves the player right in the direction they are facing),
  - > (Moves the player backwards in the opposite direction they are facing),
  - > (Moves the player left in the direction they are facing)
- > A Button (Close pop-up window)
- > B Button (Go to coping room)
- > Trigger (Both) (Allows you to grab anything you want, doors & items)
- > Other O/blank button (Is menu button for in-game)



\* ALL UI IMAGES ARE TO BE FINALIZED AND REPLACED

# SYSTEMS

**Game Manager:**

Controls many of the general game and level features. I.E. What scene is currently active, if it should change, etc. This manager will interact with the doors/paintings and the coping room button to change the scene to the corresponding scenes

**Level Manager:**

Controls some scene specific things like where to spawn the player, what scene number leads to the coping room and any necessary timers.

**Event Manager:**

Will control certain events that occur during the rooms so that there isn't as many back and forth calling of the objects.

**Player Controller:**

Character and camera movement script that allows for a first person controller view of the project and to play through the project in this first person mode. Includes a first person grabbing script that will pick up certain items.

**Triggers:**

Various box colliders that when the player collides with them will activate their respective features. For example the audio trigger will activate some set of sounds or the post processing trigger will create a certain visual effect on the player's camera.

# USER INTERFACE (UI)

**Interactables:**

Interactable objects within the VR spaces will be highlighted with a blue glowing aura to signify that it is more than just decorative. To interact with objects, the visitor can click any of the trigger buttons on the controller.

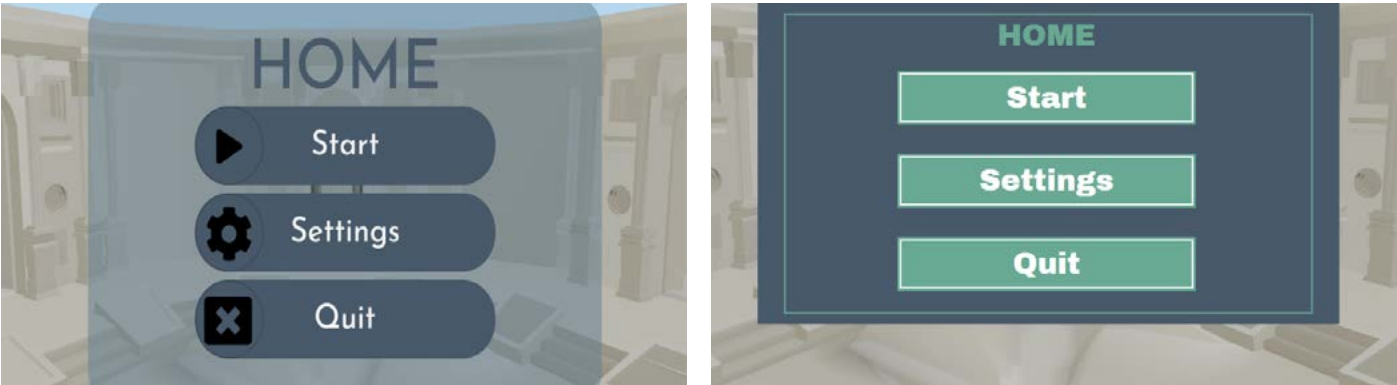
**UI Art Style:**

UI screens will be modern minimalistic, up to date with the current trends with curved edges, smooth colours and textures, nothing too overwhelming or complicated. UI screen should be as unobtrusive as possible to not distract too far away from the 3D environments.  
Colour scheme --> Light, soft, blues and white backgrounds, black accents/text

**Main Menu:**

This menu is meant to be the starting menu where the visitor starts the project and has a few options:

- > Start; Goes to the atrium and starts the project
- > Settings; Let's the player change some settings (i.e. Audio, sensitivity, etc.)
- > Quit; Quits the project and returns to desktop
- > Choose system; Allows the user to choose between Keyboard/Mouse or VR and will create the corresponding player controller accordingly.



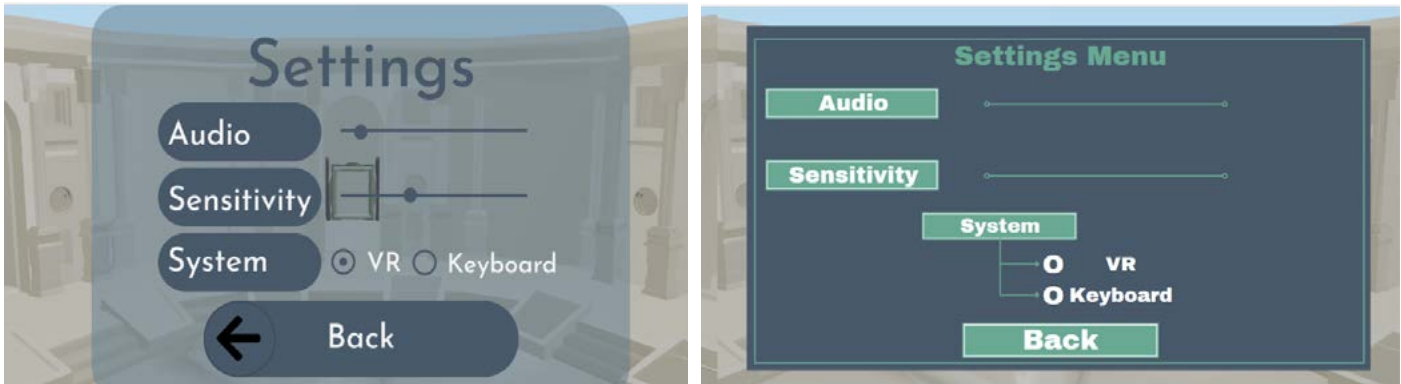
\* ALL UI IMAGES ARE TO BE FINALIZED AND REPLACED



**Settings Menu:**

The setting menu is meant to allow the user to relatively easily change certain settings:

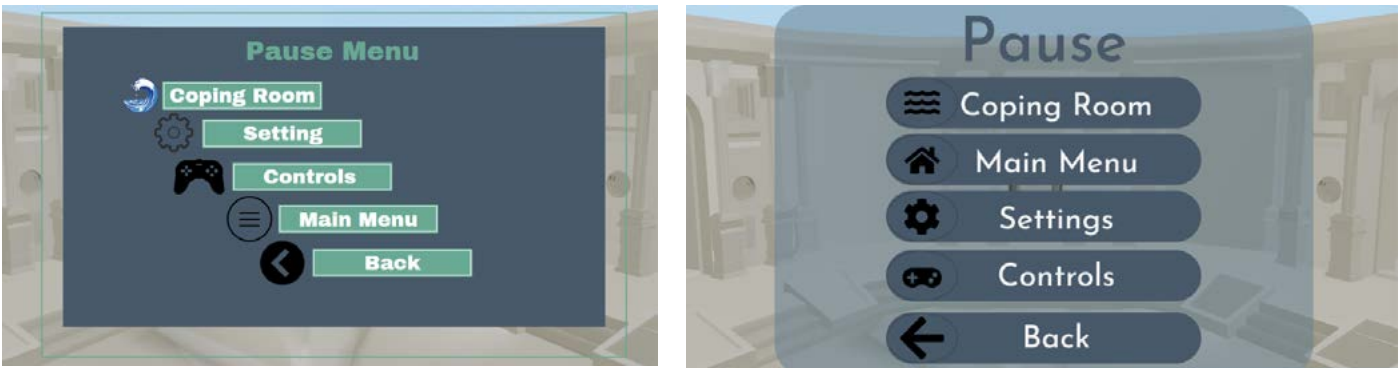
- > Audio; 0-100 for audio intensity and will increase/decrease how loud audio will play
- > Sensitivity; Affects the player's sensitivity if they are playing on a keyboard/mouse
- > Go Back; Returns to the main menu or the pause menu.



**Pause Menu:**

The UI will appear when the player pauses the project when in the atrium or any of the rooms:

- > Go to the coping room; Will send the user to the coping room in case they do not remember the button to go to the coping room.
- > Settings; Opens the settings menu.
- > Controls; Opens the menu that shows all the controls that the user can use. This is for when people might not remember all the buttons when playing with Keyboard/Mouse or VR.
- > Go to the main menu; Return to the main menu.
- > Go back; Returns to the project.



\* ALL UI IMAGES ARE TO BE FINALIZED AND REPLACED

**Instructions UI:**

A simple text that will appear on the upper middle of the screen and will have some instructions for the user so that they know what they need to be working on. It will appear for around 30-45 seconds to give the user time to read it:

- > Ok; A button to close the UI.

**Intrusive UI:**

This is the UI that is meant to appear in rooms like OCD to distract the user while they are trying to complete other things.

- > Ok; A button to close the UI.

# Resources

APA. (2020, June). PTSD Treatments. <https://www.apa.org/ptsd-guide-line/treatments>

Art Therapy Resources. (n.d). Case Study: Art Therapy for a Client with Dissociation Issues. <https://arttherapyresources.com.au/dissociation/>

Aspen Service Dogs. (n.d). PTSD Service Dogs. <https://aspenservicedogs.com/ptsd-service-dogs/>

Barnhill, J. W. (2014). DSM-5 clinical cases (J. W. Barnhill, Ed.). American Psychiatric Publishing.

CAMH. (n.d). Electroconvulsive therapy (ECT). <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/electroconvulsive-therapy>

CAMH. (n.d.). Panic Disorder. <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/panic-disorder>

Cleveland Clinic. (2020, October 15). Depersonalization/Derealization Disorder. <https://my.clevelandclinic.org/health/diseases/9791-depersonalizationderealization-disorder>

Cohut, M. (2017, October 20). Five ways to cope with PTSD. Medical-NewsToday. <https://www.medicalnewstoday.com/articles/319824>

Declutter The Mind. (n.d). Guided Meditation for PTSD. <https://declutterthemind.com/guided-meditation/ptsd/>

Diagnostic and statistical manual of mental disorders : DSM-5. (5th ed.). (2013). American Psychiatric Association.

Family Psych. (2017, July 10). 7 Strategies to Cope With OCD. <https://familypsychnj.com/2017/07/7-strategies-cope-ocd/>

Fong, R. (2021, April 28). Deep Pressure Therapy (DPT). <https://www.servicedogtrainingschool.org/blog/deep-pressure-therapy>

Heilemann, F., Zimmermann, G., & Münster, P. (2021). Accessibility Guidelines for VR Games - A Comparison and Synthesis of a Comprehensive Set. *Frontiers in Virtual Reality*, 2. 2673-4192. 10.3389/frvir.2021.697504

IOCDF. (n.d). <https://iocdf.org/>

Mayo Clinic. (2017, May 16). Depersonalization-derealization disorder. <https://www.mayoclinic.org/diseases-conditions/depersonalization-derealization-disorder/symptoms-causes/syc-20352911#:~:text=Depersonalization%2Dderealization%20disorder%20occurs%20when,%20real%2C%20or%20both>

Mayo Clinic. (2018, May 4). Panic attacks and panic disorder. <https://www.mayoclinic.org/diseases-conditions/panic-attacks/symptoms-causes/syc-20376021>

Mayo Clinic. (2018, July 6). Post-traumatic stress disorder (PTSD). <https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967>

Mike the Nerd Therapist. (2021, April 14). Trauma informed roleplaying games. Counselling with Mike. <https://counsellingwithmike.com.au/2021/04/14/trauma-informed-roleplaying-games/>

NAMI. (n.d). Home. <https://nami.org/home>

Nestler, A. (2022, Oct 12). Five Schizophrenia Coping Skills I Can't Live Without. NAMI. <https://www.nami.org/Blogs/NAMI-Blog/October-2022/Five-Schizophrenia-Coping-Skills-I-Can-t-Live-Without>

NHS. (2022, May 13). Complex PTSD - Post-traumatic stress disorder. <https://www.nhs.uk/mental-health/conditions/post-traumatic-stress-disorder-ptsd/complex/>

NIH. (n.d). Obsessive-Compulsive Disorder. <https://www.nimh.nih.gov/health/topics/obsessive-compulsive-disorder-ocd>

Raypole, C. (2019, February 1). Understanding Depersonalization and Derealization Disorder. Healthline. <https://www.healthline.com/health/depersonalization-disorder>

RNAO. (n.d). Trauma-Informed Care Teaching activities and resources. <https://mharesource.rnao.ca/section-five/trauma-informed-care-teaching-activities-and-resources>

Robinson, D. & Raypole, C. (2021, December 22). Everything You Need to Know About Obsessive-Compulsive Disorder. Healthline. <https://www.healthline.com/health/ocd/social-signs>

Sherman Counseling. (n.d). How to Ground Yourself during an Anxiety Attack | Anxiety Treatment Wisconsin. <https://www.shermanconsulting.net/2018/06/05/grounding-methods-anxiety-attacks/>

US Service Animals. (n.d). Psychiatric Service Dogs | What They Do & How They Help. <https://usserviceanimals.org/blog/psychiatric-service-dogs/>