

# DESIGN DOCUMENT

By Chili Turtle for the 2024 Pirate Software Game Jam

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|                                       |          |
|---------------------------------------|----------|
| Introduction                          | 1        |
| Game Summary Pitch                    | 1        |
| Inspiration                           | 1        |
| Player Experience                     | 2        |
| Platform                              | 2        |
| Development Software                  | 2        |
| Genre                                 | 2        |
| Target Audience                       | 2        |
| <b>Concept</b>                        | <b>2</b> |
| Gameplay overview                     | 2        |
| Theme Interpretation (It's Spreading) | 3        |
| Primary Mechanics (gifs updated)      | 3        |
| <b>Art and Design</b>                 | <b>4</b> |
| UI UX                                 | 4        |
| <b>Audio</b>                          | <b>6</b> |
| Music                                 | 6        |
| Controls                              | 7        |
| <b>Development Timeline</b>           | <b>8</b> |

## Introduction

### Game Summary Pitch

Gnomtopia is a Top Down Among-Us Gnome Dating game. where you have to find the imposter gnomes between normal garden

gnomes via gnome patting, before they convert all of humanity into gnomes (gnomes just move when you don't look).

## **Inspiration**

### **Black and White**

God game where you play as a giant hand, you have to take care of an animal, you also can fling around your human subjects.

### **Plants vs Zombies**

Plants vs Zombies has a lot of different zombie units, so the player has to play differently vs different units. Inspiration for different units which makes you play differently.

## **Player Experience**

Play in a city block or suburban area, where the player has to find all the gnomes. **The player has a time limit afterward the gnome king appears and sets every gnome into a frenzy.** The Player has to optimize their gnome patting time, and has to remember the placing of the gnomes, while not damaging the town.

## **Platform**

The game is developed to be released on windows PC

## **Development Software**

- Unreal Engine 5
- Blender for 3d models
- Reaper for all music and SFX

## **Genre**

It's complicated

## Target Audience

Goblins

## Concept




### Gameplay overview

The player controls a giant hand, the player can issue **voice commands**, to command the hand to find imposter gnomes. The start should be relaxed but the further you are in the game, it becomes more frantic and the gnomes become more active (faster movement speed, late game **gnome king** activates all gnomes on the way, you have to “gnome” talk him into submission). You can collect **damage upgrades** (Plants vs Zombies falling sunflower) to increase your damage, and size (more aoe), which is a double sided sword because you could end up destroying the city. **Events** at the end of the round. An event can trigger things like, “**GIANT GNOME**” (all the rest gnomes form a giant gnome, and becomes a ), which destroys the city and you have to protect it.

### Theme Interpretation (It's Spreading)

**'It's Spreading - The Gnomes spreading through the city and the player has to stop them, also the blood left behind by gnomes can be spread around by other gnomes.**

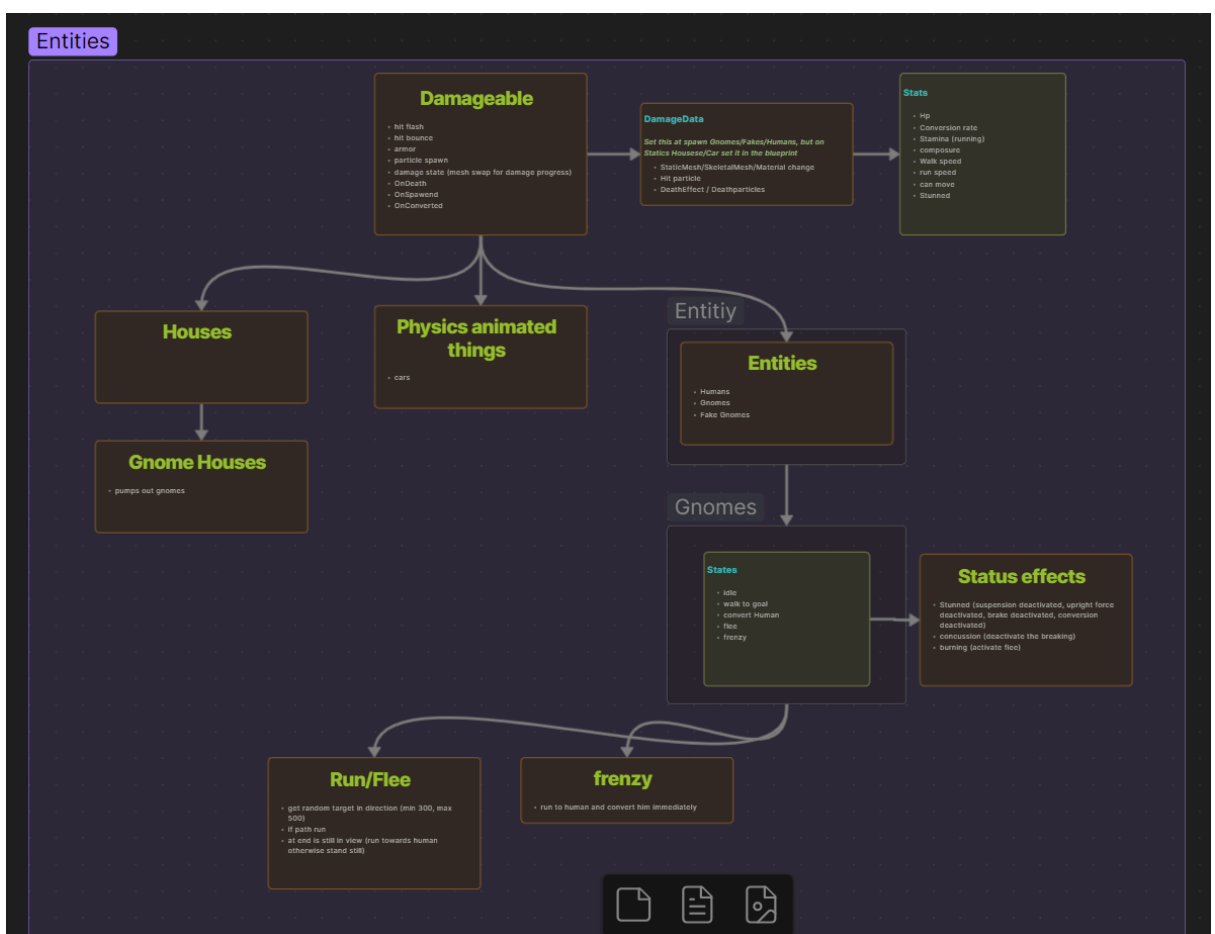
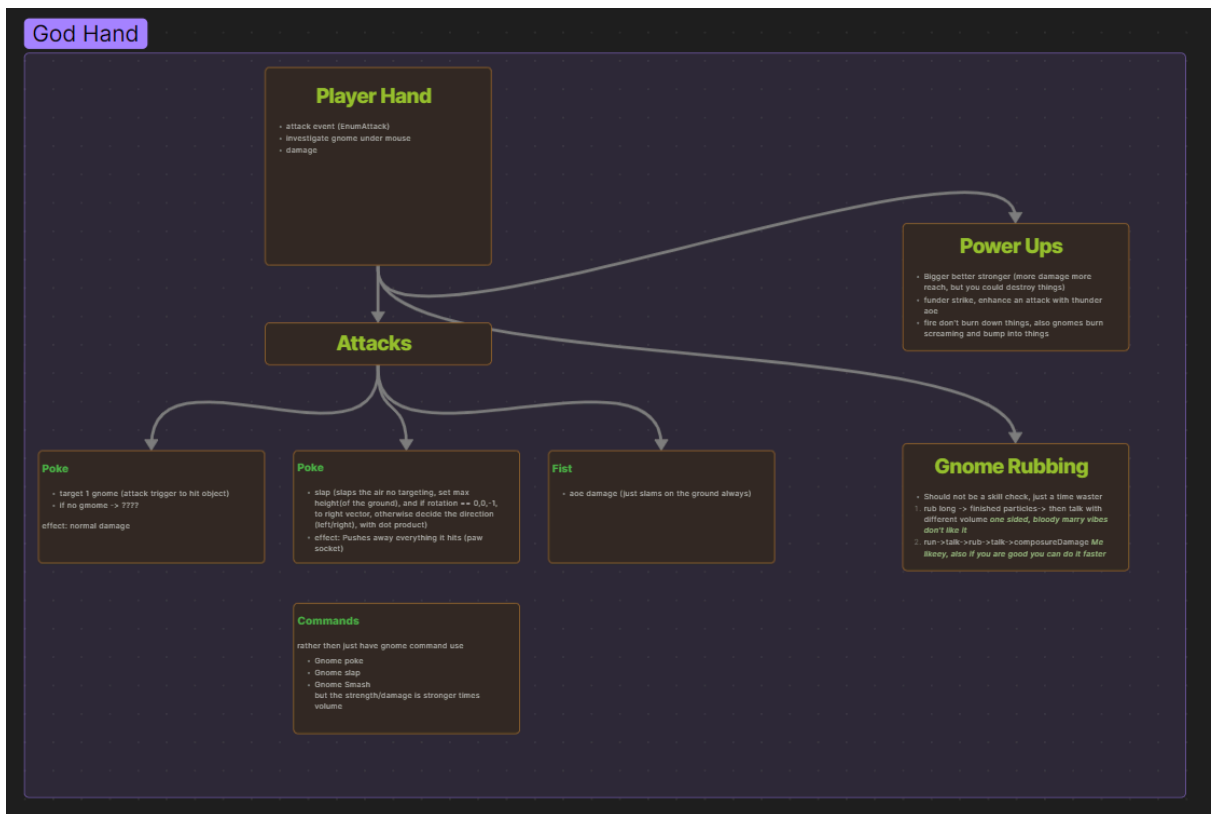
## Primary Mechanics (gifs updated)

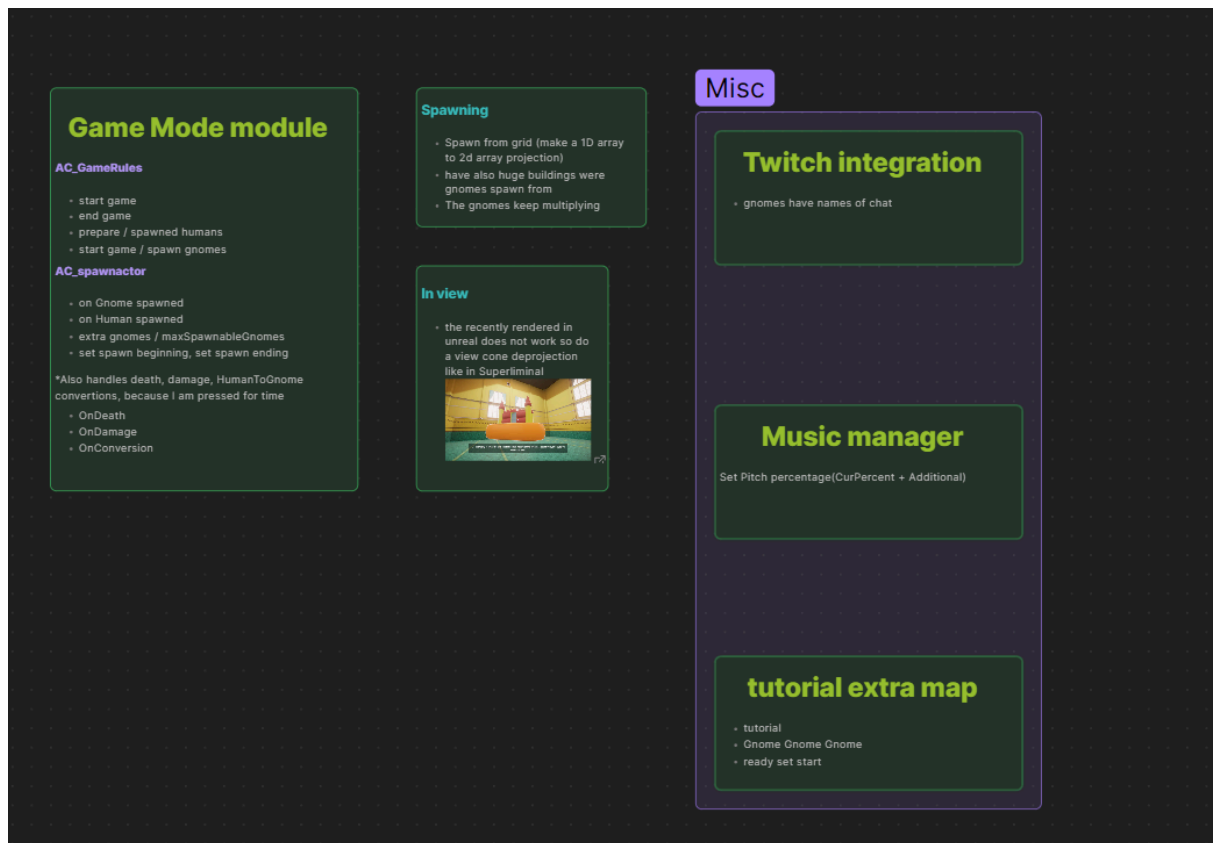
| Mechanic  | GIFs  |
|---|---|
| <p><u><b>Poke</b></u></p> <p>Precise attack, following the Gnome, less chance to hit building. Decent damage</p>        |    |
| <p><u><b>Slap</b></u></p> <p>Huge swing tons of knock back. you can use this to knock gnomes into things.</p>           |   |
| <p><u><b>Fist</b></u></p> <p>fist with shockwave aoe, huge damage but slow (should this just activate a shockwave?)</p> |  |

## Voice commands

rather than screaming “gnome” to activate attacks, have normal commands “Gnome Poke”; “Gnome Slap”; “Gnome Fist”, could be confusing for players.

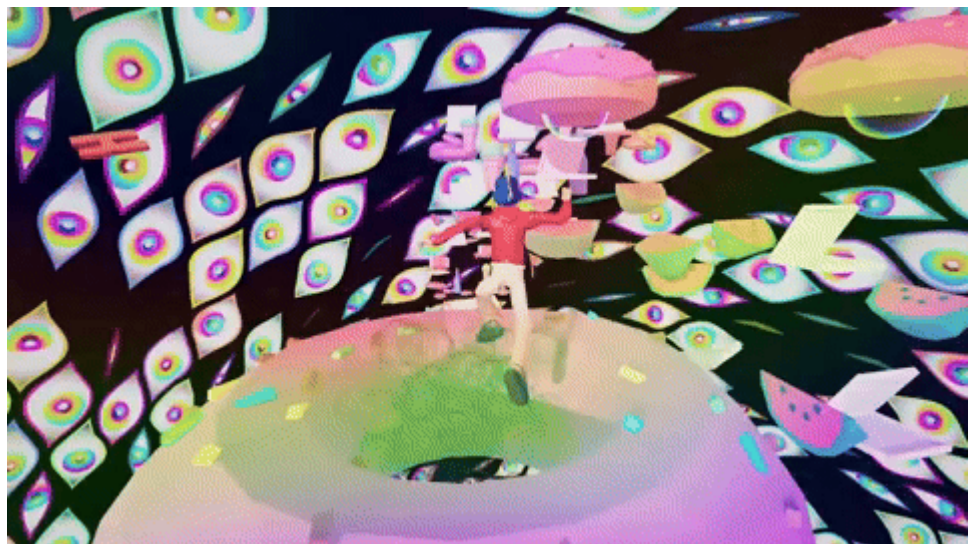
# Some mechanic tree from my Obsidian Notes





## Art and Design

Gray and trist city, when gnomes take over everything appears in a rainbow color



# UI UX

Living UI is represented as a sun but becomes more demonic the more humans die.

| Pic   | Source  |
|---|---|
|    | Soul eater sun                                  |
|  | soul eater moon<br>(some blood gushing is fine) |
|  | one piece big mom<br>sun (happy)                |
|  | one piece big mom<br>sun (angry)                |

# Audio

## Music

Not sure about music I could just use city soundscapes, but when some gnome frenzy happens, some quirky little classic tune with pizzicato strings or, some happy bossa nova style tune

## Controls

### Mouse

Left click = Move

Double click = zoom to gnome

### Voice Commands

"Gnome" = Attack Gnome

"Gnome"(in zoomed mode) = swooning the gnome

# Development Timeline

## MINIMUM VIABLE PRODUCT

| # | Assignment                    | Type     | Status     | Notes  |
|---|-------------------------------|----------|------------|--|
| 1 | Physical Character controller | Coding ▾ | Finished ▾ | make a capsule up right with forces  |
| 2 | Attack State machine          | Coding ▾ | Finished ▾ | is finished but should be reworked again maybe use the build in unreal's state machine |
| 3 | 1D grid spawner               | Coding ▾ | Finished ▾ | everything is finished but, has to be reworked   |



| #  | Assignment   | Type     | Status        | Notes  |
|----|--|----------|---------------|--|
|    |  |          |               | so I can ignore street 3d models   |
| 4  | pathfinding  | Coding ▾ | Finished ▾    | RVO system does not work with custom Pawns, therefore I need a custom avoidance algorithm (maybe boids with niagara distance fields and octree optimization) |
| 5  | 3D models  | Art ▾    | Finished ▾    | used base models I have to make some from scratch and remodel them   |
| 6  | End time frenzy  | Coding ▾ | Not started ▾ | still have to do it  |
| 7  | Gnome king model   | Art ▾    | Not started ▾ |  |
| 8  | Living 3D UI   | Art ▾    | Not started ▾ |  |
| 9  | Frenzy rainbow shader  | Art ▾    | Not started ▾ |  |
| 10 | adaptive music (pitching)  | Art ▾    | Not started ▾ | pitch the music higher for every 5 gnome on the screen   |
| 11 | Gnome state machine (either custom like my hand actions, or maybe ue build in) | Coding ▾ | Not started ▾ | Things like is concussant (so the slap force is applied correctly)   |