

Table of Contents

1 Chapter: Introduction.....	4
1.1 Chapter: Pitch	4
1.2 Chapter: Description.....	4
2 Chapter: Summary	5
2.1 Chapter: Genre	5
2.2 Chapter: Target Audience	5
2.3 Chapter: Target Context.....	5
2.4 Chapter: Design Pillars.....	5
2.5 Chapter: Features.....	5
2.6 Chapter: Minimum Viable Product	5
2.7 Chapter: Stretch Goals.....	6
3 Chapter: Character.....	6
3.1 Character: Hands.....	6
4 Chapter: Controller	7
5 Chapter: VR Gameplay	7
5.1 Mechanic: The core 'VR' gameplay Mechanic.....	8
5.1.1 Mechanic: Rules	8
5.1.2 Mechanic: Grabbing.....	8
5.1.3 Mechanic: Movement.....	10
5.1.4 Mechanic: Punishments.....	10
5.1.5 Mechanic: Score System.....	10
5.2 Mechanic: Shrinking	11
5.3 Mechanic: Combining Items	11
5.4 Mechanic: Items as triggers	11
5.5 Mechanic: Matchbox.....	11
5.6 Mechanic: Catapult.....	11
5.7 Mechanic: Cleaning dirt.....	11
5.8 Mechanic: Pinpad	12
5.9 Mechanic: Valves.....	12
5.10 Mechanic: Looking through a telescope	12
5.11 Mechanic: Attaching Items	12
5.12 Mechanic: Cauldron & Recipes.....	12
5.13 Mechanic: Cutting Rope	12

5.14 Mechanic: Shaking & Aiming at self.....	12
6 Chapter: IRL Gameplay.....	13
6.1 Mechanic: The core 'IRL' Gameplay	13
6.1.1 Mechanic: The 'Manuals'	13
6.2 Mechanic: Manual Indicators.....	15
6.3 Mechanic: Page Indicators	16
6.4 Mechanic: Manual Visuals.....	17
7 Chapter: Types of Objects	18
7.1 Chapter: Stationary/Fixed Objects	18
7.2 Chapter: Pickup Objects.....	18
8 Chapter: Gameflow	19
9 Chapter: Camera	20
9.1 Chapter: Walking	20
9.2 Chapter: Scene Switching	20
9.3 Chapter: Head Tracking	20
9.4 Chapter: Stable Camera.....	20
10 Chapter: Player Feedback	21
11 Chapter: Environment	21
11.1 World: Narrative.....	21
11.2 World: Description of the world and characters	21
11.3 World: Mood and Setting.....	23
12 Chapter: Levels	24
12.1 Level: Composition of a playable level	24
12.2 Level: 00 "Waiting Room - Wizard's Tower"	25
12.2.1 Object: Structures of level	25
12.2.2 Scene Dressing.....	26
12.3 Level: 01 "The Workbench"	27
12.3.1 Puzzle Items.....	27
12.3.2 Object: Scene dressing.....	30
12.4 Level: 02 "Ratatouille"	31
12.4.1 Puzzle Items.....	32
12.4.2 Object: Scene dressing.....	33
12.5 Level: 03 "Astrology"	34
12.5.1 Level: Puzzle Items.....	34
12.5.2 Object: Scene dressing.....	37

12.6 Level: 04 "Ecosystem"	37
12.6.1 Puzzle Items.....	38
12.7 Level: 05 "The closet"	41
12.7.1 Puzzle Items.....	41
12.7.2 Scene Dressing.....	42
13 Chapter: GUI	43
13.1 Menu: Main menu	43
13.2 Menu: Pause screen.....	43
14 Chapter: RFX.....	44
14.1 Object: Esthetic Particles	44
14.2 Object: Unshrink spell.....	44
14.3 Object: Action affirmation	44
14.4 Object: Stars Particles	45
14.5 Object: Explosion.....	45
14.6 Object: Dust Particle.....	45

1 Chapter: Introduction



TECH4FUN.BE

TEAMBUILDINGS - EVENTS - WORKSHOPS

1.1 Chapter: Pitch

SHRINKABOOM, You've been shrunk by the clueless assistant you've hired! Thankfully, you are surrounded by fellow wizards and you can (hopefully) escape this fate! Being small might seem scary, but lucky for you, the levels are scattered with littered magical item remnants. Work together with your wizard friends to use these items to break the spell of the shrinkening!

1.2 Chapter: Description

Honey, I shrunk my boss is A VR escape room game where your goal is to return to your original height after you shrunk down to a tiny size! Play together with up to 5 people and try to solve the puzzles together.

One player enters the virtual world and shrinks down to a small size. There they will find things they can interact and play with.

The players that are surrounding the player in VR will each observe their own unique wizard manuals which will contain tips on how to help the wizard to grow back to his regular size however, one manual won't suffice! The players will have to work together if they want to solve these puzzles!

2 Chapter: Summary

2.1 Chapter: Genre

Puzzle Escape

2.2 Chapter: Target Audience

Companies (all kinds).

Age range: 18-65.

2.3 Chapter: Target Context

The game is to be used during teambuildings. Meaning they give a plenary explanation to e.g. 30 people how the game works and how to operate the device, then they split up. Each team at their own setup starts the challenge, trying to finish as soon as possible or to get as far as possible to win this competition.

2.4 Chapter: Design Pillars

1. If something looks interactive, it has to be interactive.
2. Difficulty curve is flatlined.
3. Puzzle goal must be obvious from the start
4. Mechanics must feel 'right', organic and logical

2.5 Chapter: Features

The game:

- Contains 5 unique puzzles that require teamplay to work
- Is perfect to be played with up to 5 Players
- Is very enjoyable in VR and IRL
- Is an entertaining Experience for all ages
- Is an excellent choice for a teambuilding experience

2.6 Chapter: Minimum Viable Product

Our MVP will be a VR Puzzle Escape Room game with 6 Levels meant to be used in a teambuilding environment.

The levels will consist of:

- 1 'Waiting room' where the players will wait in between each level
- 5 Levels that contain the puzzles

Every level will include a puzzle that includes at least 4 steps which will go in the manuals.

- 4 'Manuals' with solutions to the 5 levels

2.7 Chapter: Stretch Goals

- Difficulty system in the manuals for different types of crowds.
- Include a Rude Goldberg machine in one of the levels.
- Add extra steps to the Puzzles

3 Chapter: Character

Since the game is a first person VR game, the only thing you will see is hands. There won't be reflections to look at so there won't be a player model however, we will be showing the hands.

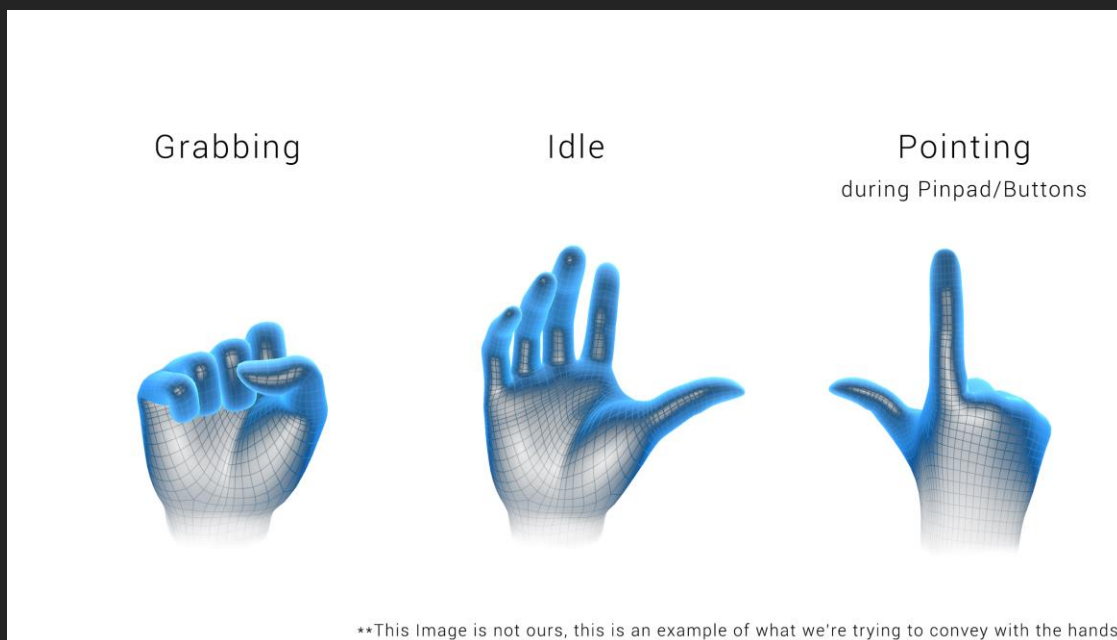
3.1 Character: Hands

The hands will rotate based on the angle that the player is holding the controller.

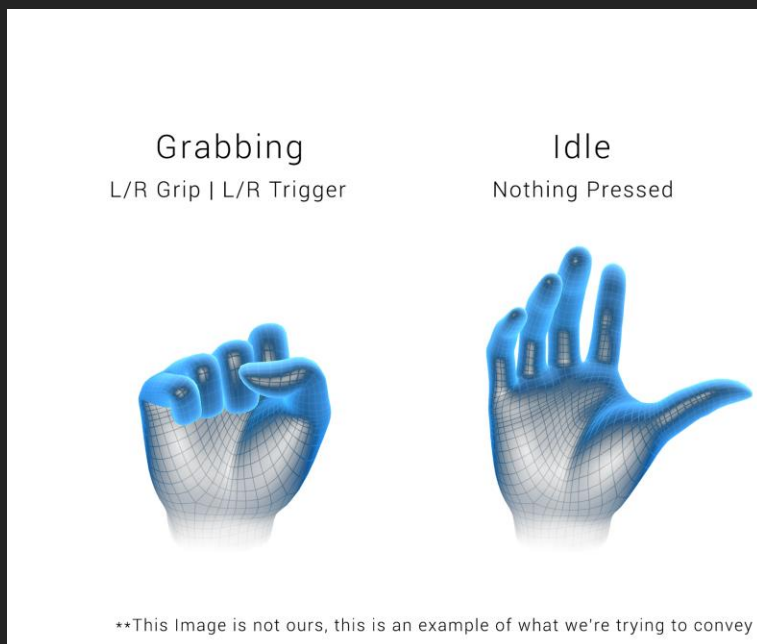
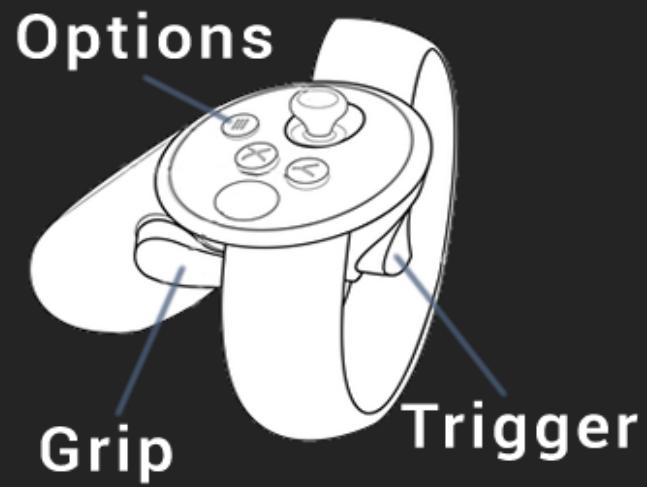
Idle: Default animation state of the hands.

Grab: Closed fist to hold something.

Pointing: pointing with your finger for pin-pads, buttons, etc that would feel natural to stick your finger out for.



4 Chapter: Controller



Controls

IRL Movement = tracked 3D
Movement

L/R Grip and L/R Trigger = Grab

Options (hold 5 sec) = Pause Menu

5 Chapter: VR Gameplay

5.1 Mechanic: The core 'VR' gameplay Mechanic

Since this is a game targeting an older demographic which is not in touch with either gaming or VR, I will be designing the game in a straightforward way by having the main mechanic be grabbing since this feels like a natural thing to do with these controllers. So the players can quickly adapt to the controls since they only have a short amount of time in these sessions.

5.1.1 Mechanic: Rules

- Can only walk in a 3x3m grid, gameplay elements must be close by
- Mechanics must feel natural and logical for how it would feel IRL
- Mechanics must be learned naturally without any tutorials
- Punishments must be mild

5.1.2 Mechanic: Grabbing

The only 'physical' control that the players have is picking objects up, there will be a visual indication so you can see what you can pick up. We're making both Trigger and Grip be grab so the mechanic comes natural and they don't have to think much about it.

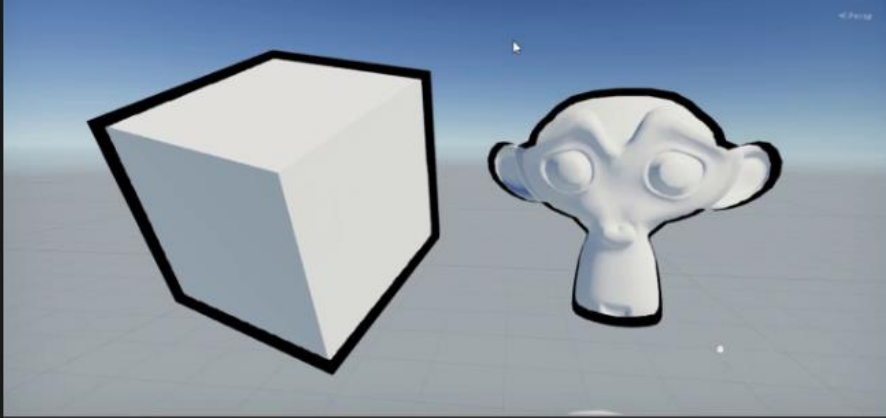
Visual Indication of Picking up

- A outline around items that you can put in your hands

Interactable World

To provide more of an experience instead of a game, the levels will be filled with fun interactable objects, both useful and useless such as:

- Useful and Useless Buttons
- Throwable Objects
- Bouncy Objects
- Spinnable Valves
- Sticking objects inside one another/throwing objects inside of other objects



**This Image is not ours, this is an example of what we're trying to convey with a shader outline

5.1.3 Mechanic: Movement

Player can walk around as long as they are within the bounds (3 by 3 meters). The position of their head will be tracked so they can look around, hunch forward, jump.

The players will also be bound by the guardian, when they get too close to the border of the bounding space, the guardian will start working and show them the invisible forcefield around them.



5.1.4 Mechanic: Punishments

When players do something wrong in the game like putting the wrong object into a puzzle component we will soft punish the player by:

- Resetting their puzzle to a previous stage
- Exploding the item in their hand (so they have to craft it again)

5.1.5 Mechanic: Score System

In order to drive a competitive spirit in the multiple teams playing the game, we will be adding a score system. Our client has specifically requested from us to add in a timer that runs starting when the puzzle begins till the end and to AVOID a decreasing timer as this has proven to be problematic for them.

When the player has effectively been shrunk and entered the small level, the timer will START till the end of the puzzle. The time won't be focused on for the players as this is mainly for the clients.

The client wanted to be able to manipulate these values to some degree so we are going to keep the scores but keep them low-key and will be shown intermezzo screen between levels.

5.2 Mechanic: Shrinking

At the start of the game the player will shrink and particles will play around him.

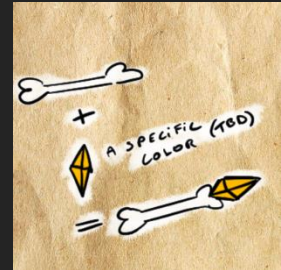
The player size will decrease after he does an action that starts a level, for example:

eg: Ripping a page out of a book

5.3 Mechanic: Combining Items

Combining in Hand:

Players can pick up objects that can interact with each other. If they have two items that belong together they can combine them for example.



5.4 Mechanic: Items as triggers

Using Items as Triggers:

Players can have something in their hands and trigger events such as swiping a match on a matchbox causing the match to go on fire or using a pen on a contract so it signs.



5.5 Mechanic: Matchbox

The player will be able to light a match by striking it against a matchbox. This will cause the match to light on fire.

5.6 Mechanic: Catapult

The player will be able to press a button that activates a catapult that can launch items.

5.7 Mechanic: Cleaning dirt

Being able to clean a dirty spot on a surface with a brush revealing the clean area underneath it.

When you clean the area, you will unlock the next stage of the level.

5.8 Mechanic: Pin pad

Numerical pinpad that needs 4 correct numbers that sends out a message to an object in order to trigger something.

1 2 3
4 5 6
7 8 9

with a confirm button to check if the combination is correct.

and a delete button to delete numbers from the pinpad.

5.9 Mechanic: Valves

Players can turn a valve with their hands. The rotation will be kept in float and in radians so that we can use this value to rotate another object in the level.

5.10 Mechanic: Looking through a telescope

There will be a big telescope in the astrology level, when you peek your head through the eyepiece you will see an image (space with stars aligned in it)

You need to physically put your head inside the collider before you can see this image.

5.11 Mechanic: Attaching Items

Being able to attach object to places in the world where an object is missing eg: A valve on a pipe that is blowing steam out, put the valve on that pipe so you can rotate it.

5.12 Mechanic: Cauldron & Recipes

- 1) A big cauldron where you can throw items inside of and the items will de-spawn.
- 2) The cauldron will keep track of what was thrown inside of it and when its the correct combination it will send a message to the game to grow the player.

5.13 Mechanic: Cutting Rope

A rope that you can cut with a knife item, doing this action will result in a pulley dropping a box causing the box to break and fall

5.14 Mechanic: Shaking & Aiming at self

Shaking an object vigorously inside of your hand and then pointing it at yourself will send a message the game which will trigger growing yourself

6 Chapter: IRL Gameplay

The players in the real world (IRL) will be handed booklets which they will be helping the player with. In HISMB I've decided to make these booklets the Notebook/Scrapbook of the wizard. The players will have to look inside the scrapbook to aid the player in their puzzles.

I want to make sure the players will know where they have to look at by adding focal points and clues inside of the manuals, pointing them towards the correct solutions.

The main goal will be to make the players feel useful to the person in VR, but that they still have fun looking in the manual so it would have to be visually pleasing to the eye.

6.1 Mechanic: The core 'IRL' Gameplay

Since our game will be played by people both in VR and IRL, in this section we will go over the IRL Gameplay.

We want to make sure the players are co-operating and will work together to help each others.

The manuals: in our game the IRL players will be using the manuals to aid the player inside of VR. They are the ones who hold the key clues to solve the puzzles in a proactive way.

6.1.1 Mechanic: The 'Manuals'

The manuals are physical documents that will be handed out to the four players not inside of VR. Players any random manual in any order and will be able to help the player inside VR.

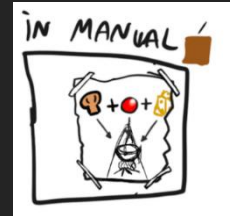
The manuals will contain clue's and directions towards beating the puzzle but it will also be visually pleasing and fun to look at and will be able to distract the players for a bit whilst the person in VR figures everything out. The manual will work much like a wizard's **Scrap Book** or like a wizard's notebook. With it having random doodles and articles inside of it next to the actual clues. The manual will also include eye catching or 'clickbait' thumbnails and focal points to look at so that its more obvious where the player will have to look at.

As you read above, the manual will act as a notebook/scrap book so that means there will be a lot of images, doodles, articles, random 'unreadable' text, findings and more. To really immerse the players outside and make them feel like fully fletched wizards, aiding their comrade in need.

There are different types of Puzzle types that we are going to use and I will go over them in the following chapters:

6.1.1.1 Mechanic: Recipes

There will be recipes in the Manual which will help the player figure out how to solve a cooking level



6.1.1.2 Mechanic: Hints

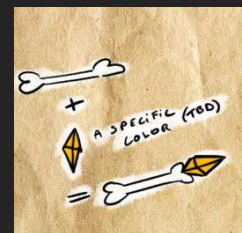
The manual will provide hints on what the player has to do with key focus points for the player to look for.

Finding the correct Statue out of a bunch of statues



6.1.1.3 Mechanic: Combinations

Having to find the correct combination in a page full of spells, there can also be some useless combinations in there that won't work but will be used as filler in the page so they search for the correct ones (the right one will be highlighted and will catch the eyes easier)



6.1.1.4 Mechanic: Instructions

The manuals will also provide instructions on how certain items work so the players in VR can be reminded of stuff that seems obvious when you think about it.



6.2 Mechanic: Manual Indicators

In order to make it more clear where the players will have to look at in the individual manual pages, We will add multiple visual indicators/clues as a tool to help those who need it.

Visually, adding multiple indicators like:

- symbols
- comic book text bubbles
- highlighting of text or images
- underlining items.
- italic text
- colors pointing that direction
- arrows

Anything that would be used to highlight important or point out important sections of a book will be used here **Exclusively** for the hints.

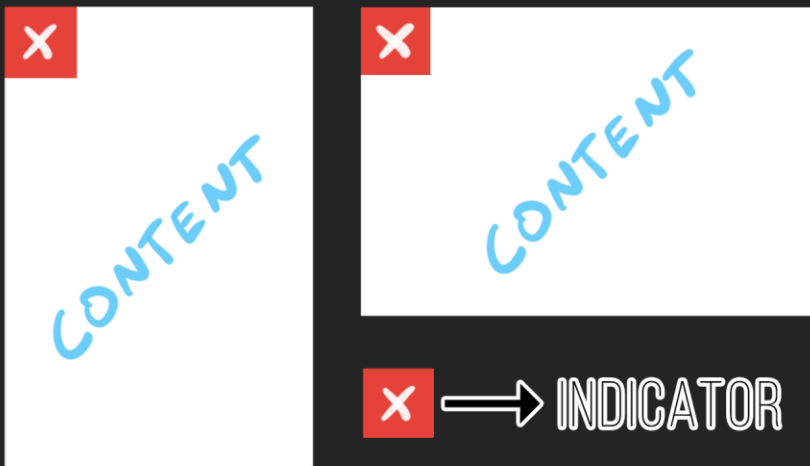
6.3 Mechanic: Page Indicators

When players are playing the game, we want them to be able to find the correct page in the fastest way possible and to reach this we will add visual Indicators at the **Top Left** part of the page.

In Belgium and Europe, we are sinistrodextral which means we read and write from left to right. That's why we will be placing the indicators there, to gain maximum attention.

These visual indicators will be the main focal point in the VR Level connecting both VR and IRL together in the manuals and to give an immersive experience.

PAGE ORIENTATIONS



6.4 Mechanic: Manual Visuals

For the Manual visuals, we will be using a parchment paper aesthetic as the background the text will be stylized and the Manual will have a cartoony vibe. There will be cute doodles on them in a 'chibi' style, cartoon and comic indicators



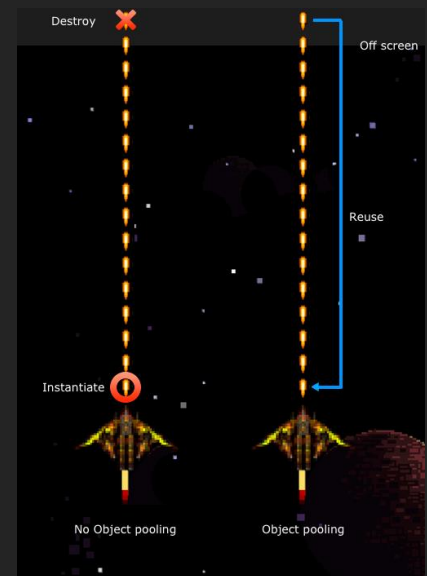
7 Chapter: Types of Objects

Throughout the game there will be many interactable objects, both stationary/fixed in the world and items that you can pick up.

To prevent the levels being unplayable by the color blind, we will also avoid using colors in a prominent way and instead use shapes for this task instead.

Based on our Design Pillar, If it looks interactable **It should be interactable**

When the items get further than 3 meters (boundary box) then they will respawn in their respective positions. We will also be using object pooling for when we are using a bunch of the same item to increase performance.



7.1 Chapter: Stationary/Fixed Objects

These objects are present in the world but won't be able to be picked up by the player. The player can touch them, push them or interact with them.

Interactable Objects Types

- Buttons/Valves and switches
- Objects too heavy to grab but can be pushed/will bounce (statues, dead mouse, etc...)

In the VR Gameplay Section I go more in detail about how you can use Objects in the world as triggers for gameplay elements as well in short, in some levels you will be able to stick objects from your hand in the static objects and they will cause something to happen like getting to the next step in the puzzle or something opening in the world.

7.2 Chapter: Pickup Objects

These objects are scattered throughout the maps and can be freely picked up and thrown.

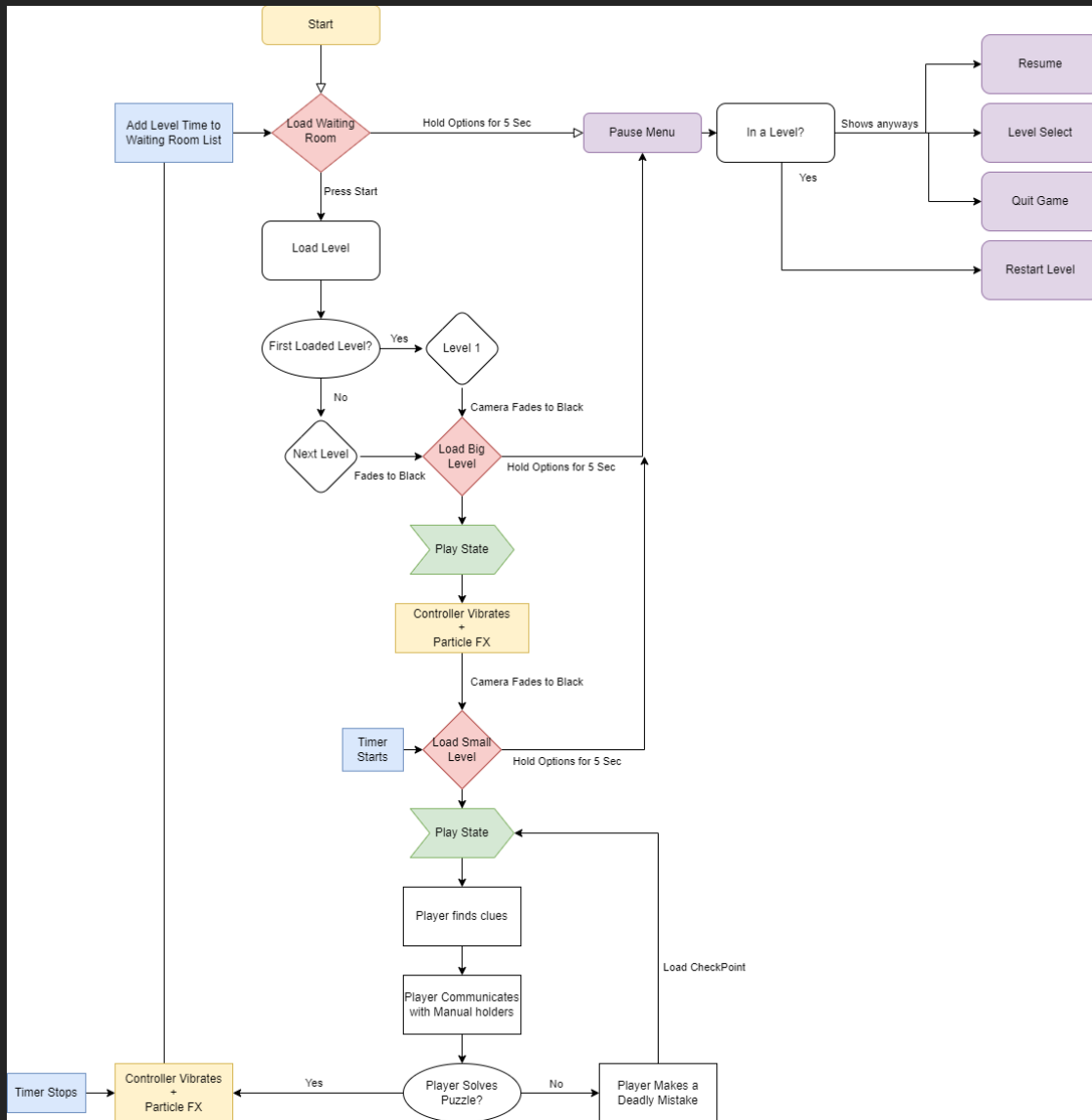
Differences in Objects

- Bounciness
- Weight
- Different SFX and Particles for objects using Unity's Scriptable Objects

Some of these items will also be using Object pooling for when we have a bunch of them eg: lots of cheese behind a door, a box full of mushrooms, a bowl of marbles, etc...

8 Chapter: Gameflow

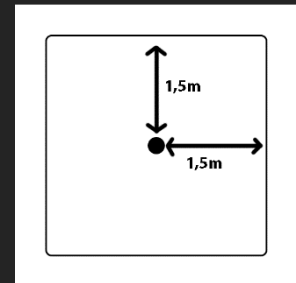
In Depth Gameflow:



9 Chapter: Camera

9.1 Chapter: Walking

The camera is situated on the players head and is 1:1 to the players movement IRL. This means that wherever the player walks, the camera will follow. The player will be able to move 1,5 meter in each direction.



9.2 Chapter: Scene Switching

The camera fades to black and fades back when the level is loaded.

9.3 Chapter: Head Tracking

The camera will track the head of the player, the direction he is looking and the height he is at. The camera will follow the rotation and position of the players head throughout the game.



9.4 Chapter: Stable Camera

Because this is VR, we cannot add anything to the camera for the safety of the player.

We will avoid:

1. Camera Shake.
2. No fast moving, rapid tilting, spinning or flipping objects.
3. We will be aiming for a stable and consistent framerate of 72.
4. No motion blur.
5. Effects on the camera will be minimal if not non-existent.

10 Chapter: Player Feedback

- Particle FX:

We will be adding small particle FX to certain objects such as Sparks and Stars when you solved something in a puzzle or combined an item correctly.

Throwing something in a liquid will also show a particle effect to give feedback indicating if it was the right ingredient or the wrong ingredient.

- Haptic Feedback:

When the player combines something in their hands or they hold something that vibrates, we will add haptic feedback to the controllers.

When the players Combine two items to craft something haptic feedback will be used as a fun extra, indicating that they did something correct

Shaking the magic wand: In one of the Puzzles you need to shake the magic wand and when you shake it, there will be haptic feedback present.

- Sound FX:

Appropriate sound effects for objects that can be picked up or when you successfully complete a puzzle part.

- Pickupable Outline

When players put their hands close to an interact with an object there will be an outline around the object to indicate that this object can be picked up.

11 Chapter: Environment

11.1 World: Narrative

You are an experienced wizard and you have decided to hire an assistant! Too bad this assistant is a complete mess and keeps shrinking you by accident, you only pay him in crystals so I guess this balances things out?

11.2 World: Description of the world and characters

It's a fantasy world with magic and more. The game takes place inside the messy tower of a wizard king. The tower is quite small and has only one room that the player will visit. In this room all playable areas are visible.

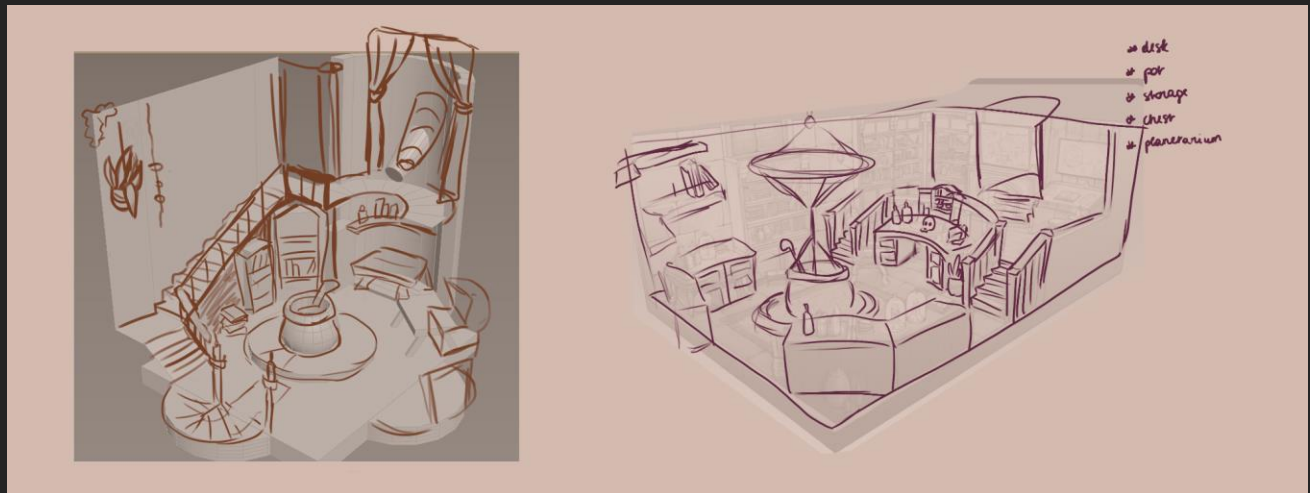
The playable areas are:

- the wizards work bench
- a cauldron with a shelf above it
- an Astrology station
- an ecosystem in a bottle



- the inside of a shelf/closet

Some reference of what the room could look like:



Apart from these areas a lot of set dressing props will be added to make the room feel like a home - like it's being lived in. In general, the wizard is quite messy and a bit of a hoarder. This needs to be reflected in the room with the set dressing:

- Additional furniture like bookcases, shelves, stools,...
- Lots of books (messily) stacked on top of each other and littered around
- Lots of candles
- Lots of potion bottles, some fallen over
- Carpets and drapes, some with holes
- Frames - some hanging diagonally to emphasize the messiness of the wizard
- Lots of modelled plants
- ...



Examples:



This main room will be composed of 70% modular assets and 30% unique assets that can be copied around to fill the room.



11.3 World: Mood and Setting

As opposed to the "cliché" dark and mysterious atmosphere usually associated with wizard environments, this game's environment will be a lot brighter and warmer. This is because the game needs to have a happy and upbeat mood to it.

The wizards tower is located on a calm mountaintop. The game takes place during the day. This means warm soft sunlight will come in through the windows and light up the environment pretty well. There's warm candle lights and lanterns as well. While the structures in the room are relatively cold (stone floor, wall plaster,...) the area livens up with the wooden props. The place is very chill and has a relaxing vibe. It needs to feel pleasant to look at and be in.

Example of good mood & lighting:



12 Chapter: Levels

In this chapter we will go over the levels, there will be a total of 5 playable levels and 1 stage select 'Waiting Room'

Explain wizard tower and workflow to make it

12.1 Level: Composition of a playable level

In theory, there is one level (the inside of the wizard's tower) in which all playable areas have their own spot. However, in practice each playable level will have its own scene in Unity.

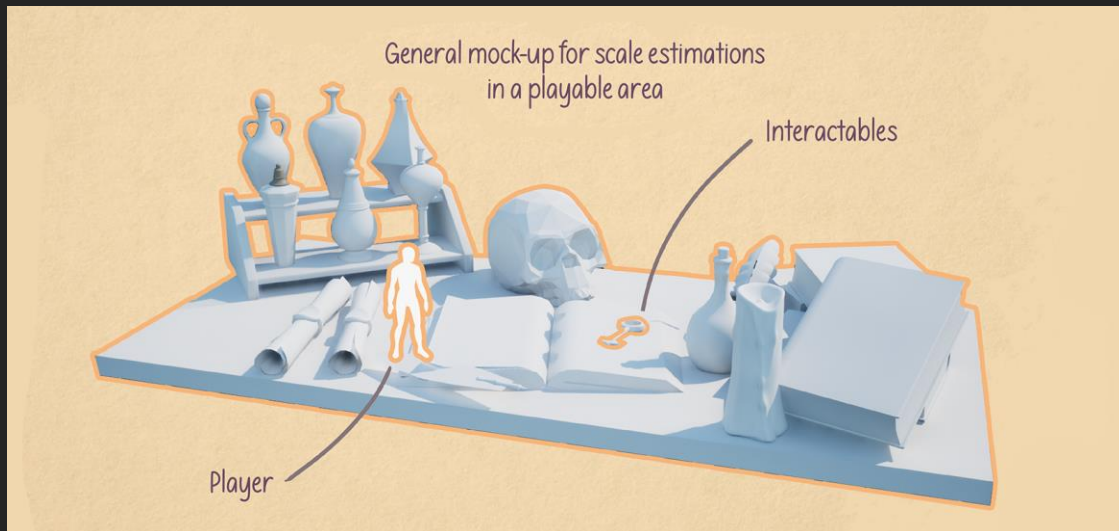
This means there will be 6 scenes in Unity:

- General level: The full wizard environment, the interior of the tower in which glimpses of each playable level is visible (e.g. the workbench, closet,... will all be visible in the room)
- Playable level: The workbench scene
- Playable level: Ratatouille scene
- Playable level: Astrology scene
- Playable level: Ecosystem scene
- Playable level: Closet scene

While the environment of the general level (the wizard tower) will be made in a conventional way, the environments of the playable levels will be approached differently.



A 360 render is taken of the wizard tower and baked down onto a sphere (like an HDRI). This sphere encapsulates the playable area and resembles the environment of the level. This means the only geometry a playable level has is the playable area and some set dressing props to mask the transition between the 2D texture of the environment and the actual 3D objects.



Several aspects need to be taken into account when creating the playable area:

- Since the player is limited in movement, interactable objects need to be in close proximity.
- Interactable objects need to be around the size of a sword max so the player can easily grab it with one or both hands.

12.2 Level: 00 "Waiting Room - Wizard's Tower"

The waiting room will be inside the wizard tower with "Play" Button that players can press in order to easily start the game.

12.2.1 Object: Structures of level



12.2.2 Scene Dressing

12.2.2.1 Object: Small Props

The following small props will need to be made to set dress this level:

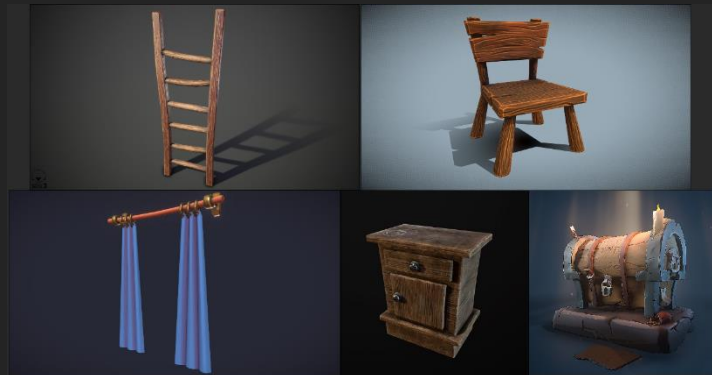
- Lanterns
- Scrolls
- Wizard hat
- Magical wand(s)



12.2.2.2 Object: Medium Props

The following small props will need to be made to set dress this level:

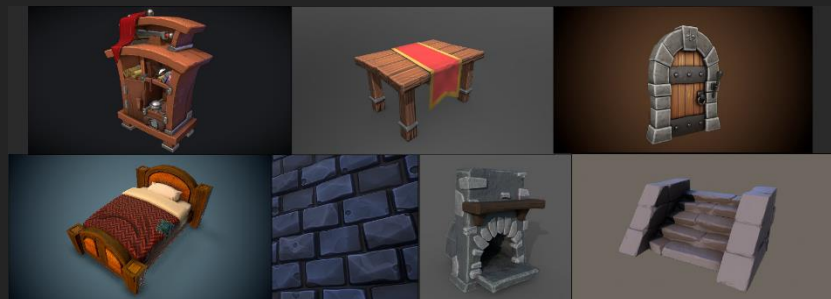
- Ladder
- Chairs
- Drapes
- Chests
- Nightstand



12.2.2.3 Object: Big Props

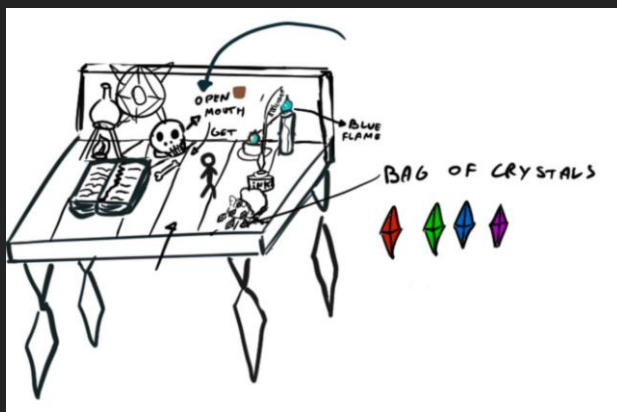
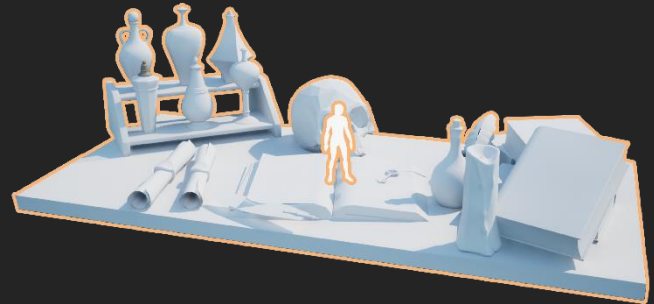
The following small props will need to be made to set dress this level:

- Closets
- Tables
- Bed
- Stone walls
- Chimney
- Doors
- Stairs



12.3 Level: 01 "The Workbench"

The player has been turned small by accident and has landed on his workbench. He must use the littered items on the table to create a wand and use this on himself. The table has a lot of random items on there that the player will use. There's bags of crystals, candles, paper, pens and other stuff that you can see on a table. Using these materials he can make a wand to turn himself back.



12.3.1 Puzzle Items

12.3.1.1 Object: Wand

The wand will be made from 2 components: The bone and the blue Crystal. The player will shake the wand and directed it on itself so they can grow again.



12.3.1.2 Object: Ink & pen/feather

The ink and feather will be used to sign the contract.



12.3.1.3 Object: Parchment paper

The contract needs to be signed in order to unlock the bone.



12.3.1.4 Object: Bone

The bone is the first component of the wand. You will get the bone out of the skull after signing the contract.



12.3.1.5 Object: Baggie of crystals

The crystals is the second component of the wand. They lie on the side of the desk.



12.3.1.6 Object: Skull

The skull will be will lie in front of the player. The jaw has to be separately, so we can animated it going open to get the bone.



12.3.1.7 Object: Candles

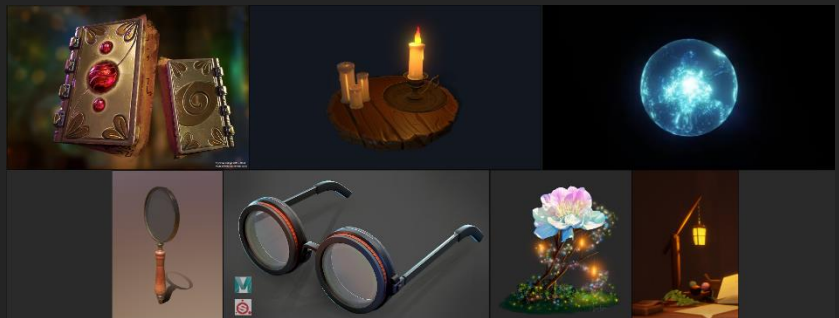
Required to turn your dummy wand into a useable wand



12.3.2 Object: Scene dressing

The following props will need to be made to set dress this level:

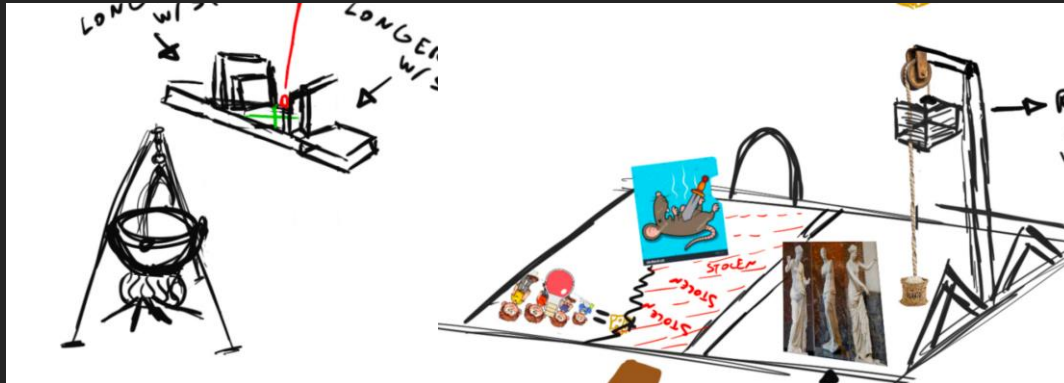
- The workbench
- Books
- Magnifying glass
- Wizard sphere
- Candles
- Pot with magic plant
- Hanging lamp
- Reading glasses



12.4 Level: 02 "Rattatouille"

The level is on top of a shelf above the cauldron, the player will spawn in facing the cauldron and it will draw a lot of attention. when they look around them they will see books and if they look under them they will see a hint of the level goal, growing yourself back to size by brewing a potion. There will also be a dead mouse with a knife in its chest and the mouse house behind him with rat traps around it. Another key component is statues, there will be one with a sword pedestal.

It's time to cook up a potion to grow yourself back to regular size!



12.4.1 Puzzle Items

12.4.1.1 Object: Wooden Box

A box containing magic mushrooms. Use the knife to set off trap so the box falls down.



12.4.1.2 Object: Philosophers' stone

Ingredient to throw in cauldron.



12.4.1.3 Object: Small Statue

If the statue receives the sword, it will reveal the philosophers' stone.



12.4.1.4 Object: Magic Mushroom

Magic mushrooms fall out of the box when it falls down



12.4.1.5 Object: Knife

Used to trigger the mouse trap, which makes the wooden box fall down.



12.4.1.6 Object: Cheese

Cheese fall out when player opens the door of the mouses' house.



12.4.2 Object: Scene dressing

The following small props will need to be made to set dress this level:

- Books
- Ladle
- Etc...



12.5 Level: 03 "Astrology"

In this level the player will be shrunk on a astrology table. The level will focus on the rotating the big metallic solar system next to the table so it is aligned towards him, growing him back to regular size using planetary magic. The level will include finding valves and spinning them, using paper magic that you need to clean first and a telescope where you can see inside of it.

Time to use the stars to your advantage!

12.5.1 Level: Puzzle Items

The following puzzle/interactable items will need to be made:

12.5.1.1 Object: Throwing targets

12.5.1.2 Object: Telescope

You have to remove a cap from the telescope and stick your head into it to look at the stars.



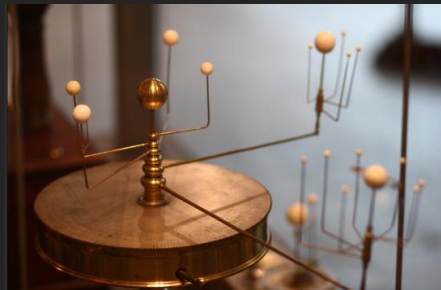
12.5.1.3 Object: Valves and pipes

Player can change the order of the solar system model by turning the valve.



12.5.1.4 Object: Solar system model

Player has to put the planets in correct order to progress through the level.



12.5.1.5 Object: Bowl with marbles

Box or box with marbles



12.5.1.6 Object: Paint brush

Paint brush



12.5.1.7 Object: Bucket

Bucket



12.5.1.8 Object: Dirty sheet of paper

Dirty sheet that can be cleaned, under it there is a magic sigil and it will spawn in magic which will cause an action to happen in the level.



12.5.2 Object: Scene dressing

12.6 Level: 04 "Ecosystem"

This level will be in a little ecosystem with lots of modelled fauna and flora. The player will have to use natural objects in the map around him to grow himself using plant magic.

The main components for the puzzle will be getting rid of vines obstructing your vision. In the area there are berry bushes with berries, a beautiful scenery with rocks and sticks around, a toy catapult made out of sticks rubber bands

The main focus points for puzzle elements will be:

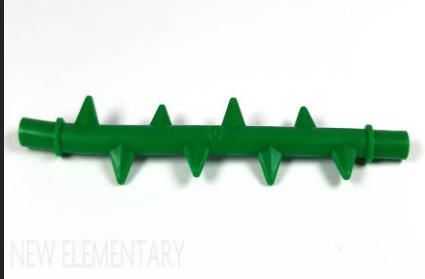
- Small rocks
- Small sticks
- Berries (multiple) & Berry Bush
- Catapult
- Vines
- Axe
- Growth Potion



12.6.1 Puzzle Items

12.6.1.1 Object: Vines

Vines like in mario that will be spikey and will be blocking the map



12.6.1.2 Object: Berry Bush

Berry bush where multiple berry types are growing



12.6.1.3 Object: Big leaves

Big overhanging leaves that hang over the player and can be cut



12.6.1.4 Object: Catapult

A toy catapult that can be used to throw stuff across big distances



12.6.1.5 Object: Tree trunk

A Tree/Plant Trunk in the map that will be the respawn location of the axe, once you have crafted it.



12.6.1.6 Object: Axe

A craftable axe that you can make by combining sticks and rocks from the floor



12.6.1.7 Object: Berries

Multiple Berry types based on colors and shapes, the most important one being BOOM Berries which will explode



12.6.1.8 Object: Sticks and Stones

Littered Sticks and stones on the floor in different corners of the playable area.



12.7 Level: 05 "The closet"

You begin the level inside of a closet. You can see through the cracks of the shelf and look outside to the map.

The main components for this puzzle will be a Vault with a pin pad, the eye of your assistant that you poke out which is looking inside of the vault.

The main focus points for puzzle elements will be:

- Eyeball that looks inside of the closet
- Match box
- Tooth Pick
- Pin pad
- Vault box (works as a treasure box)

12.7.1 Puzzle Items

12.7.1.1 Object: Vault/Lockbox

A vault that includes items, the vault is locked and can be unlocked by inputting the correct pinpad



12.7.1.2 Object: Toothpick

A very sharp tooth pick that you can use for poking



12.7.1.3 Object: Wizard eye

Wizard Eye looking around in the closet, you will have to prick his eye in order to progress in the puzzle



12.7.1.4 Object: pinpad

A 9 numerical pin pad where you can press all the individual buttons in order to press the correct 4 digit password. when its correct it will say CORRECT and unlock something in the world, when its incorrect it will display that as well



12.7.1.5 Object: Matchbox + Match

Matchbox with matches where you can take one out and strike a match on the side



12.7.2 Scene Dressing

The following small props will need to be made to set dress this level:

- Books
- Sheets of paper
- Spider web
- Pen

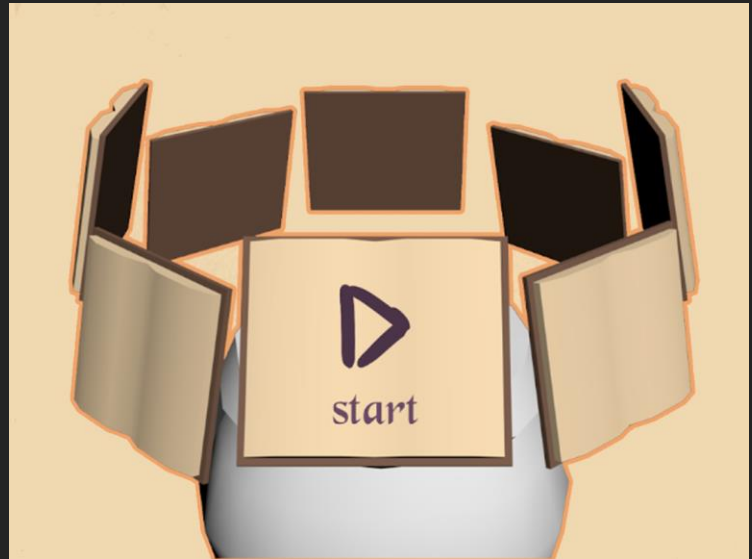
13 Chapter: GUI

13.1 Menu: Main menu

For the main menu the player is in the waiting room and is unshrunk/normal human size. As mentioned before, the waiting room is the inside of the wizard tower. This means the player can look around and see the interior of the wizard's room.

When the game is opened, the player stands in front of the cauldron in the tower. Books will be floating around the cauldron. The book in the middle will contain the "Start game" button. This is all the player will see.

There are other settings but these are only available to the staff and will only come up on the screen when the menu button is pressed (see "Pause Screen" section).



13.2 Menu: Pause screen

During a level, a pause screen is accessible through the menu button on the controller.

The pause screen is accessed only by the staff and is thus mainly used for troubleshooting when a player gets stuck. It's important for the staff to be able to quickly reset/restart a level, choose a different one or go back to the main menu.

This pause screen is partly 3D. When the menu button is pressed, a book/scroll (geo) spawns on one of the VR hands. On the book/scroll it will say:

- Resume
- Settings
- Menu
- Quit
- An option to select between levels



14 Chapter: RFX

- To avoid making the game feel static
- Particle effects are performant and simple.
- Stylized
- Bright colors to make it look happy
- Use diffuse textures as much as possible.

14.1 Object: Esthetic Particles

Particles that are always in a scene, that the player does not interact with.

- Fire particle for candles.
- Fire particle for fireplace and torches.
- Fire particle for lantern.



14.2 Object: Unshrink spell

When the player shrinks or grows, it will be made visible with a particle effect.

14.3 Object: Action affirmation

These are particles appearing to draw players' attention, like little stars appearing when the player has completed an objective?



14.4 Object: Stars Particles

This is used when we got a wand to create a magic mood.



14.5 Object: Explosion

When a player throws the wrong ingredient into the cauldron, it will play an explosion

14.6 Object: Dust Particle

Dust comes off the dirty sheet of paper, when player is cleaning it.

