



ICAT
COLLEGE
OF DESIGN & MEDIATM

An Assignment Work submitted for the subject

Specialized Game Engine I - Practical

By

ATHUL K M

University Registration No.: 248378730004

2024 - 2025



ALAGAPPA UNIVERSITY

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KARAIKUDI - 630 003, Tamil Nadu, India



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IDEAS

1. Bubble Game:

Its a game about a bubble where you help the last stading bubble from the bubble wand to reach out safely into the air whithout getting bursted on the way.

2. Endless Ball Game:

A simple ball rolling,hyper casual game with a speedrunning. Each level will be progressing with different mode of difficulty and modes.

3. Pip's Butterfly Quest:

Story of a small character call PIP who lives alone in the dark wood. He live a happy life in exploring the deep woods and studying the life of butterflies.The main gameplay focuses on the life of the character where you can fully explore the house and the little world to interact and involve in the activites to make the game more fun and cozy.

4. Brain Boosters:

Brain Boosters is a fun and educational set of mini-games designed to challenge your mental agility. Quick Math pushes your arithmetic skills to the limit by giving you fast-paced equations to solve within a time limit. Memory Match tests your concentration as you flip tiles to find matching pairs in as few moves as possible. Pattern Tap challenges your short-term memory by having you repeat increasingly complex sequences of lights or sounds.

5. Reflex Rush:

Reflex Rush is all about testing your speed and reaction time. In Color Clicker, you must quickly tap the color tile that matches the word shown, even if the font color tries to trick you. Shape Dodge puts your reflexes to the test as you swipe to avoid falling obstacles. Speed Tap keeps you on edge by making you tap only when the correct object appears, punishing any false moves.

6. Puzzle Trio:

Puzzle Trio delivers classic brain-teasers in a sleek and simple format. Tile Slider makes you rearrange scrambled image or number tiles into their original order. Maze Escape tests your sense of direction as you try to navigate through quick mazes before time runs out. Line Connect challenges your planning skills as you try to connect all dots without crossing lines or retracing paths.

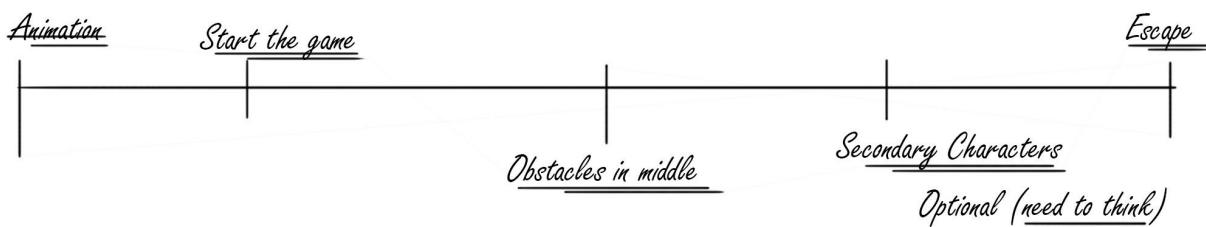
7. Classic Arcade Set:

Classic Arcade Set brings retro-style gaming into a modern, bite-sized package. Pixel Jumper is a one-tap platformer where timing your jumps is key to avoiding obstacles. Alien Blaster turns you into a defender of the galaxy as you tap to shoot incoming enemies before they reach your base. Bounce Ball keeps your focus as you tap to keep a bouncing ball in the air, dodging deadly spikes.

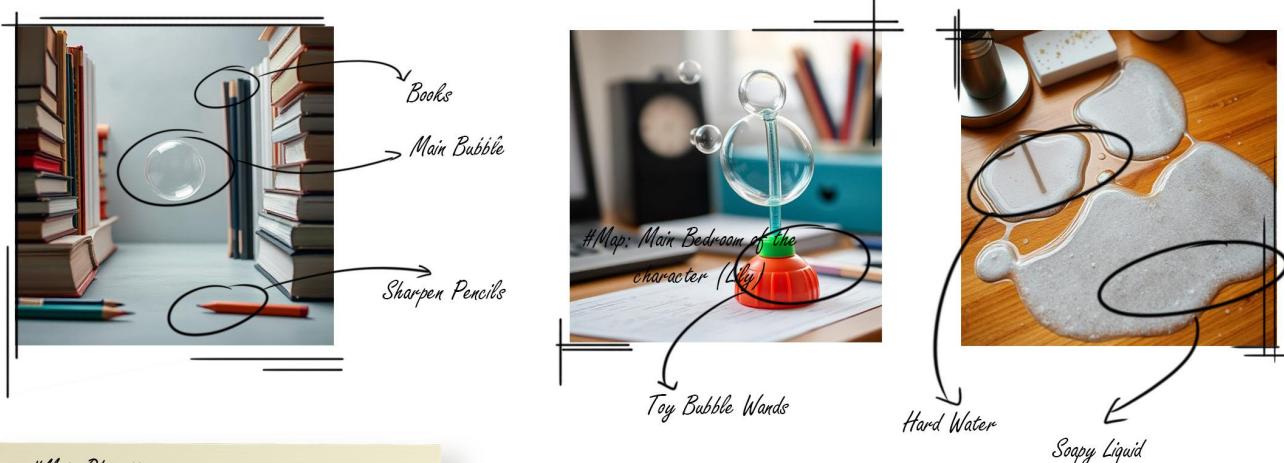
CONCEPT EXPLANATION

1. Bubble Game:

So basically its a game about a bubble where you help the last standing bubble from the bubble wand to reach out safely into the air without getting bursted on the way. On the way, the bubble need to collect some collectables such as soap waters to make the bubble more sustainable and avoid some obstacles such as hard water, sharp object and wind to not get bursted. Also bubble wands are placed on the checkpoint areas for the easy respawning process of the bubble to continue its journey.



References:



#Main Objective:
Survive before getting bursted

#Obstacles: For 1 map

| | |
|--------------|---|
| Books | #Map: Main Bedroom of the character (Lily) |
| Pens | |
| Pencil | |
| Hard Surface | |
| Desk | |
| Strong Wind | |
| Hard Water | Respawning can be done with the help of the toy bubble wand |

#Game Type: Cozy
Main game inspiration
#Mission: 6 chapters
Need to reffer to the It Takes Two Game

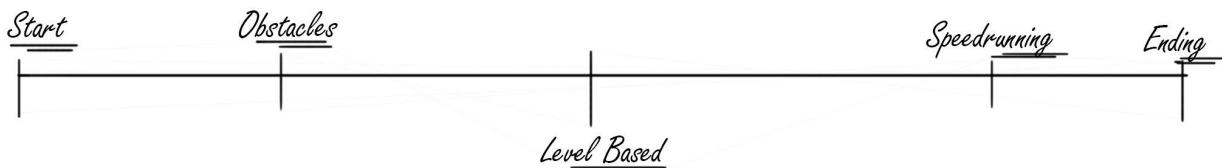
#Animation Concept:
Lily, playing with the bubbles and suddenly her mother calls her to the hall. she leaves behind the bubble wand filled with soap. suddenly a little breeze hits the wand and makes one big bubble

#Extra Features:

- ★ Time Challenge Mode - Race against a slowly closing window!
- ★ Wind Manipulation Power-ups - Create small gusts to control the bubble.
- ★ Multiple Levels - Different rooms with unique hazards (kitchen, garden, attic).
- ★ Storybook Cutscenes - Show Lily's love for bubbles and her dream of seeing a rainbow.

2. Endless Ball Game:

A simple ball rolling, hyper casual game with a speedrunning. Each level will be progressing with different mode of difficulty and modes.



Background Reference

Color Pattern

#Main Objective:
Completing Levels or Speed Running

#Abilities:
Shape Shifting as per the situation
Pause time in certain situations

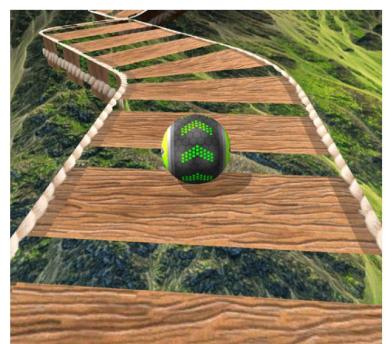
#Not Sure abt this:
Maybe a shooting mechanics to destroy the obstacles in front. Also world shifting of world, collapsing and break of gravity and floor for more action.

Focus more on sounds; breaking

Glass Materials

Clear and simple background with good music

Multiplayer Idea:



Maybe a race between the players

Going Balls
Game ref for long runner

Game quality expectations

213

Game point system

solid background

Game name:
Gyrosphere Race



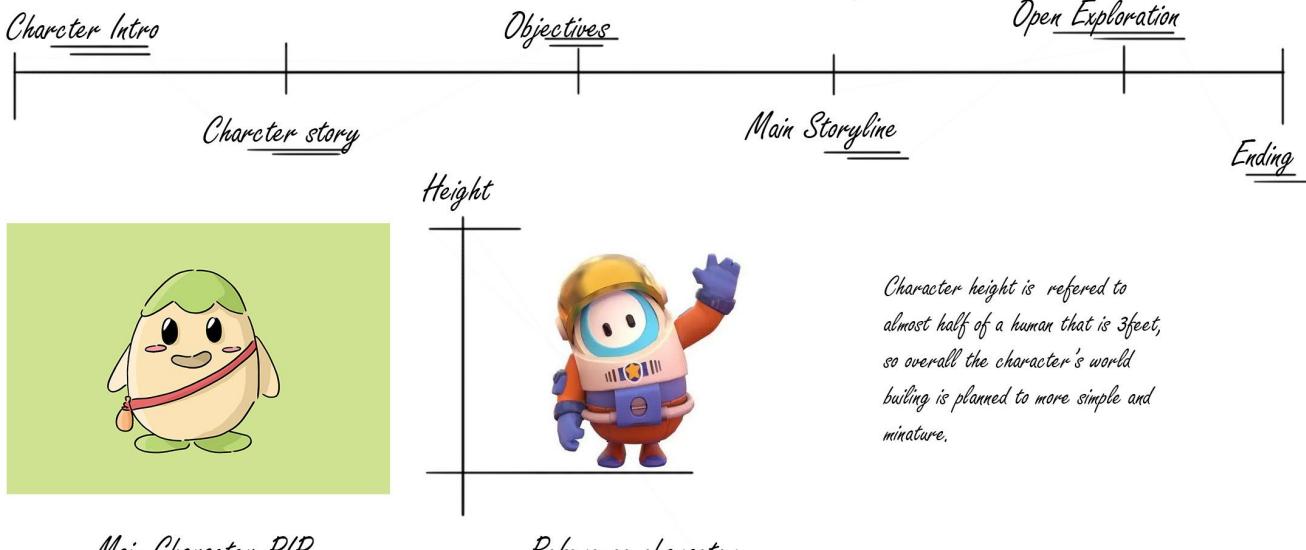
If possible a small drift like
mechanics with time pausing can be
more engaging



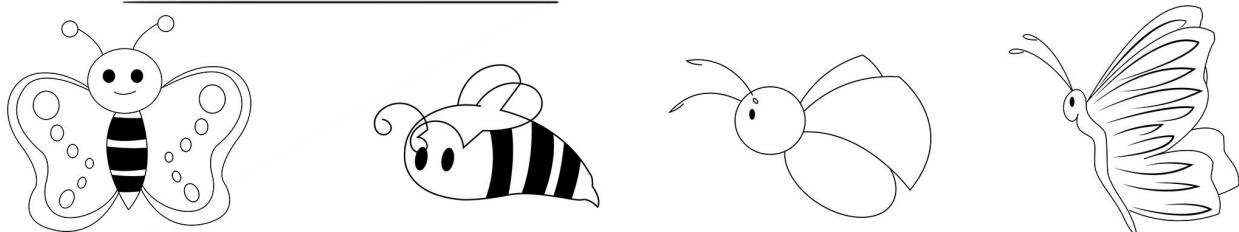
Or puzzle levels

3.Pip's Butterfly Quest:

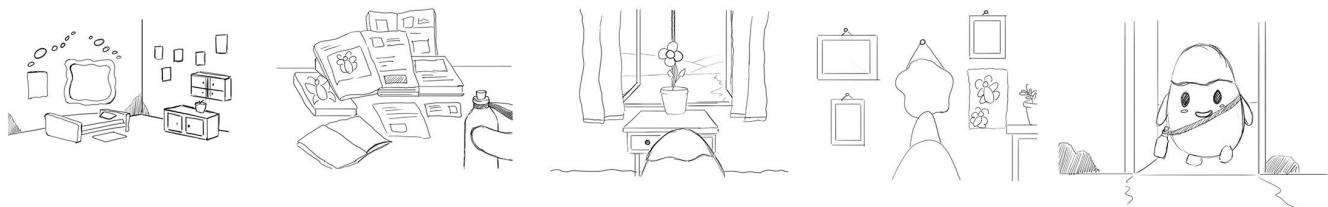
Story of a small character call PIP who lives alone in the dark wood. He live a happy life in exploring the deep woods and studying the life of butterflies. The main gameplay focuses on the life of the character where you can fully explore the house and the little world to interact and involve in the activites to make the game more fun and cozy.



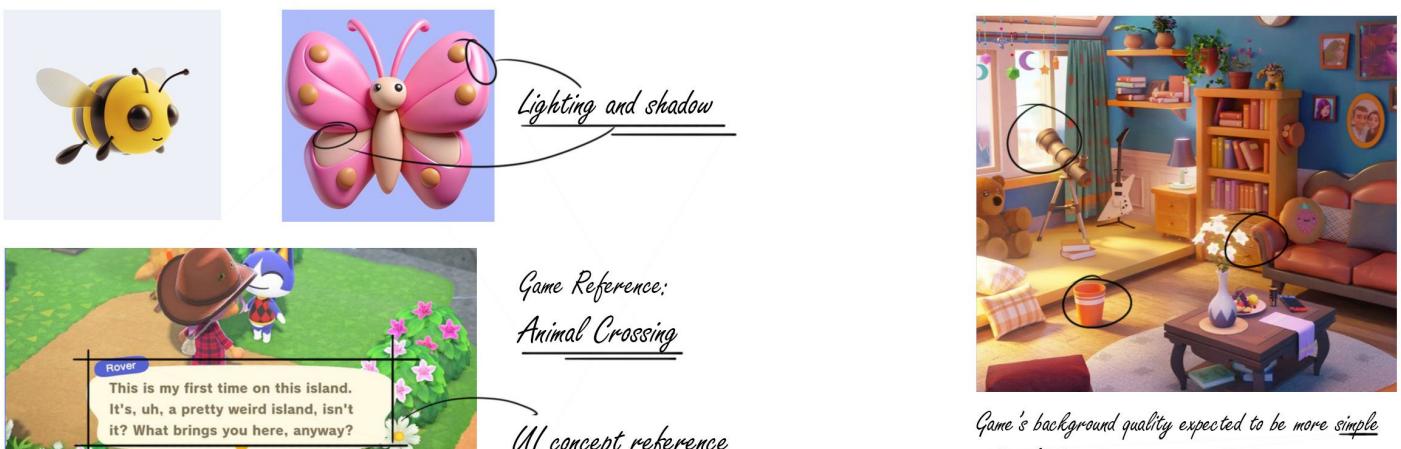
Other characters planned to be added to the story line:



Preplanned character intro animation rough sketches:



Character quality expecting



Game's background quality expected to be more simple and stylized

MAIN CONCEPT

Apart from the 3 concept, the 3rd concpet is considerd as the main concept for the futher explain and detail description.

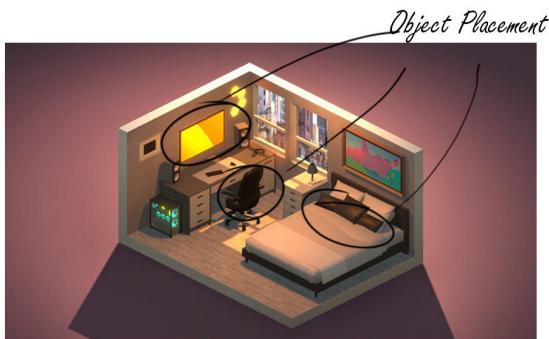


LIST OF SIMILAR GAMES

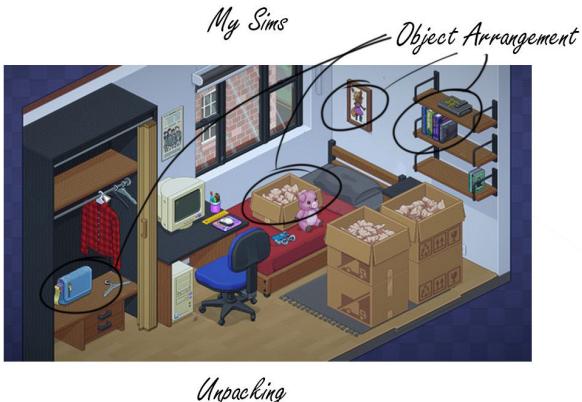
Before speaking about the games with this same concept, there are many open world games who can adapt this idea into their gameplay where the players can interact, involve and customise the place where they hangout such as their own house. Today's games let the players more involvement into their world environments. Games like Red Dead Redemption 2, Grand Theft Auto V and Sleeping Dogs are some of the open world game with these features in the games. Here I have adopted that idea in creating my game concept where the player can involve more into the interactive element of the game. Like in real life the player can involve in the household chores and other fun activities in the game such as playing games, watching movies, learning, reading, cooking, playing with toys, drawing and so on.



Games like The Sims Franchise let you live just like in real life by doing and managing a life and household activities. On the other hand where Unpacking and My Dream Setup game provides the chance in arranging things in the way the player loves to be seen in their rooms.



My Dream Setup game allows the players to customise their own dream gaming room and bedroom to make any imaginary a dream setup just like the title. Just like this game unpacking same the same gameplay of arranging of objects in the room as per the players wish.



Tiny Glade is a small diorama builder where you doodle whimsical castles, cozy cottages & romantic ruins. Where now more customization with a stylized style of graphics attracts more cozy games.

Hence the idea of these games and the quality of the Tiny Glade inspired me in making my game, Where I add a small story to concept to bring out a good gameplay.

IDEA ADAPTATION FROM MOVIES

These are some of the movie scene environments that has inspired me to build such art style game environments for my game character. Most of the environments are built in a way of simple and stylized art style, which enhances the game play experience. Both Disney and Pixar studio has a number of such inspiring environments.



Toy Story



Toy Story



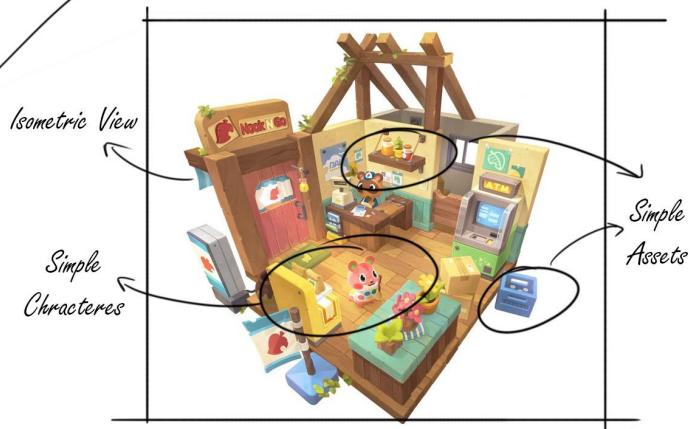
Toy Story



Toy Story

Simple Assets
Stylized
Beveled Surface
Less Details, add solid colors
No Realism

Art style reference



Animal Crossing (game)

These are some of the 3D assets taken as reference from pinterest



A little realistic



Simple and cute



More detailed grass

MIND MAP

Pip's Butterfly Quest is an adventure and life-sim game where players explore nature, track butterflies, and solve environmental puzzles. With interactive NPCs, a cozy village, and a moral choice system, players can either collect or release butterflies, affecting the world around them. Dynamic weather, diverse biomes, and a heartfelt story create a relaxing yet meaningful journey about discovery and conservation.

Bedroom Staircase
Kitchen
Hall
Fireplace

Rooms

There are many assets build in low poly for the game such as for bedroom, kitchen, main hall, staircase and fireplace

Game Assets

The environment and the art style is build in more stylize way and of low poly in nature

3D style



Story

Story of a small character call PIP who lives alone in the dark woods of the fantasy island of butterflies. He live a happy life in exploring the deep woods and studying the life of butterflies.

PIP is cute and small baby character who is always involved in search of his fathers dream in search of the giant butterfly which lived in the island where PIP lives.

About Character

Current Activities

Primary Activity:
Interact with objects(holding, throwing)
Access chair, sofa, television and console

Other Characters

Butterflies
Firefly
Honeybees
Giant Butterflies

Upcoming Activities

Character Customization
Customize Home
Cooking
Entertainment
Playing With Toys
Reading
Drawing
Gardening

TITLE OF THE GAME

A bubble font is a type of font that features rounded, puffy, and balloon-like letters, often resembling bubbles. These fonts are commonly used in graffiti, comic books, cartoons, and playful designs because of their soft, fun, and informal appearance. They can be outlined, filled, or even stylized with 3D effects to enhance their visual appeal.



Impact of Using Bubble Font for a Game Title :

- **Welcoming & Playful Aesthetic:** Bubble fonts create a friendly, approachable vibe, making the game feel fun and inviting, perfect for cozy and adventure games like Pip's Butterfly Quest.
- **Easily Readable & Recognizable:** Their bold, rounded shapes stand out, making the title more memorable and instantly recognizable, even from a distance or in small icons.
- **Soft & Relaxing Feel:** Compared to sharp or edgy fonts, bubble fonts give a softer, more comforting feel, reinforcing the game's cozy and heart-warming theme.
- **Stronger Branding & Identity:** Unique typography helps set the game apart in a crowded market. A custom bubble font can make Pip's Butterfly Quest feel distinctive and iconic.
- **Appeals to a Wider Audience:** Casual and family-friendly players are naturally drawn to gentle, rounded typography, making the game more accessible and engaging for all ages.

GAME DOCUMENTATION

Game Title: Pip's Butterfly Quest

Genre: Adventure / Puzzle / Exploration

Platform: PC or VR

Game Art Style: Whimsical, story-driven with a hand-painted or cozy 3D art style

Story Premise:

Pip is a young explorer with a deep fascination for butterflies, spending years studying and catching them. His biggest dream is to find the legendary Ethereal Butterfly, a giant, mystical creature said to bring wisdom to those who encounter it. Pip sets off on an adventure, traveling through lush meadows, mysterious forests, misty mountains, and even enchanted caves to track and document rare butterflies. However, along the

Gameplay Features:

1. Butterfly Tracking & Interaction System:

- Each butterfly species behaves differently—some are drawn to flowers, others only come out at night, and rare ones require special actions to appear.
- Pip uses various tools like a net, magnifying glass, and bait to attract butterflies.
- The game includes a Butterfly journal where players can log details about each species they discover.



White Daffodil
(Main object to attract butterflies)

2. Nature-Based Puzzle Solving:

- Environmental Puzzles: Players must solve nature-related puzzles to access new butterfly habitats (e.g., watering a dying flower to attract a rare butterfly).
- Butterfly Powers: Some butterflies have unique abilities—one might illuminate dark caves, while another helps plants grow. Players must release the right butterflies at the right time to solve puzzles.
- Weather & Time Mechanics: Certain butterflies only appear during specific weather conditions or at dawn/dusk, requiring

3. The Moral Choice System

- Players can choose to keep collecting butterflies or embrace the lesson of letting them go.
- Keeping too many butterflies may negatively affect the environment (flowers wilt, animals leave, the world feels "empty").
- If players release more butterflies, they restore balance, and the world becomes vibrant and full of life!



4. Village & Life Sim Elements :

- Pip visits a cozy village full of charming NPCs (talking animals, wise elders, fellow explorers). Each character has unique stories, quests, and butterfly knowledge.

- Players can decorate Pip's cabin, plant butterfly-attracting flowers, and build small butterfly sanctuaries.

- A trading system lets Pip barter for rare butterfly-related items (special nets, potions, or books).

- Fishing, farming, and crafting mini-games add depth—players can create butterfly-friendly gardens, make butterfly houses, and brew nectar-based potions.



Butterfly Statue
(customise the village)



Butterfly garden
(to attract butterflies)



Power Potions
(for trading with NPCs)

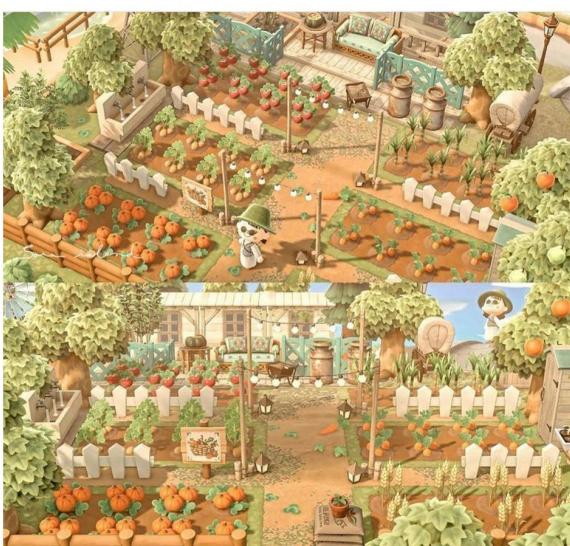


Enchanted Books
(for trading with NPCs)

5. Open-World Exploration:

- The game world is vast and interconnected, with diverse biomes that change as Pip learns to let butterflies go.

- Hidden areas and secrets unlock as players interact with nature and solve puzzles.



Game environment reference from
Animal Crossing

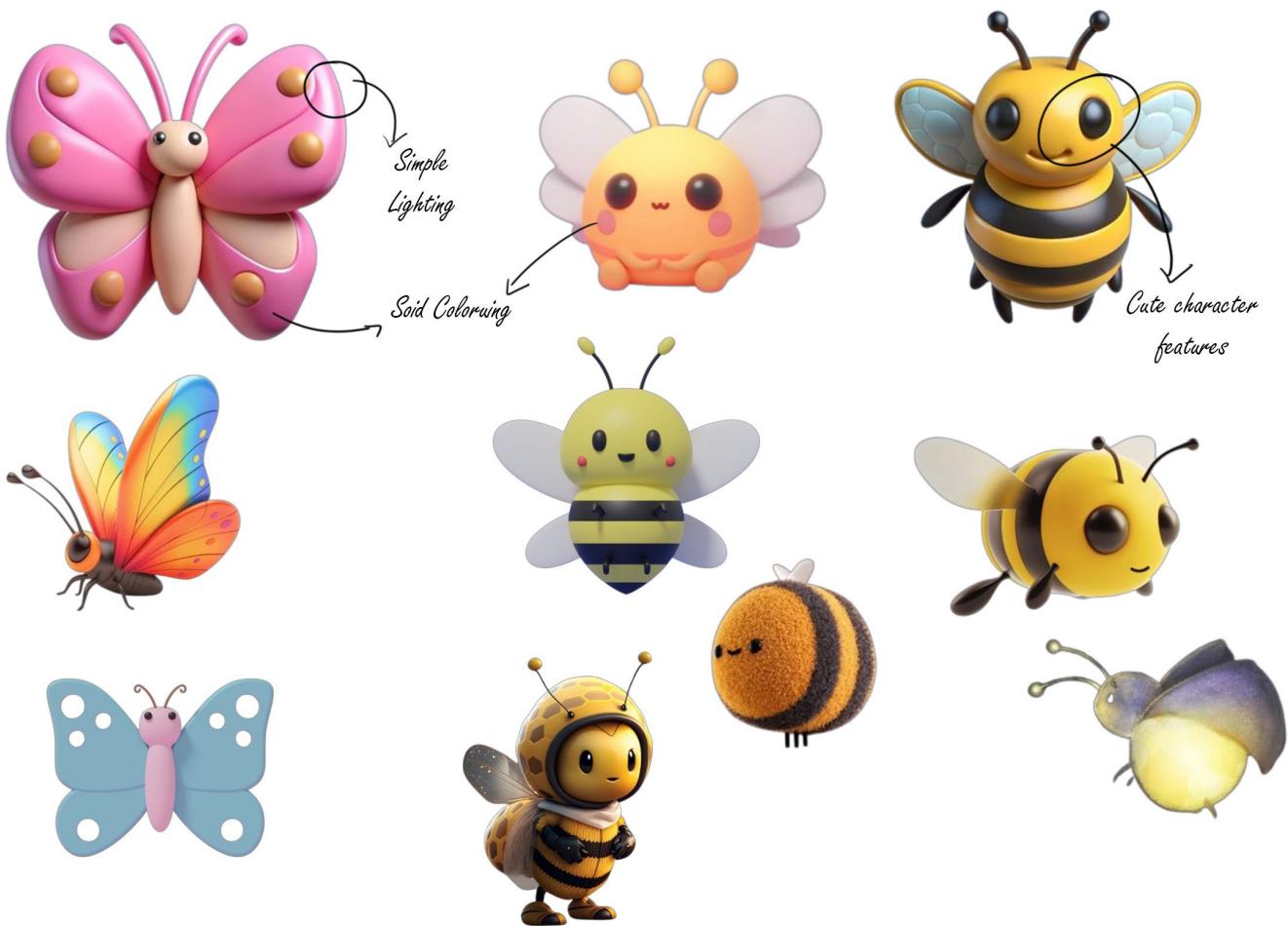


MOODBOARD

Main character moodboard:



Other Character Moodboard:



Environment Moodboard:



Bedroom reference



Kitchen reference



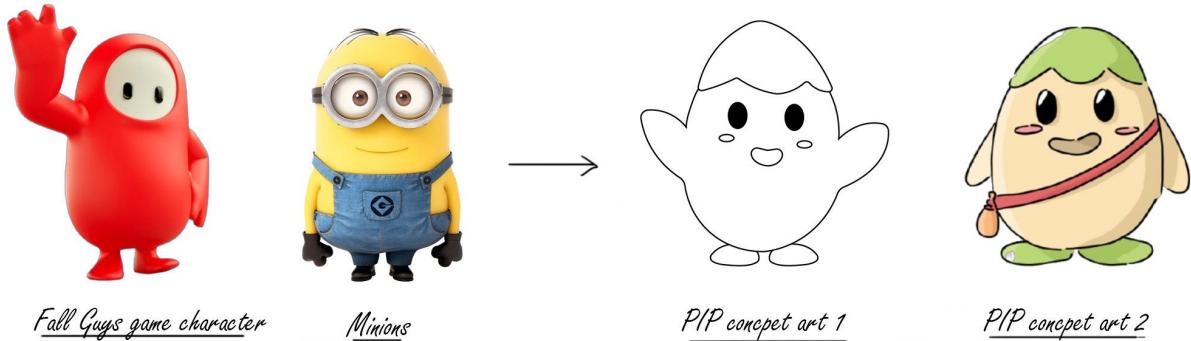
Fireplace reference



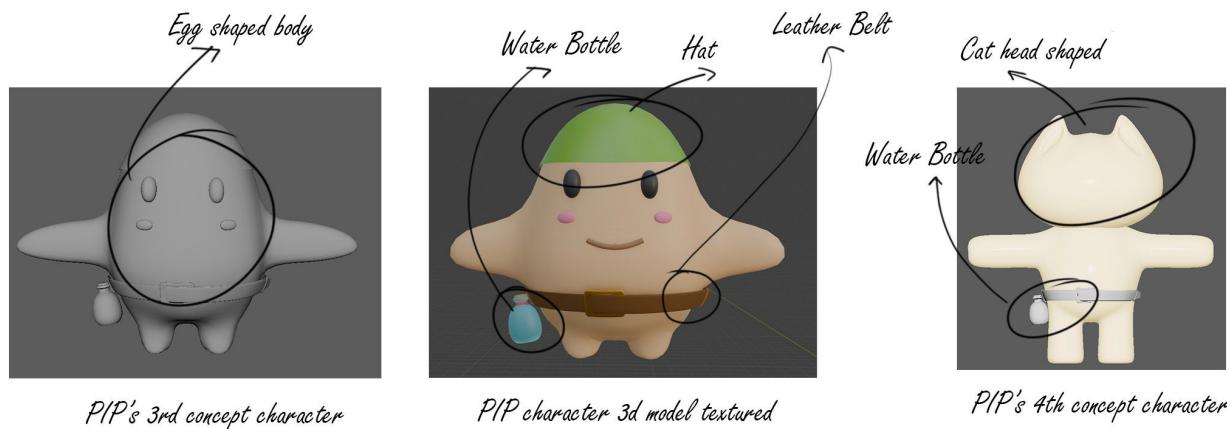
Main hall reference

CHARACTER STUDY

The character was created from the inspiration of the fall guys character and minions

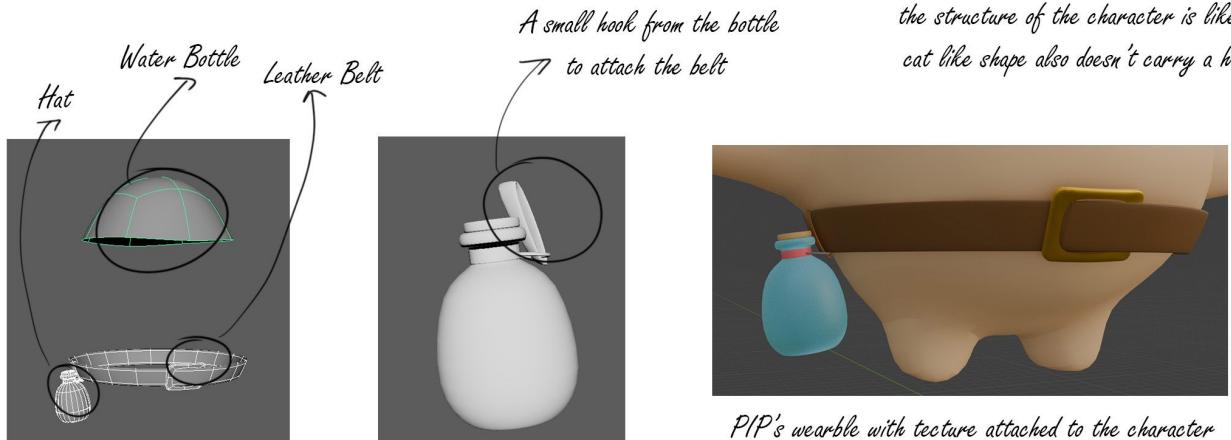


The 3d model of the character with wearables.



PIP's character is made directly from the colored concept art. The character here has replaced the side bag from the concept art to a belt carrying the bottle for carrying the water. Also a small hat made of a shell in green color is used as per the concept art.

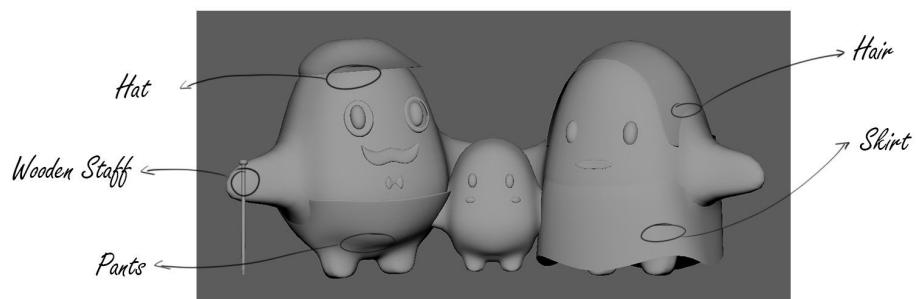
Here the character is completely turned in to a human like character. The character also carry the similar belt with the bottle hooked on the side. Here the structure of the character is like a cat like shape also doesn't carry a hat



PIP's wearbles

Water bottle

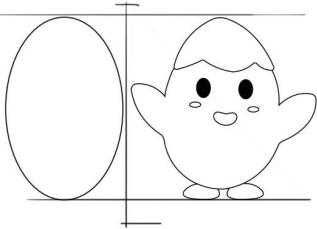
PIP's wearble with texture attached to the character



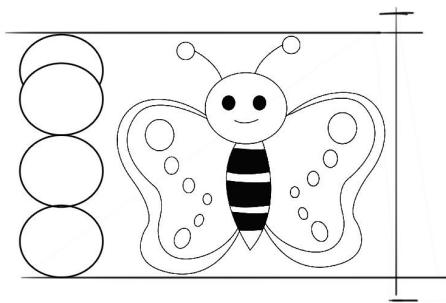
The PIP's family do share the same structure of the main character. All have the egg shaped body feature.

CHARACTER DESIGN

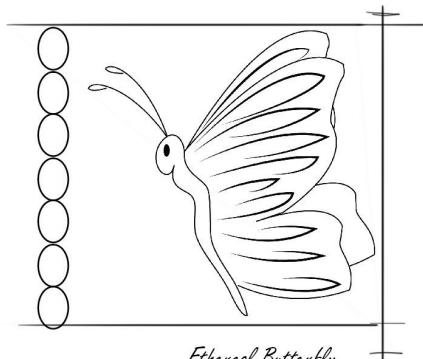
Character Description:



Pip
(The Main Character)

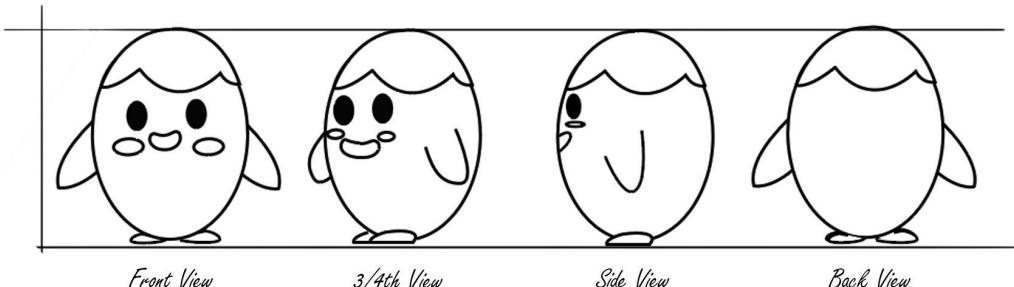


Mini Butterfly

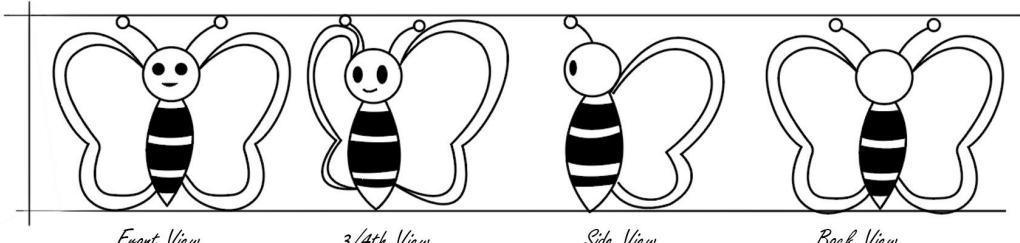


Ethereal Butterfly

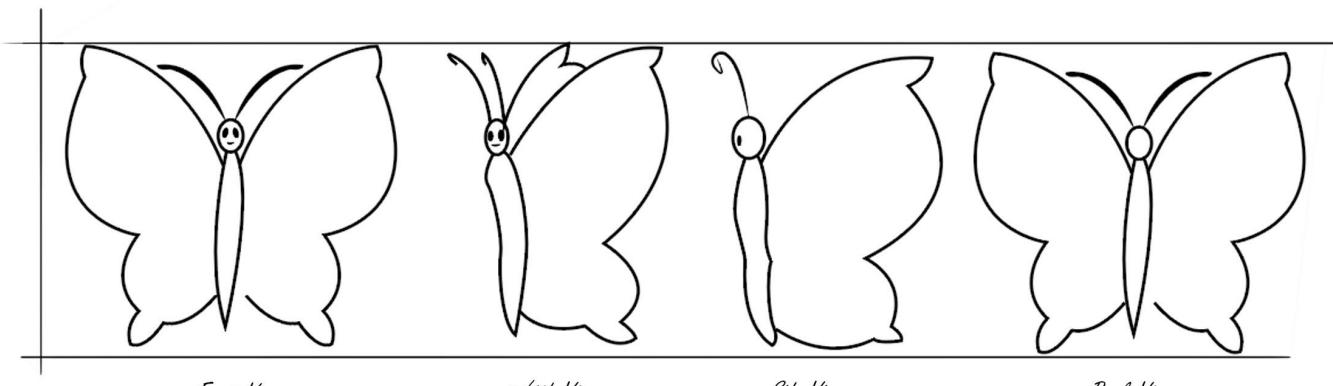
Character Model Sheet:



Front View 3/4th View Side View Back View

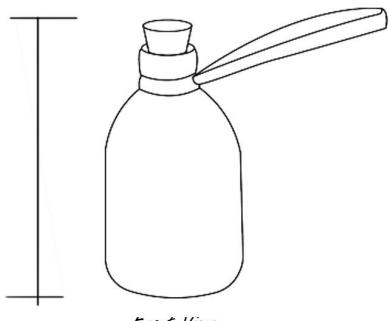


Front View 3/4th View Side View Back View

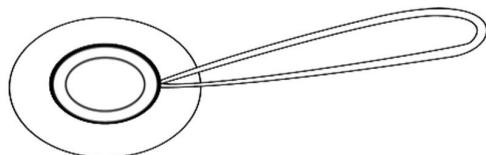


Front View 3/4th View Side View Back View

Character Property:



Front View



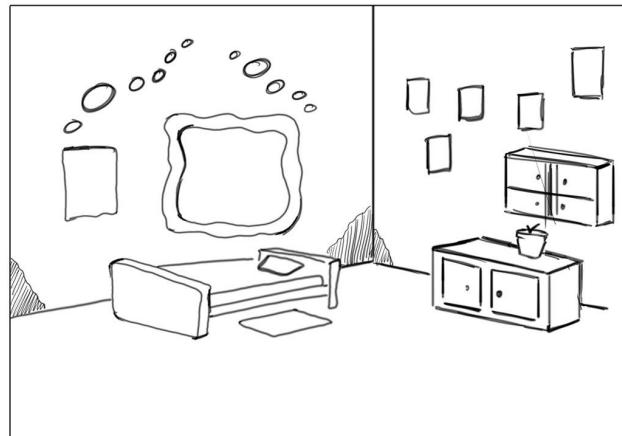
Top View

STORY BOARD

This story board mainly focuses on the introduction scene of character PIP, where the player gets out of his house for his hunt for the Ethereal Butterfly.

Scene No: 1

Shot No: 1



Duration: 3sec

Action: Introduction scene of PIP's room

Camera Shot: LS

Audio: Intro song

Scene No: 1

Shot No: 2



Duration: 2sec

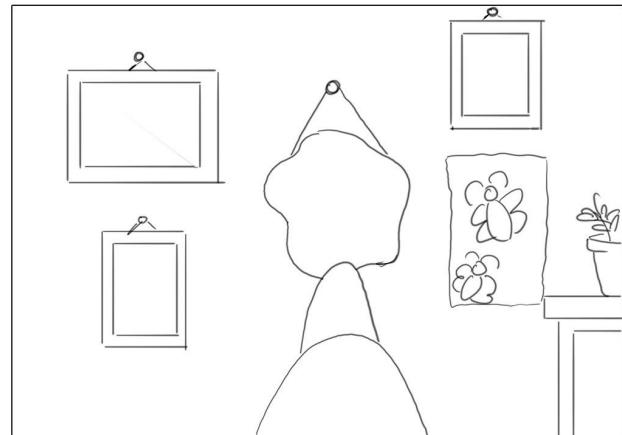
Action: PIP picks up the bottle from his study table

Camera Shot: LS

Audio: Intro song

Scene No: 1

Shot No: 3



Duration: 2sec

Action: PIP picks up the hat from the wall

Camera Shot: LS

Audio: Intro song

Scene No: 1

Shot No: 4



Duration: 3sec

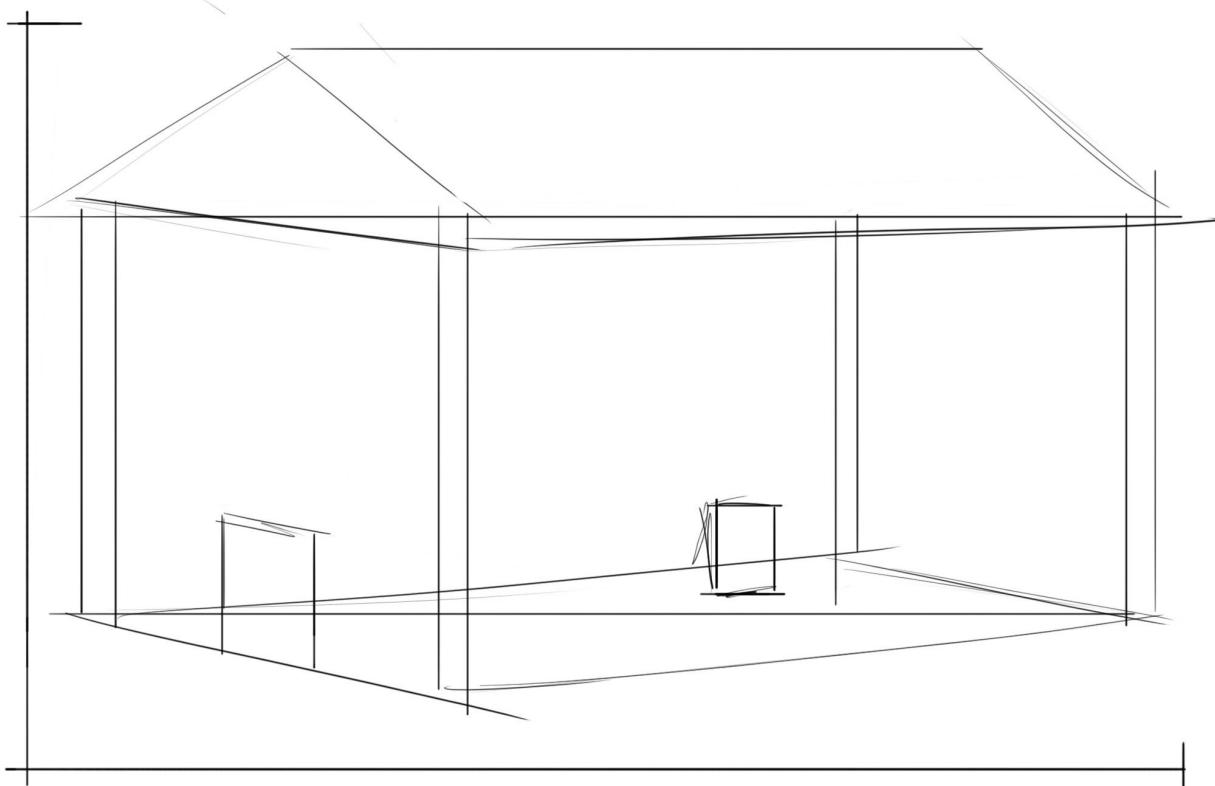
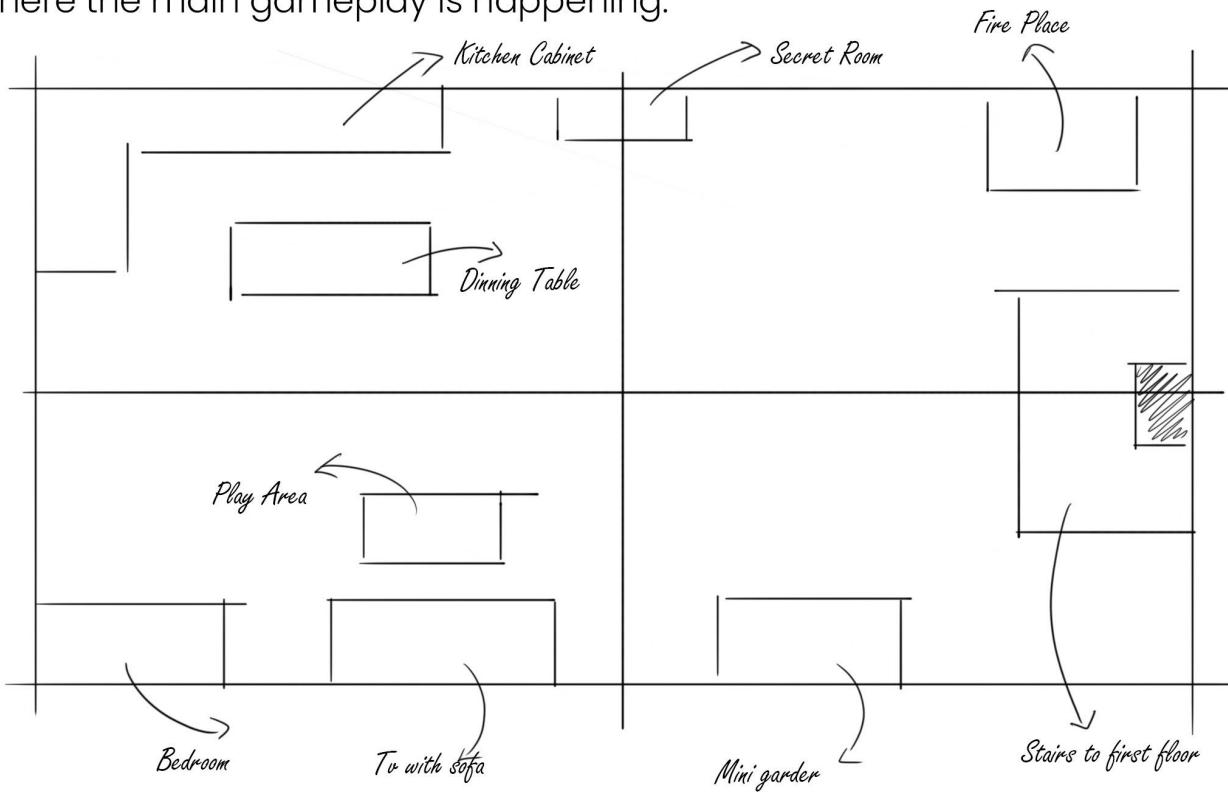
Action: PIP looks at his new flower pot

Camera Shot: LS

Audio: Intro song

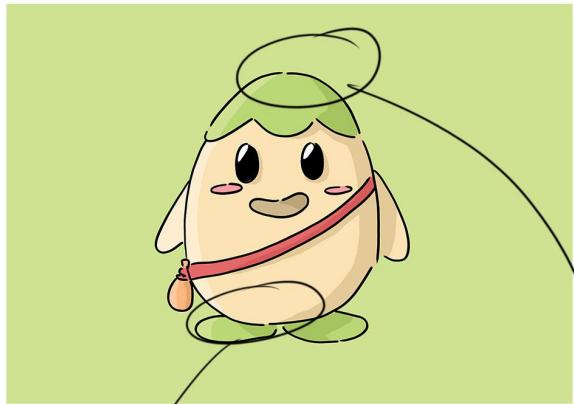
LEVEL ROUGH SKETCHING

Rough drawing of the interior view of the house of the main character where the main gameplay is happening.

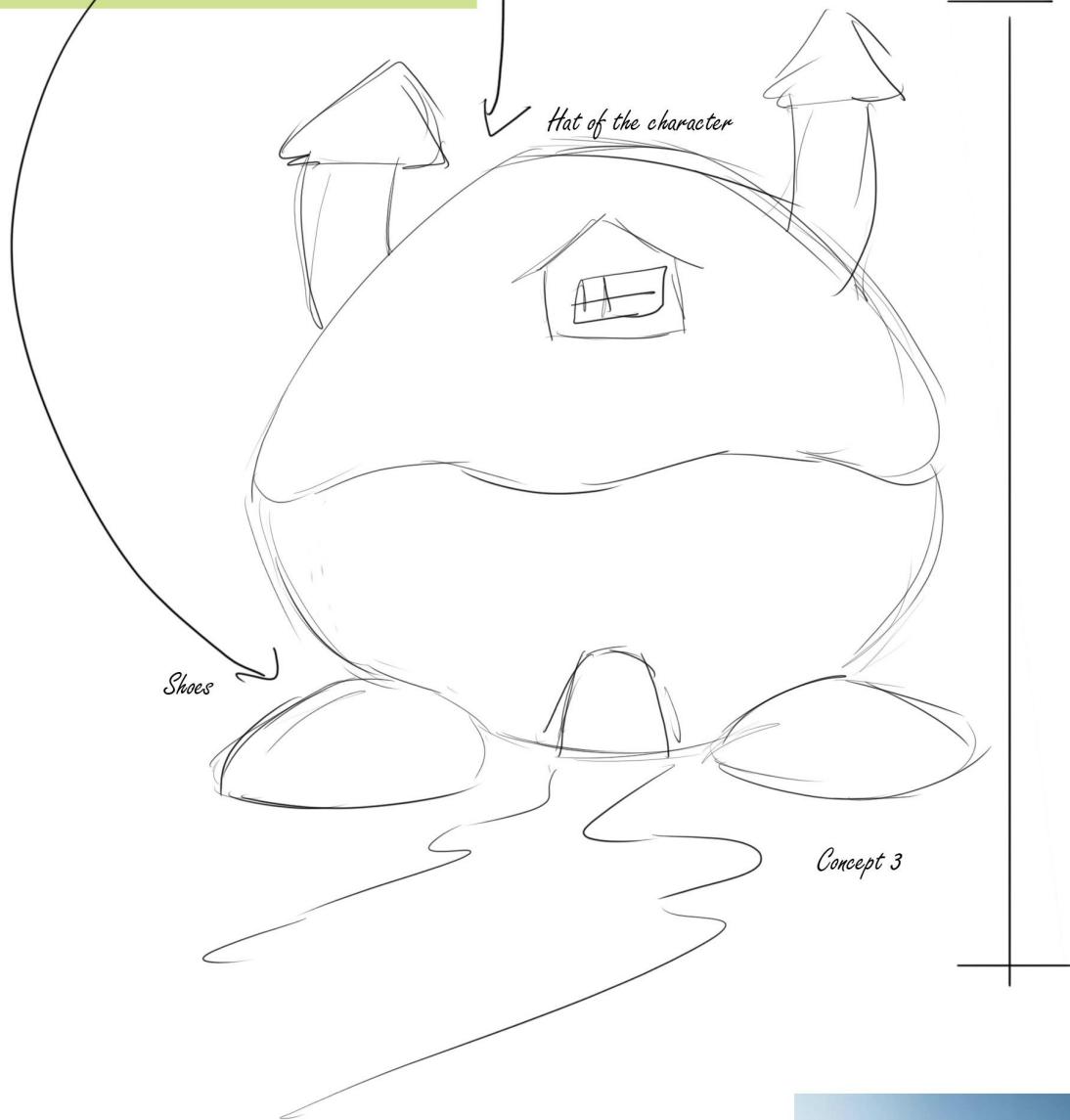


The initial idea for the characters was inspired from the movie like Angry Birds.





Concept 3 is build similar to the same design of the character. The hat and shoes are used to build the house

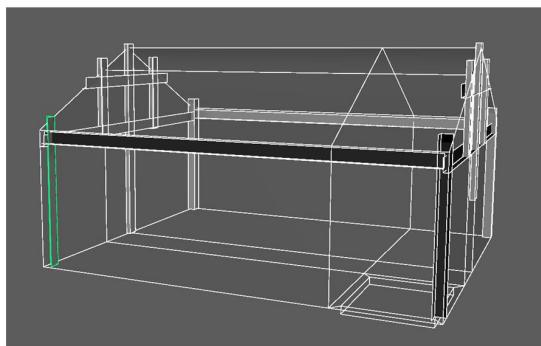


This is mini concept idea of a building build on the character theme. Similar to this idea the 3rd concept of the home was build.

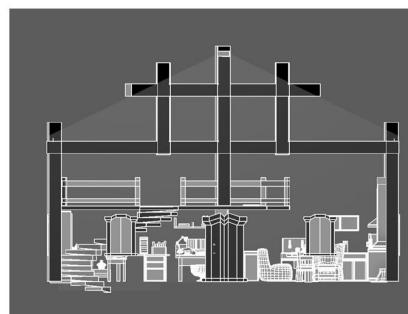


MAP 3D VIEW

The game play of the story is set into house of the character. The player can explore different open rooms in the home. The player can interact with the different items in the room such as bed, sofa and chairs.



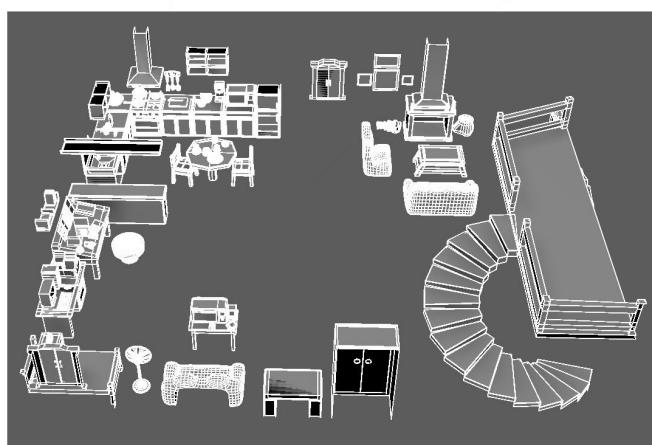
Wire frame view of the



Front view of the home

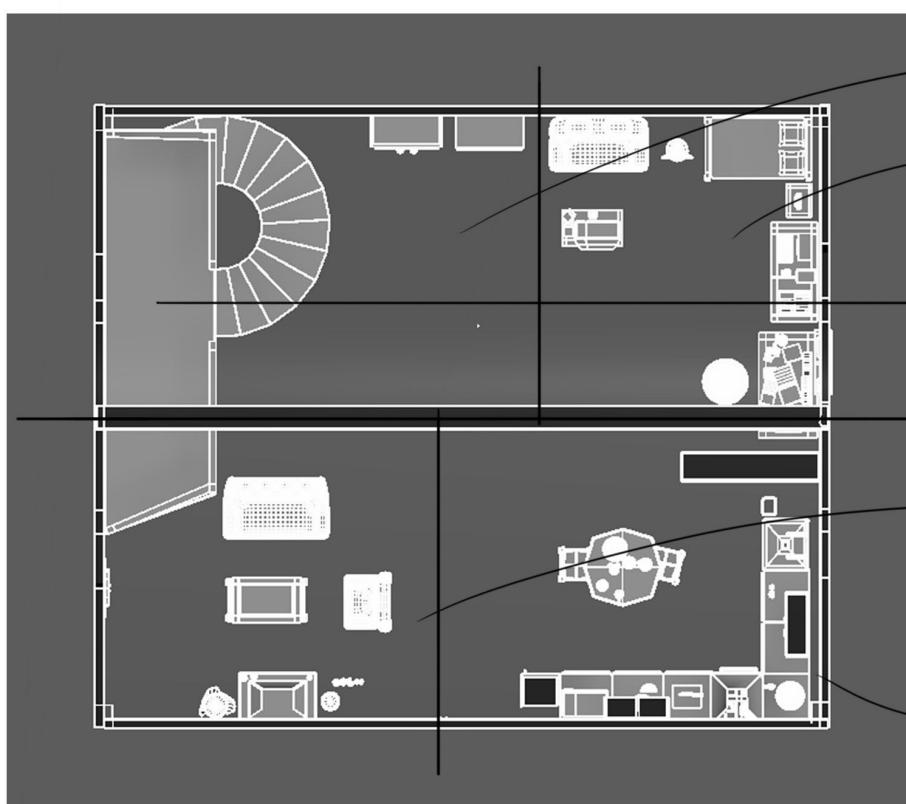


Side view of the home



Assets of the home

There are almost 50-60 assets made within the home. Within the house there are 4 rooms . Kictchen has more assets with kitchen appliances and kitchn set

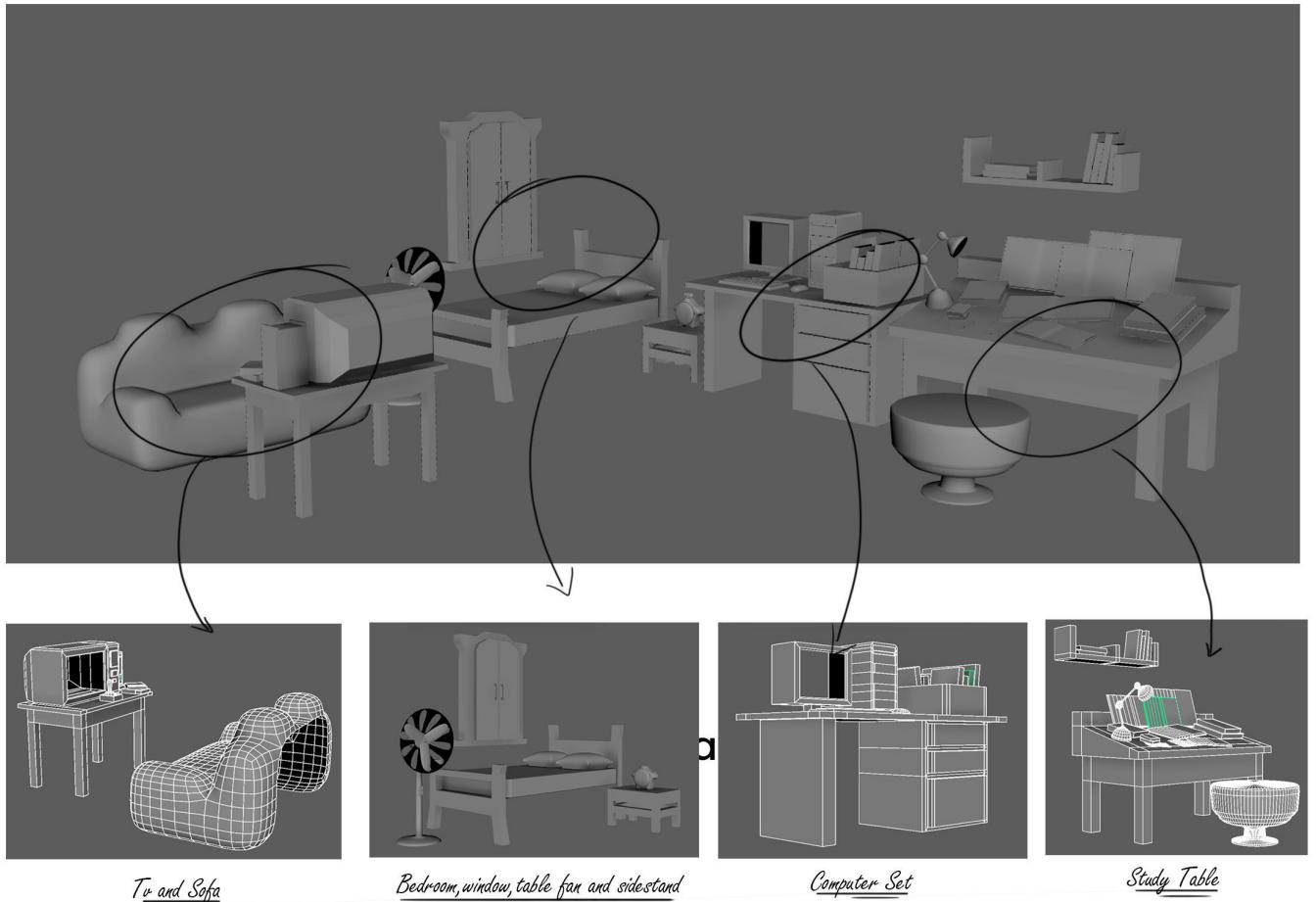


Top view of the home

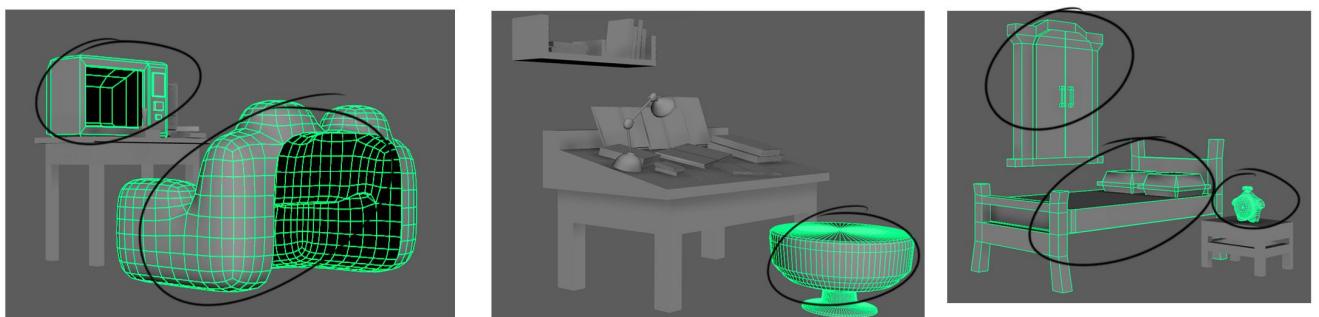
LEVEL EXPLANATION

Apart from the level vise gameplay, the player can explore different rooms and assets to access and explore.

Room 1: Bedroom



Assets that can access

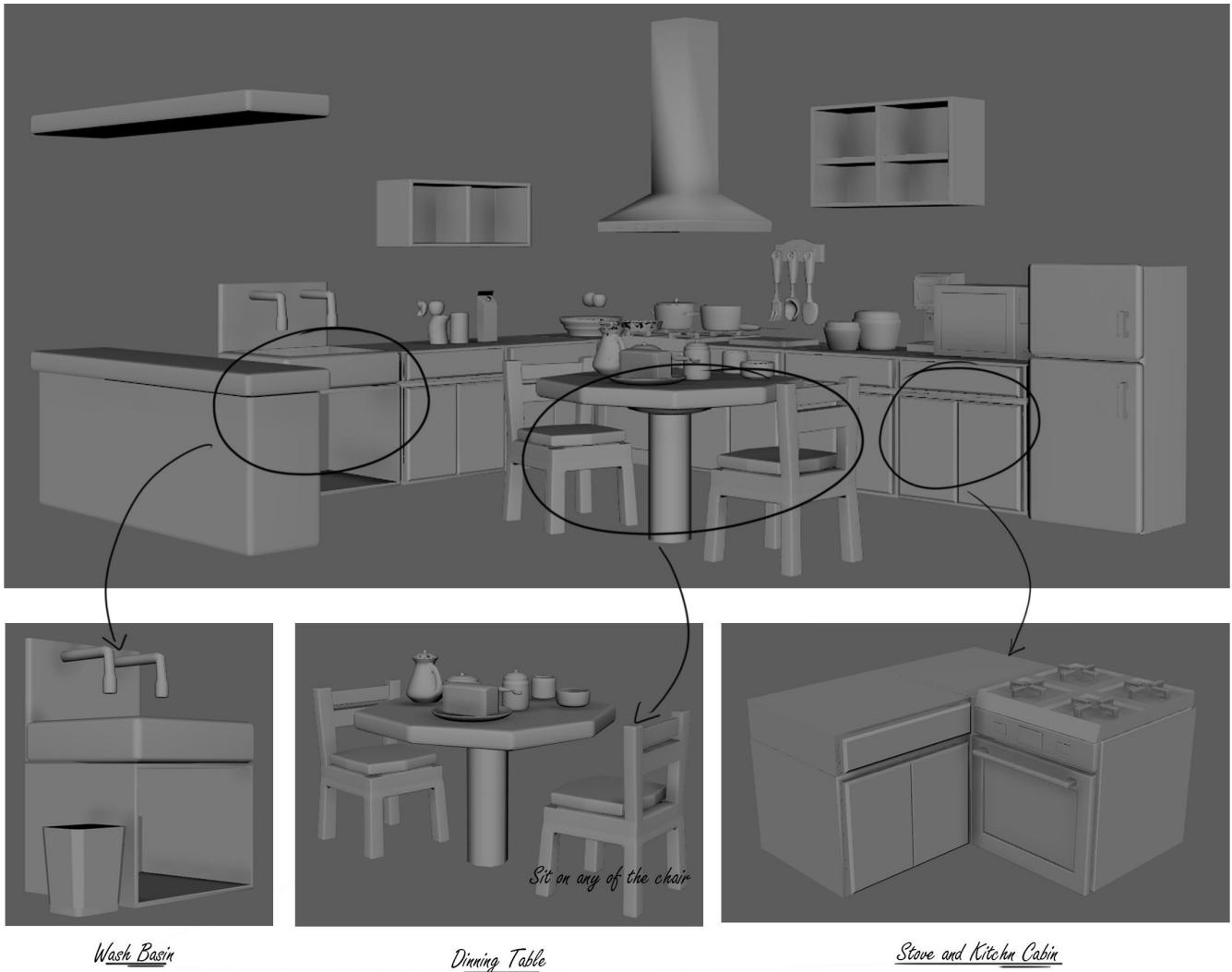


The player can access the tv, change the tv channel just like in real life. The player can access the tv when the player appear next to the sofa. The player can also access the sofa and sit on it and watch the tv.

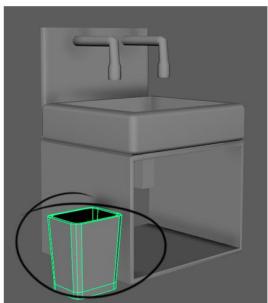
The player can sit on the chair placed on the study table and watch all the books and papers placed on the table.

The player sleep on the bed just like in real life and watch the ceiling. The window placed next to the window and open and close it. The alarm clock can also be turned off.

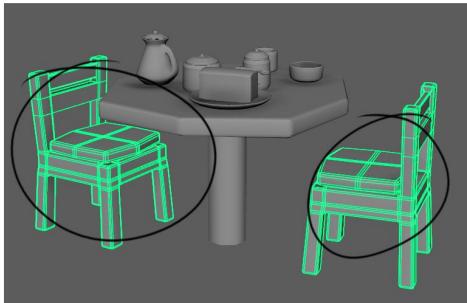
Room 2: Kitchen



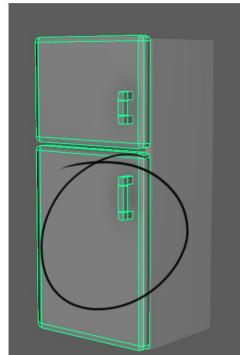
Assets that can access



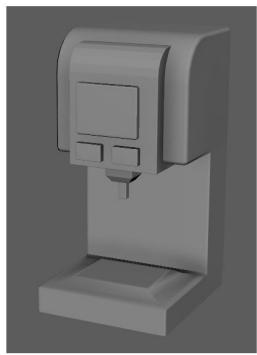
The player can throw waste or anything into the basket



Sit on any of the chair

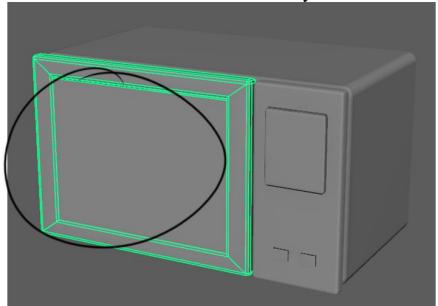
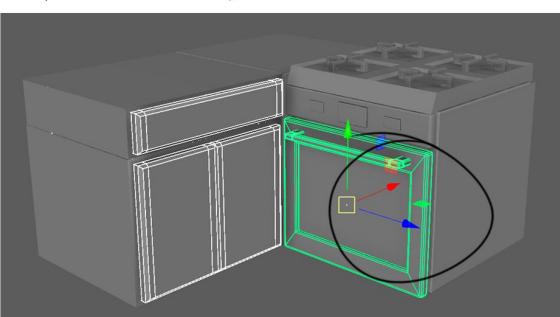


Open and close the door of the fridge

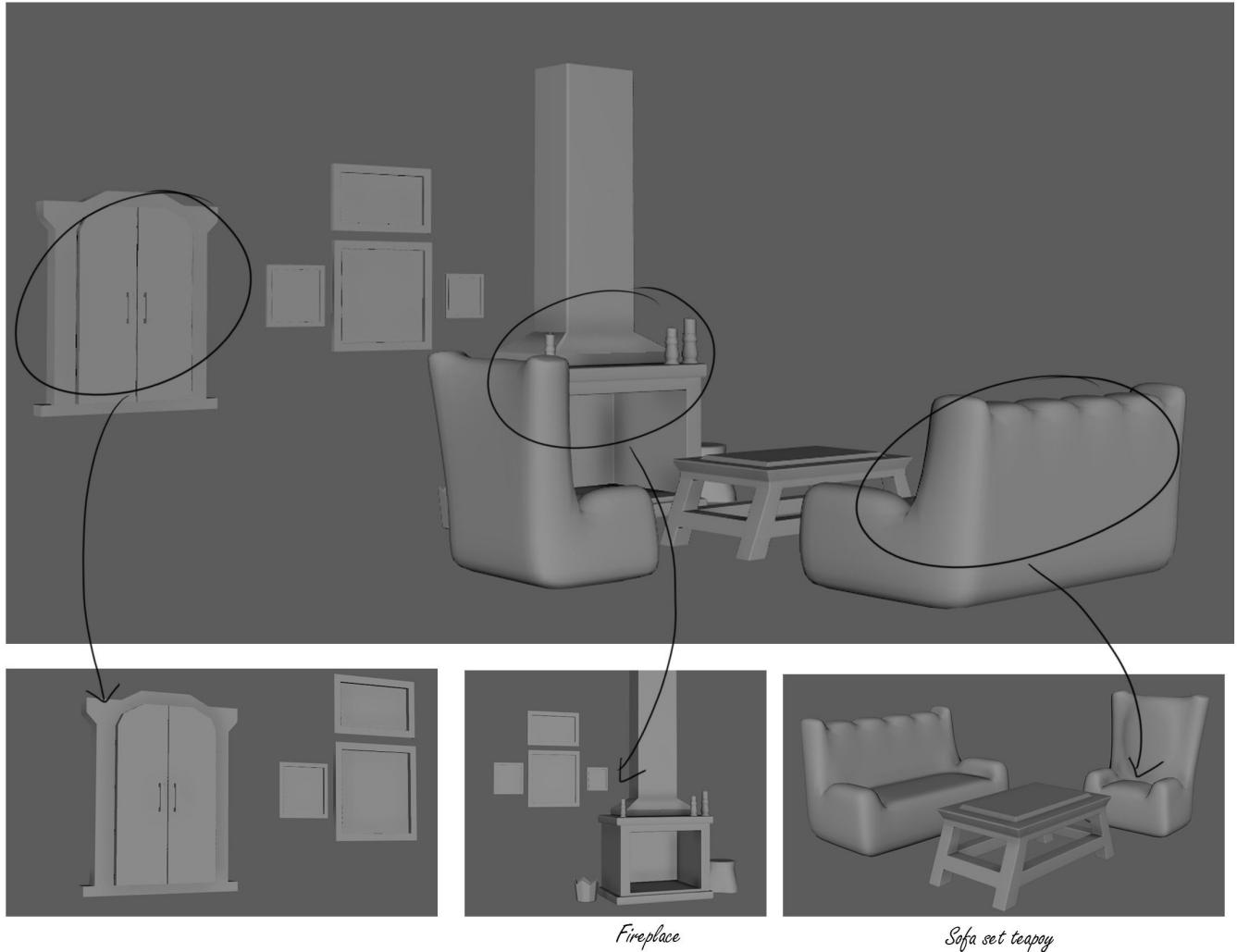


Access the coffee maker

Access the doors of the microwave



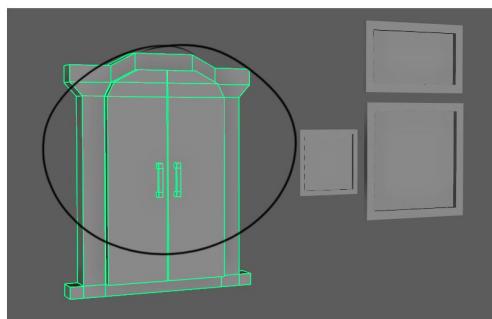
Room 3: Fireplace



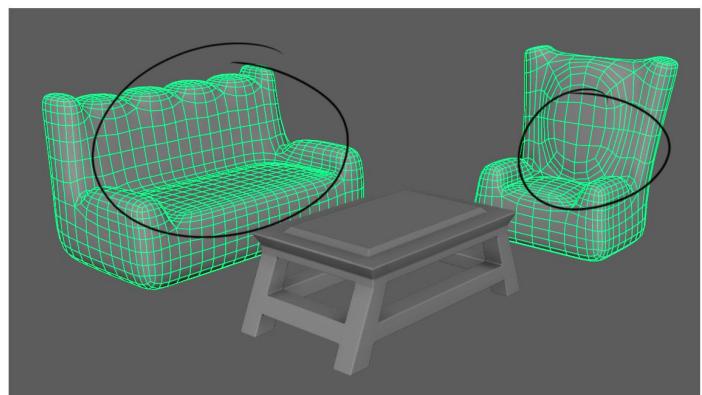
Fireplace

Sofa set teapoy

Assets that can access

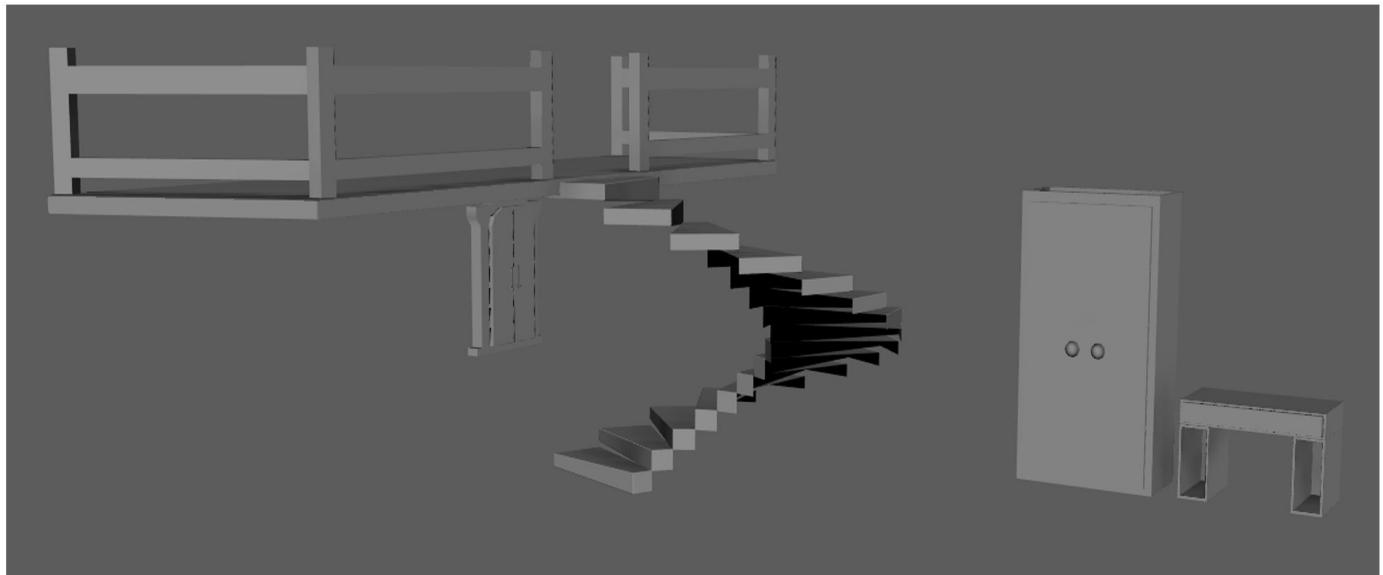


Can open and close the window

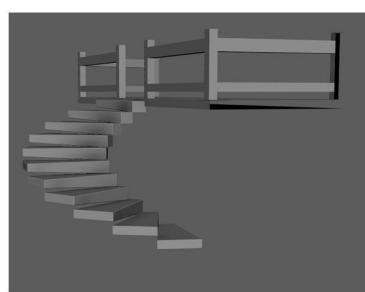


Player can sit on any of the two sofa and watch the fireplace

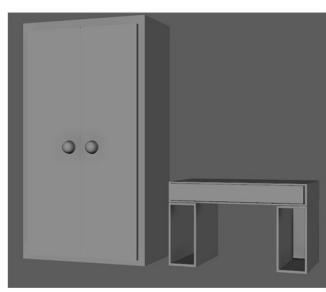
Room 4: Main Hall



Window



Stairs

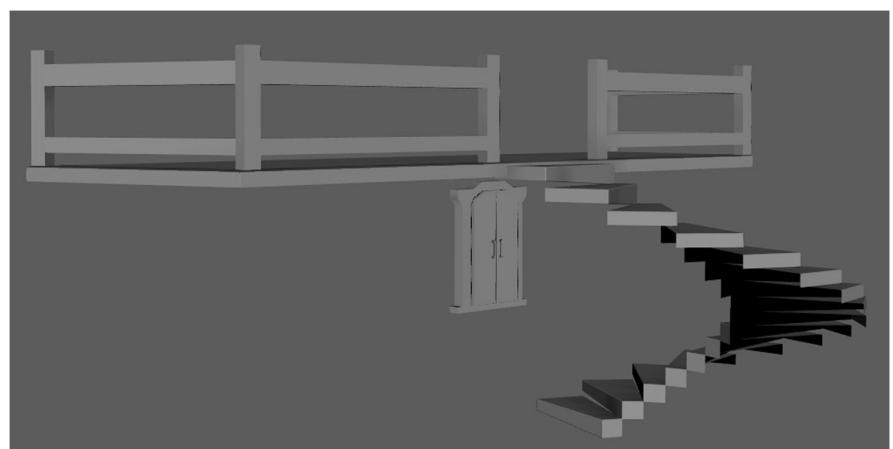


Cupboard

Assets that can access



Cupboard can be open and closed

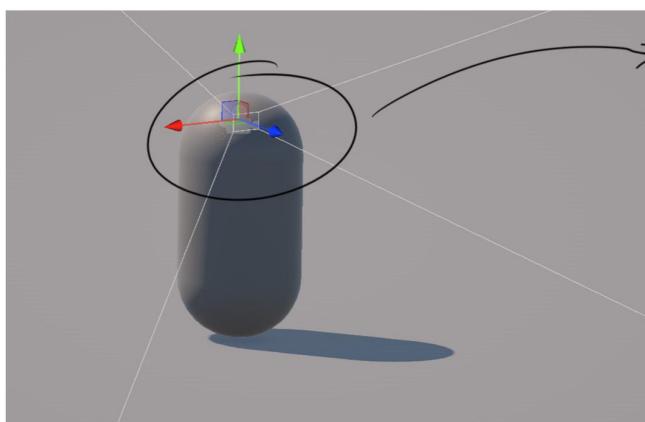


Satircase can be used

GAMEPLAY MECHANICS

The gameplay mechanics of this game very simple like walk,jump,run,sprint and hold object and some of the other mechanics used in the game are as follows:

Mechanics 1: Basic movement and camera rotation



Main camera attached on top of the character's head to make it a first person game

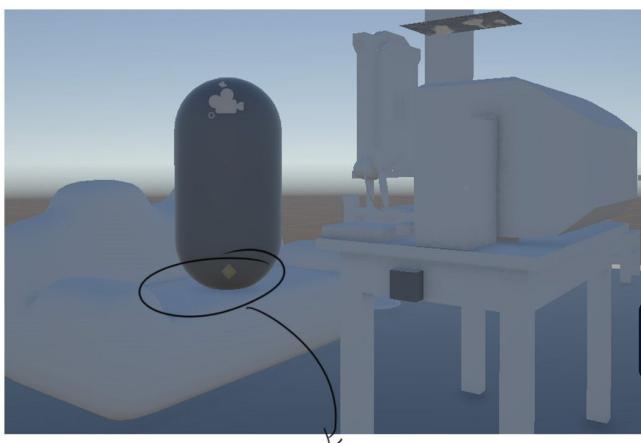


W,A,S,D are used for the basic movement of the player



Mouse can be used for the 360 view

Mechanics 2: Sit on the sofa

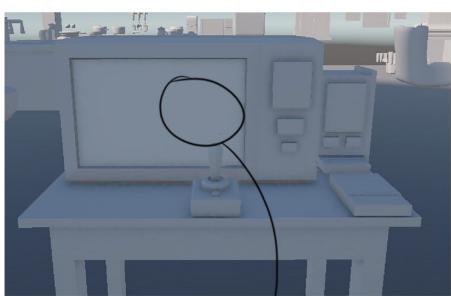


E The player can access the sofa places in the main hall just by moving next to it and press the button E to sit on the sofa. Again pressing the E button can help the player to get out of the sofa and stand on it



On sitting on the sofa the player can see the tv in front of him just like in real life and access the tv, turn off/on and change the channels

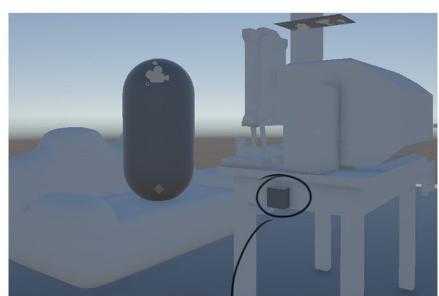
Mechanics 3: Turn off/on the tv and change channel



X The player can turn off/on the tv just by press X button

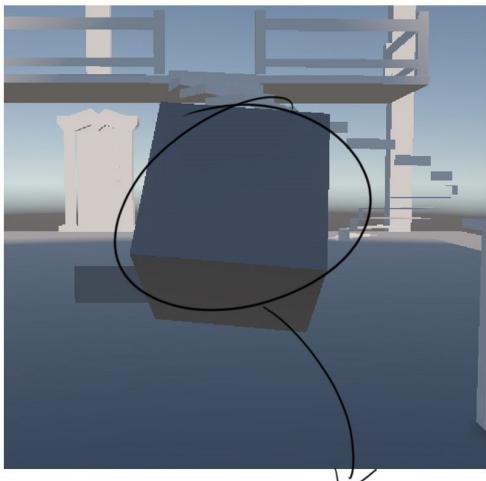


C The player can change the tv channels



When the player appears next to the tv the player can change the channels because this button triggered by the player

Mechanics 4: Holding an object



The player can hold objects in hand by the player and throw it anywhere



Side view of the player holding in scene view

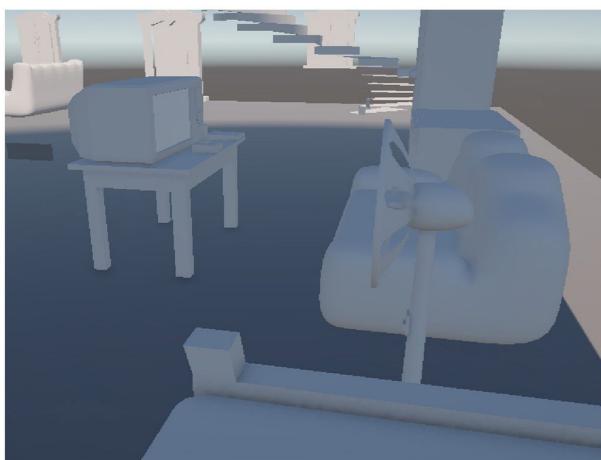
Mechanics 5: Sleeping on bed



The player can press E button to sleep on the bed



The player can use the mouse to access the view while sleeping

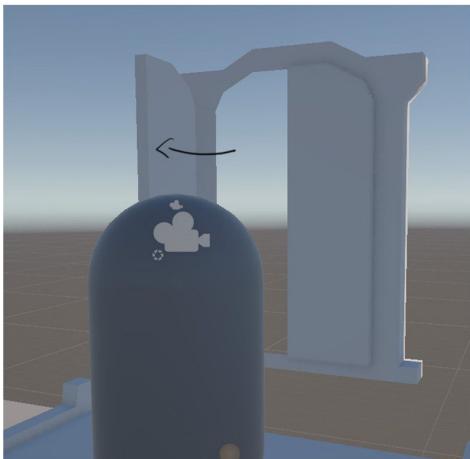


The player can press E button to get on the bed



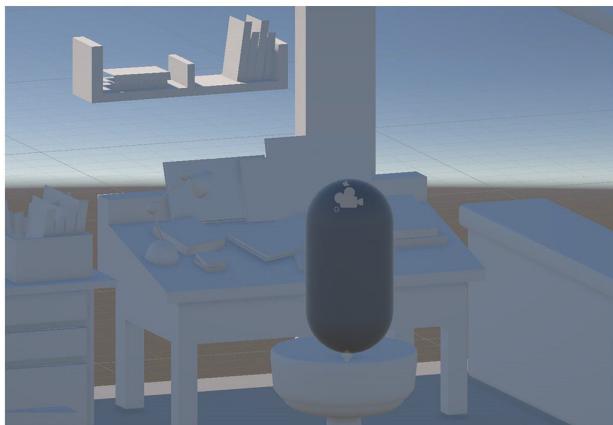
The player can stand on the bed to exit

Mechanics 6: Opening and closing of windows

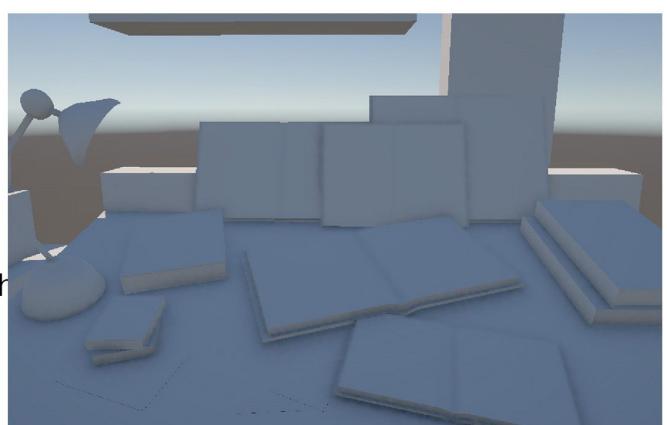


The player can open and close the window just by pressing on them with the left click on mouse

Mechanics 7: Sit on the chair next to study table



The player can sit on the chair that is placed next to the study table just by pressing E button

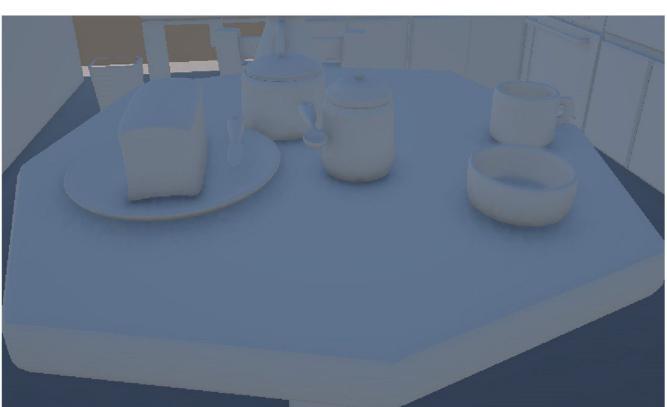


First person view of the player seeing all the books and notes placed on the study table

Mechanics 8: Sit on the chair next to dinning table

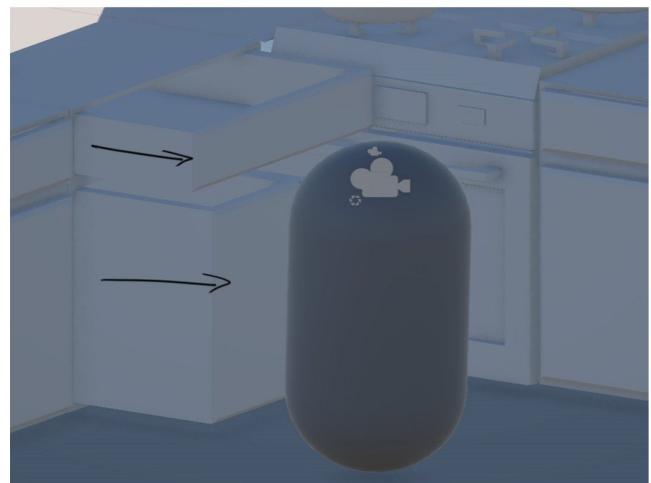


The player can sit on the chair placed next to the dinning table just by pressing E button



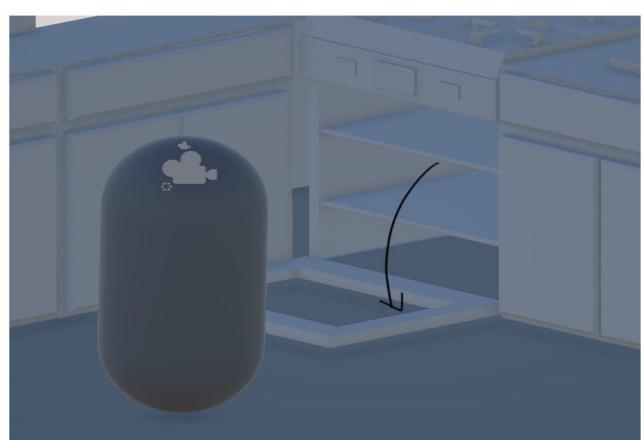
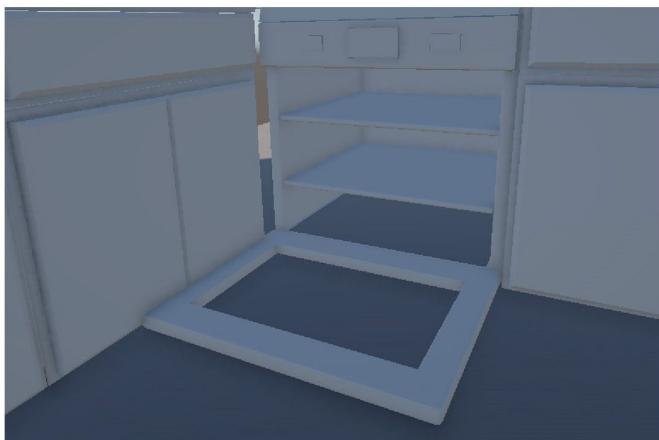
First person view of the player seeing all the food and plates placed on the table

Mechanics 8: Open and close the kitchn cabin



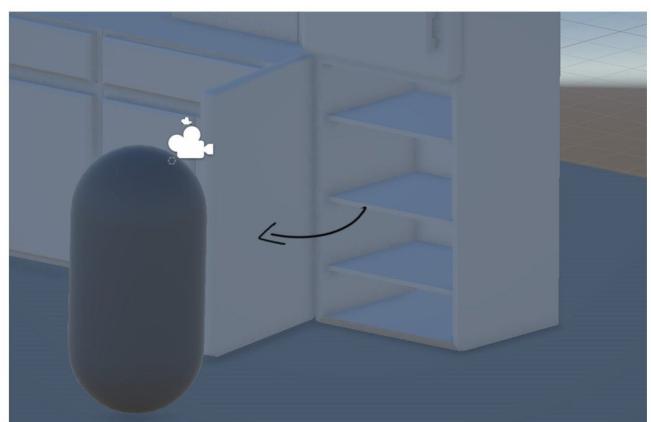
The player can open and close the cabin in the kitchen set just by pressing the left click on them

Mechanics 9: Open and close the kitchen stove



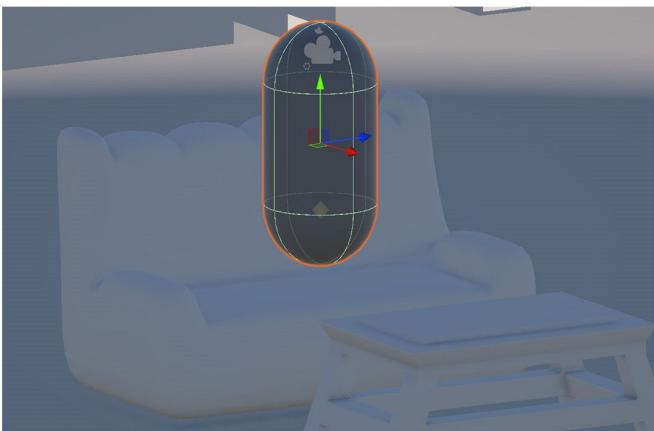
The player can open and close the kitchen stove from the kitchen set just by pressing the left click on them

Mechanics 10: Open and close the fridge

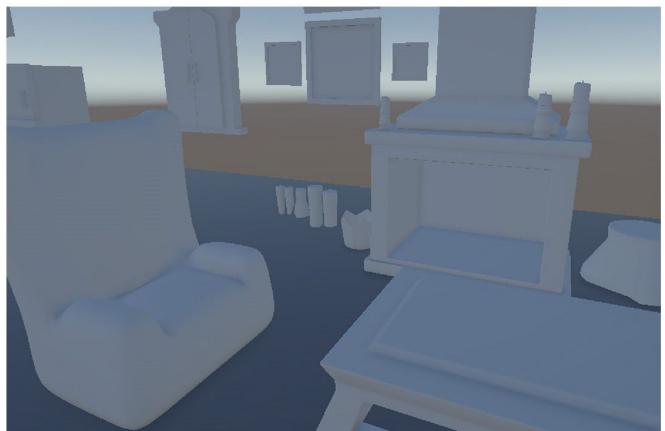


The player can open and close the fridge from the kitchen set just by pressing the left click on them

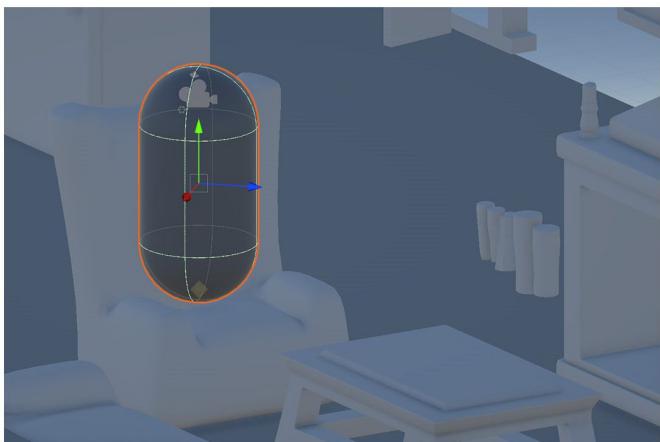
Mechanics 11: Sit on the any of the sofa next to the fireplace



The player can press E button to sit on the sofa



The player can use the mouse to access the view while sitting on sofa

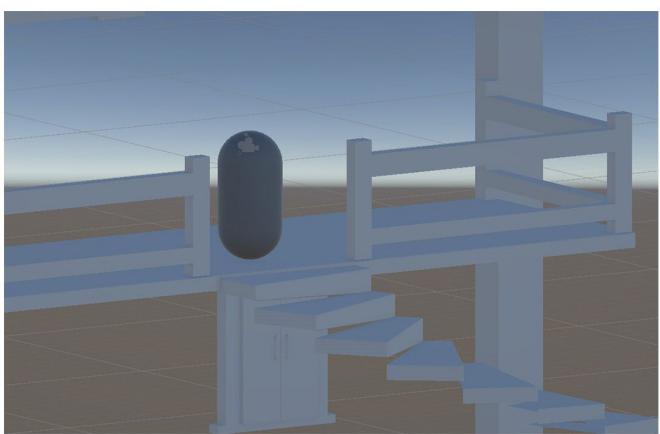


The player can press E button to sit on the sofa

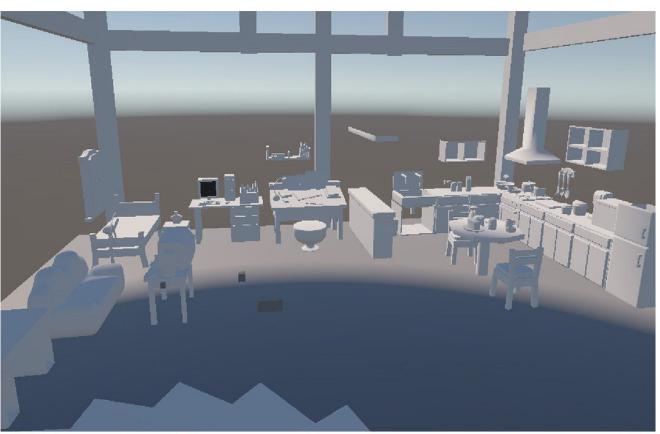


The player can use the mouse to access the view while sitting on sofa

Mechanics 12: Jump mechanics



The player can slightly jump by pressing space bar



SIMILAR GAMEPLAY EXAMPLES

These games are some of the similar games that offer a blend of cozy atmospheres, engaging gameplay, and themes that resonate with nature and conservation, providing experiences similar to the envisioned concept of Pip's Butterfly Quest.



Other game such as the **Sims** game franchise, **Grand Theft Auto** and **Sleeping Dogs** games also allows the player to interact more with home assets such as using washroom, changing cloths, using kitchen and watch tv.



Watching TV in GTA



Changing clothes in Sleeping Dogs



House chores involvement in Sims



Assets customization and placement

WHY THIS ART STYLE

Unique & Memorable Aesthetic: Stylized art gives a game a distinct visual identity, making it stand out from realistic designs. Games like Animal Crossing, Hollow Knight, and The Legend of Zelda: Breath of the Wild are recognizable because of their artistic style.



Timelessness: Unlike hyper-realistic graphics that can age quickly as technology advances, stylized art remains visually appealing for years (Wind Waker still looks great today).



Creative Freedom: Developers can design whimsical worlds, exaggerated animations, and vibrant colors that wouldn't be possible with realism, allowing for more imaginative storytelling.



Emotional Impact: Expressive, exaggerated art styles help convey emotions more effectively, making characters and worlds feel more alive and immersive ("Journey" and "Ori and the Blind Forest" use stylized visuals to enhance their emotional storytelling).



Stylized game art is a creative method that prioritizes artistic expression over photorealism. Stylized art aims to emphasize shapes, colors, and proportions to create a distinct visual identity. This art style is frequently employed in various games, from independent ventures to big brands, and provides endless potential for creative development.



Apart from other stylized game art there are other popular style game and they are:



Cartoon



Realism



Hand Painted/Watercolor



Low Poly



Fantasy Realism



Pixel Art



Hand-Drawn



Vector Art



Isometric Art



Silhouette



Digital Painting



Chiptune-Inspired Art



Monochromatic



Paper-Cutout



Silhouette



Rotoscoping



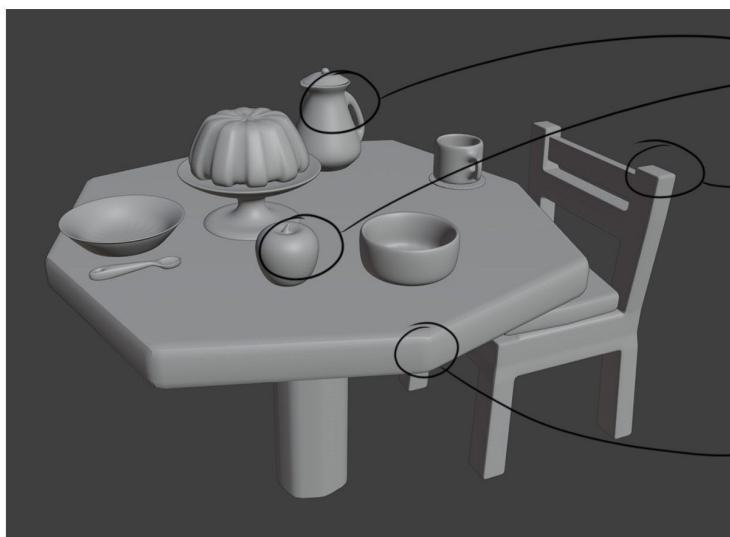
Gothic 2D Art

TEXTURE REFERENCE

Texture references are taken from the games like **Animal Crossing**, **The Legend of Zelda** and some of the movie references and 3d miniature modellings from pinterest.



These references are mostly taken from the 3d models which follow the way of simple and minimalistic art style



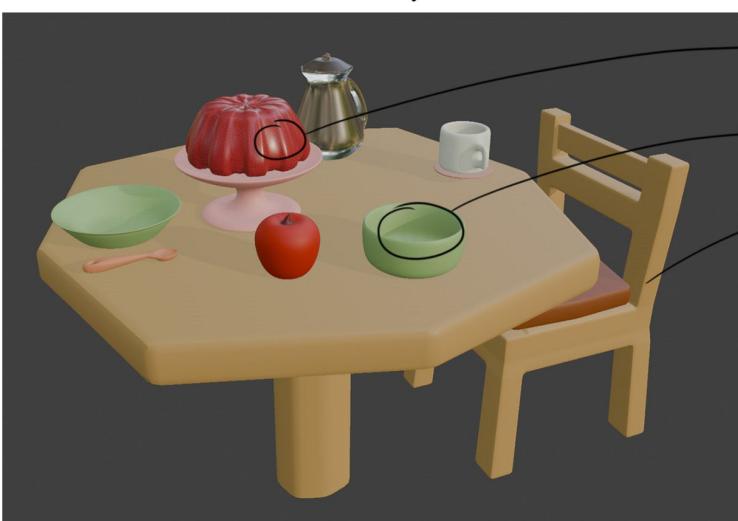
Smooth modelling

Simple modelling

Beveled Edges

Trial modelling

Game plot, mechanics, assets and texturing are done in the most simplified way as many movies, 3d models and game references. The assets are built on the simple assets building method with less detailed and simple on the modelling part



Simple Lighting

Simple Shading

Solid coloring

Trial texturing

The trial modelling and texturing is done in a manner of simple and minimalistic way to express the art and texture style of the game. Most of the assets follow a solid color and less detailed

UNITY LIGHTING AND ENVIRONMENT

A Directional Light in Unity simulates sunlight or moonlight by casting parallel light rays across the entire scene from a specific direction, rather than from a point. It evenly illuminates all objects regardless of their position, making it ideal for outdoor environments. Directional lights can cast both soft and hard shadows and are typically the main light source in many scenes due to their wide coverage and consistent lighting effect.



This is the output of the game with the basic Directional light where equal light is displayed to all the assets and the environment in the game.

UI ELEMENTS USED IN THE GAME

The UI is mainly inspired from the Animal Crossing game



Dialogue Box pop up from the bottom of the screen



Instead of mobile a communication device to connect other players and surroundings



Game title pop up



Switching of inventory items around the player



Moving video in the background with lofi music



Player can teleport just by scrolling the screen sideways



Player customization

Player's health and stamina



UNIQUE SELLING POINT

Integrating the cozy, life-simulation elements of Animal Crossing with the engaging puzzle-solving mechanics of The Legend of Zelda can create a unique and enriching gaming experience in Pip's Butterfly Quest.



Cozy & Relaxing, Yet Full of Depth:

In Animal Crossing: New Horizons, players immerse themselves in a tranquil environment, engaging in activities like fishing, gardening, and interacting with anthropomorphic villagers. This open-ended gameplay fosters creativity and personalization, allowing players to shape their island paradise at their own pace.



Pip's Butterfly Quest can adopt this serene atmosphere by offering players the freedom to explore diverse landscapes, cultivate butterfly gardens, and build relationships with various characters. This approach encourages a relaxing yet immersive experience, where players can unwind while delving into the game's rich world.

Dynamic World Influenced by Player Choices:

A dynamic, responsive world enhances immersion and replayability. In Animal Crossing, the island evolves based on player activities, with flora growing and villagers reacting to changes. Similarly, in Zelda, certain actions can alter the game environment, opening new paths or affecting the storyline.



Pip's Butterfly Quest can feature an ecosystem that responds to player decisions. For example, choosing to release captured butterflies might lead to a flourishing environment, attracting more wildlife and unlocking new quests, emphasizing the impact of conservation efforts.

Butterfly Conservation Message:

Integrating a conservation theme can provide educational value and emotional resonance. By showcasing the beauty of butterflies and the importance of their preservation, players can develop a deeper appreciation for nature. Activities like creating butterfly-friendly habitats or participating in in-game conservation projects can mirror real-world efforts, fostering awareness and empathy.



Game would also include multiple choice based dialogues which could influence your character and the flow of the story

Multiple choice



Character of the player

Define relation



Red Dead Redemption 2



Also proper decision making of choosing the conversation between the other NPS character can build a strong bond of friendship or enmity between characters such as in games like **Detroit Became Human** and **Red Dead Redemption 2**

BENEFITS OF THIS GAME

Cozy & Relaxing, Yet Full of Depth: A mix of Animal Crossing's life sim charm with Zelda-like puzzle-solving.

Beautiful & Dynamic World: A living environment that changes based on player choices.

Butterfly Conservation Message: A feel-good, emotional journey about respecting nature.

Game Modes:

Story Mode – A heartfelt journey with a meaningful ending based on Pip's choices.

Free Exploration Mode – A relaxing mode where players can roam freely, discovering and documenting butterflies.

Cozy Village Life Mode – Focus on village interactions, farming, and decorating Pip's home

TARGETED AGE GROUPS

1. Kids (Ages 7–12):

- Why it fits: Cute characters, easy controls, colorful visuals, and a wholesome story.
- Appeal: Encourages curiosity, learning about nature, and problem-solving in a gentle way.

2. Tweens & Teens (Ages 13–17):

- Why it fits: Deeper narrative about letting go, fun exploration, and social-style interactions (like Animal Crossing).
- Appeal: Relaxing yet meaningful gameplay with light challenges and personal expression.

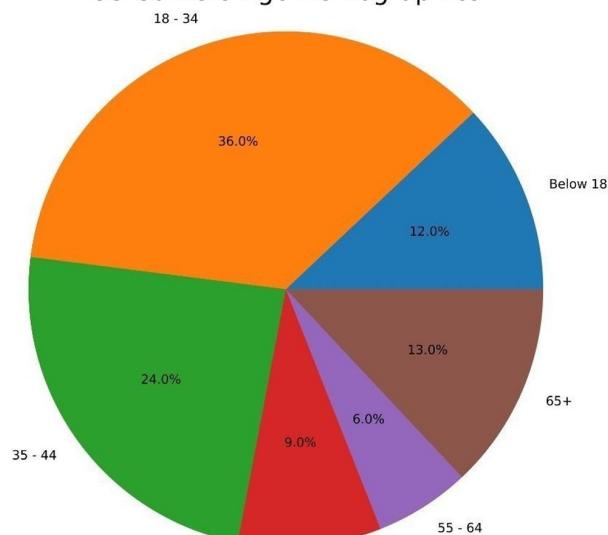
3. Young Adults (Ages 18–25):

- Why it fits: Aesthetic vibes, cozy escape, and nostalgic connection to games like Stardew Valley and A Short Hike.
- Appeal: Emotional storytelling, conservation themes, and customization.

4. Casual Adult Gamers (Ages 26–40+):

- Why it fits: Low-stress gameplay, wholesome content, and relaxing worldbuilding.
- Appeal: Great for stress relief, mindful gaming, and a peaceful experience.

US Gamers Age Demographics



Source:
Exploding Topics
© 2024 Hawk Live LLC

| | Often | Sometimes | Net |
|---------------------|-------|-----------|-----|
| Men | 24 | 23 | 47 |
| Women | 19 | 21 | 39 |
| White | 21 | 20 | 41 |
| Black | 24 | 20 | 44 |
| Hispanic | 18 | 29 | 48 |
| Ages 18-29 | 29 | 31 | 60 |
| 30-49 | 28 | 25 | 53 |
| 50-64 | 15 | 17 | 31 |
| 65+ | 11 | 13 | 24 |
| High school or less | 21 | 21 | 42 |
| Some college | 25 | 25 | 50 |
| Bachelor's degree + | 17 | 19 | 36 |

FINAL OUTPUT



Game View 1



Game View 2



Game View 3



Opening windows



Tv watching by sitting on the sofa



Sitting next to the dining table



Openign the kitchen cabin and stove



Sitting next to the fireplace sofa

PROBLEMS FACED

1. The unity software newly introduced so it took some time to get adjusted with the workflow and interface of the software.
2. The development part was a little bit confusing as the coding is not still familiar to me hence I had to use both ChatGPT and YouTube to clarify doubts and find the proper code for mechanics.
3. Most of the mechanics as per my idea and concept were not working or suiting the game play.
4. Texturing part is still not similar to the expected output as it needs more time on texturing and UVing the models made on the 3D softwares like Maya and Blender.
5. Hand-painted textures are a little bit difficult in processing.

HOW I OVERCAME THE CHALLENGES

1. Proper guidance from the teachers and friends helped me in the development part.
2. Proper texture for now is set with the help of the Blender.
3. Correct YouTube and ChatGPT help in the errors and bugs in the codes.
4. Mechanics were used in the game were taken as reference from the YouTube.

THINGS TO IMPROVE

1. More rooms and assets need to be added to the game.
2. More mechanics and gameplay need to be added to the game.
3. Texturing and UV mapping need to be improved properly.
4. More software and techniques needed to be learned for a proper optimized game-play.
5. More coding need to be learned and used in the mechanics.
6. Better UI elements for a better player experience.

THANK YOU