A terrarium simulator.

Cozy Game…

Design Document

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# Overview

## Game Concept

### Genres

The game will consist of 2D fixed environments, designed to be played on a computer and implemented in unity.

The game aims to maintain a more relaxing atmosphere with emphasis on comfort and self-care referred to as Comfort Gaming.

It aims to introduce complexity with resource gathering and management. This combined with the customisable nature of the game aims to create individual environments the player can lose themselves in.

### Target Audience

The game is aimed towards a casual game audience, where the player does not need to have extensive knowledge or experience with games and game mechanics. It is also aimed towards players who actively seek out games to alleviate the stress of daily life. This is implemented by pulling the player into a cute and natural world where the tasks and goals are simple, optional and repetitive.

### Project Scope

After the duration of the allotted time the game will aim to consist of 2 characters with their own environments with character specific resources. This will be used to contribute to the other character’s environment. These will consist of at least 2 interactable items for each character. All contained within a primary environment.

In summary:

* 1 Main environment
* 1 Farm environment
* 2 Characters
* 1 Character environments x 2
* 1 Character created resource x 2
* 3 Production states per character x 2
* 1 Resource collection item x 2
* 2 Customisable items x 2 options x 2 characters

# Game Components

## Gameplay

### Game Objectives

There are no primary objectives or end goals. Secondary goals will consist of upgrading items within the character space.

### Game Progression

This consists of unlock additional characters and item options to gain more resources that will be used to upgrade more characters and items.

### In-game Graphics User Interface (GUI)

Arrows to swap between customisation options for objects within a character space when it is selected.

UI on top of the tree environment blurred.

A white background with black text

Description automatically generated

A white square with black text

Description automatically generated

## Mechanics

### Rules

Rules that the game abide by.

### Player Interactions

Player will be able to click between environments. Select items to upgrade or plots to plant via arrows next to said objects. Click on the resource crates to collect resources.

## Game Elements

### World Narrative

You are an omniscient being overlooking a tree and it’s inhabitants.

### Characters

List of characters that will be implemented for the game. (Including concept art)

#### Bee

#### Silkworm

### Locations

Areas that will be implemented for the game. (Including concept art)

#### Tree

#### Farm

#### Beehive

#### Leaf pile

## Assets

### 2D Models

List of 2D Models we will aim to have completed for the game.

* Main Tree environment
  + Hive (Interactable)
  + With leaves and sticks (Interaction)
  + Plots (Interactable)
  + Resource Images x 3
* Farm land
  + Plots (Interactable) x 2 characters
  + Different Plot types x 2 characters
  + Character in farmland (Animation) and Visual change (outfits) x 2characters
* Hive environment
  + Bee (Animation)
    - Idle Animation
    - Working Animation
    - Sleeping Animation
    - Walk Cycle Animation
  + Table and chair
  + Bed
  + Wax Frame (Animation)
* Silkworm environment
  + Silkworm (Animation)
    - Idle Animation
    - Working Animation
    - Sleeping Animation
    - Walk Cycle Animation
  + Table and chair
  + Bed
  + Loom (Animation)

### Music

List of scenes or menus that will have background music.

* **Main Tree**  
  Relaxing, happy and simple
* **Farm Music**  
  Muted, wind, outdoor noise, outdoor atmospheric sounds and bird noises
* **Bee Environment**Bustling noise, primary instrument, fast
* **Silkworm Environment**Softer, calmer and slower

### Sound Effects

List of sound effects that will be implemented and where.

* **Environment switch sound – Arrow click between environments**Short click, punch
* **Interaction with item for sound – Click on item to interact with**Bell, light
* **Upgrade sound – When the item is upgrade**Celebratory, Cheery
* **Character movement sound – When character is moving x 2**Bee - buzzing  
  Silkworm – slide
* **Character resource noise – While the character is developing their resource x 2**  
  Bee - Humming, softer buzzing  
  Silkworm – Loom running
* **Character farm noise – While the character is in the garden x 2**  
  Bee – Watering sounds  
  Silkworm – Digging, dirt shuffling

# Game Prototyping

### The Team

***Bi Wan Low (101814341): Lead Programmer/Producer***  
Primarily responsible for implementing mechanics and interface between the art animation and sound. Also responsible for creating and reviewing game documentation and ensuring that the timeline is being adhered to.

***Jessica Harmer (103060612): Game Designer/ Environment Designer***  
Primarily responsible for outlining the rules of the game and what the final product will consist of. Also responsible sourcing and creating environment and background art assets.

***Nicolette Zorbas (102614665): Character Designer/Animator***  
Primarily responsible for creating character assets. Also responsible for animation and leading implementation of character assets.

***Syed Faiyaz(Raad) (102614665): Audio Designer/***  
Primarily responsible for sourcing music and sound effect assets. Also responsible for implementing the art, sound and animation in Unity.

### Task List

##### Environment Build

The kitchen environment (without interactive/animated elements).

* Base Kitchen Sketch
* Countertops & Cupboards
* Base Appliances (Inactive): Fridge, Bin, Door

##### Game UI

The design & incorporation of the task-list & menus.

* Ui display
* Tasks listed
* Hidden success values/completion rates
* Options & Menu Screen

##### Interactive Appliance Incorporation

Adding the appliances for task completion.

* Create assets (toaster, kettle, lights)
* Scripting for various functions

##### Character Design

The tasks involved in the character design & animation.

* Character model
* Walk cycle
* Object interaction animation

##### Character Schedule

The level schedule of the character.

* Formulate schedule
* Test balancing of daily schedule & tasks
* Match to character animations

##### Sound Design

The basic sounds required for the game.

* Background music
* Task done (partial and full)
* Appliance noises
* Homeowner: Footsteps, expression noise
* Basic click/select

### Timeline

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week | Bi Wan | Jess | Nic | Raad |
| 6 |  |  |  |  |
| 7 | Implement Ui & Apply Scripts to Room (Week 7/8) | "Collect SFX, begin implementing Unity Sound System" | "Basic character object interactions, character expressions" | Environment Build (Room & Surfaces) |
| 8 | Develop Character Schedule & Begin Playtest/Balancing | Implement Sounds & Music | Implement Character to Level Build | Other Object Animations |
| 9 | Playtesting/Bug-Fixing | "Continue Implementing Sounds/Finalising Music, Playtest" | Add additional animations for smoothness/cohesiveness | "Expand Environment Design (Inactive Appliances, Door)" |
| 10 | Playtesting/Bug-Fixing | "Environment Build/2D asset support, Playtest" | "Continue animations, Playtest" | "Input final environmental features/designs, Playtest" |
| 11 | Playtesting/Bug-Fixing | "Finalise asset implementation, Playtest/Bug-Fixing" | "Finalise asset implementation, Playtest" | "Finalise asset implementation, Playtest" |
| 12 | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing |
| 13 | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing | Playtesting/Bug-Fixing |

# Further Development

\*\*These will only be implemented if all previous tasks are included, and all parties involved in its development are able to implement these changes safely.\*\*

### Features

Additional Features to be coded into the game.

### Assets

Additional Assets that we would like to develop if there was time.

### Levels

Additional levels that we would like to develop if there was time.

# Appendix