# 

Pepper & Carrot Tactical RPG

Game Design Document

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# Story

## Main Argument

Pepper wakes up one day to find that the magical land of Hereva is threatened by the witches of Chidike, she along with her friends must fight to save their home world.

## Story Progression

This is a rough schematic of how the story will go, each act should have at least one boss.

### Act I - Loss

Pepper wakes up and finds that carrot is missing, after looking for him in her house she finds a strange figure escaping from her house carrying carrot on top of a magic broom.

Pepper goes to Squirrel’s end and she finds that the locals have lost their pets too, she is told to head to Qualicity, as they are running an independent investigation and could use her information.

She goes to Qualicity to search for answers and she meets with Coriander, Coriander and pepper decide to go to Komona to invesitigate and see if they can get some help from Saffron .

### Act II - Reunion

On their flight to Komona pepper and coriander are attacked by an unknown forces and crash-land on a forest and have to walk their way to komona.

On their way to komona they find an outpost protected by magical creatures, in this outpost they find carrot.

This is basically good old RPG filler.

Pepper and Coriander arrive at Komona, Saffron is really angry because some important city officials are discussing this situation in Kerberos, but they won’t tell what the contents of the meetings are, they decide to go to kerberos, to be able to get in they need a special spell, luckily Saffron knows exactly where to get it, pepper uses carrot to get through a small open in a rich person’s house to get a paper where the spell is written.

They all go to Kerberos, where they find they have all been attacked by strangely looking creatures, after fighting them, and recovering Mang0, who was conveniently carried by them they are told they are creatures created by the witches of chidike, after learning the story behind what’s been happening lately, and learning there’s only one way to stop this, to go to the land of Chidike, through a portal in the land of the setting moon and negotiate, however for this they will need a legendary scroll that is found in the Desert of Eodroe

### Act III - Savior Streak

On their way to the desert they intercept a Chidikian airship carrying prisoner pets and herevans, the airship is crewed by witches of Chidike, their original plan is to keep going, saying that the airship is the least of their worries, however Saffron states that she feels Truffel is in the airship.

After finding truffel in the airship they leave it off to a herevan from the airship that knows how to pilot it so he can bring the pets to Komona.

### Act IV - Shining moon

The group arrives to the land of the setting moon, here they are ambushed by a group of chidike witches and captured.

While at “jail”, they hear a strange noise, it is revealed to be Shichimi and Yuzu, who have investigated the camp and have come to rescue them.

They are caught before escaping, and they engage in battle against the witches.

After defeating the witches with the help of Shichimi and getting the scroll from the witches Shichimi guides them to the door that leads to the world of Chidike

### Act V - Twin Suns

Once in chidike they meet a bunch of local witches, those witches explain them the story of what happened in Chidike and they join the group to help them fight against Asra.

As they get closer to Asra the resistance gets bigger, but nevertheless they are able to get through and fight Asra, the Chidikian witches are defeated almost immediately.

Asra summons the demons of Chaosah, they are the defeated and then she fights by herself.

After being defeated King Acren appears and orders Asra to be judged, however Pepper interposes this, and makes King Acren attempt to have a better relation with Chidike.

Act VI - Epilogue

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## Twists

### Asra and Pepper

Asra(Or mint) is actually Pepper’s sister, but this is never stated in the game, players will need to figure it out.

She’s not really Pepper’s biological sister, but a clone of Pepper made by a Hippiah magician.

## Characters

Check [the wiki](https://github.com/Deevad/peppercarrot/wiki)

# Environment design

Entering buildings should be done in a mixed way, certain houses can be entered from the side, when you are outside the house you will see the building, but when you get near the door the building graphic will fade out and a sidescrolling view of the interior of the house will appears.

Certain other buildings can be entered by traditional front-facing doors, when Pepper is in front of them she can press a button to enter them.

-TODO

# 

# Gameplay

## Stats

Characters have the following stats:

-Vitality

Health, no cap.

- Power

Increases the attack’s property (healing or damaging)

- Intelligence

Allows the character to have more Rea and have a small bonus damage when using right attack types on right enemies.

-Pet bond

Increases effectiveness of pet-based attacks.

- Speed

Makes stuff fast

Each character has those base stats, except pet bond, which is exclusive to the main characters.

### Calculation

#### Stats

Each stat is calculated using the following equation:

RawValue is the value of the character’s ability,

The multiplier states how much that character’s skill grows during the game, usually ranging from 50 to 200.

#### Creatures

Creatures have randomized stats within a certain range.

#### Leveling up

EXP Formula:

If the value is smaller than 1 it’s moved up to 1

T\_Lv is the target level, C\_Lv is the character’s level

D is a modifier used if the target is killed with that attack

When leveling up the character gets a boost in all stats, however in the ability tree the player can chose nodes that will give him specific stat boosts.

This means that:

The smaller the growth constant the bigger the level up bonus is.

## 

## Skill tree

The skill tree allows the player to unlock bonus and customize the path the character is heading, when the pet is unlocked pet skills are unlocked and the pet sub-tree is unlocked too.

## Inventory

The inventory will be divided in many categories:

### Potions

### Quest items

### Alchemy recipes

### Mehr

### Misc

## General Gameplay Explanation

Moving in the overworld is done in a platformer, side scrolling fashion, the player is able to go into houses and interact with the world and characters.

The player carries a map, a spellbook and can also carry potions.

Alchemy can be performed in Pepper’s house and in alchemy stations in the overworld.

## Combat

### Turn based

Advantages:

-Easy to implement

-Does not require many animations

-Would allow for multiple ally battles without having to code a complex AI.

Disadvantages:

-Hard to balance

-Must be done carefully to not feel boring (no korean grinding, good non-rng based grinding).

### Mechanics

Fighting is similar to the Mario & Luigi games, first the player acts on their turn, the rotation is a simple classical rotation with the final fantasy time twist, certain entities can attack faster,, when attacking the user can press at certain points to deal more damage, and when being attacked to parry the attack and receive reduced damage, some attacks cannot be parried.

### Balancing

To balance defensive characters without removing their parries by receiving a smaller penalty.

## The house concept

### Crafting in the house

Pepper can always go back to her house, it’s a safe place where she has tools to perform various tasks, from alchemy to getting upgrades to her equipment, those same artifacts are also found around the world, but her house has them all and are unlocked when pepper finds the first one, this is to avoid the user from feeling the frustration of only being able to craft X potion in a certain place, there can be a few “creation stations” that are unique because they can only craft certain objects (think the skyforge in skyrim) but these should exist in a very small number,

### Teleporting

Pepper can teleport from her house to marked places by using magical portals.

## Pseudo-open-world

The game works in a pseudo open world manner, it’s not really open world -after certain parts of the game you might not be able to go somewhere you could go before-, the game’s quest system only points towards primary quests, this way the users can find secondary, optional objectives by their own, but they are not necessary to complete the game and they serve just as an expansion to the story and the world.

## Magic

### Solving the Reality equation

The equivalent of mana in the world of Pepper & Carrot is called Rea, Rea however is very different from mana, as it is limited and can only be obtained in tedious and long processes, we need to find a elegant solution to the problem, because as stated in the wiki:

“Rea use is must be replenished from time to time. While Rea can be replenished in various ways (meditation, careful focus on a project, dedication to a project, etc.) these take time and effort to achieve. Beware anyone who claims to have invented a way to regenerate Rea without effort.”

How it will be handled:

* Make Rea be recovered by doing pretty much anything, as it is stated that “putting work into something” is the way to regenerate it, that way accumulated Rea will eventually form a good influx of it and won’t lead to an anxious feeling of always running out of Rea.
* Make Rea regenerate in Pepper’s house by meditation.

## Game mechanics

### Pets

In the story the pets for all the main characters have been kidnapped by the witches of Chidike, all pets give new in-battle abilities to their owners, check the Carrot section for a special situation.

### Carrot

Pepper can put carrot down allowing him to walk around and move in the world by his own in order to access certain restricted parts of the world.

# Sound

|  |  |
| --- | --- |
| Sound | Description |
| Footstep grass (walking - running) |  |
| Footstep wood (walking - running- |  |
| Flying |  |
| Wind blowing in the forest |  |
| Birds |  |
| Door screech |  |

# Music

## Themes

Music can be made for each level, containing themes for each character in the game. When a certain character is present, a melody about that character can be included.

## Actions

Concerning the actions we can split up the music in layers of instruments. When an action is performed, for example when a fight starts, an additional layer of music can be added (unmuted). Let’s call it an action-layer of music.

This can best be achieved when this additional layer of music is unmuted at the right time. Music is structured in themes and bars. When an action-layer is activated by starting the action, it will give a bad effect if it starts out of the structure of the overall theme. This means that the software should best know when a bar begins, and it should know the tempo of the music. For example Theme A has 60 bars of 4 beats at a tempo of 120bpm. When a player starts a fight by the press of a button between beat 3 and 4 of bar 10, the action-layer should not be unmuted at that moment, but at the first beat of bar 11 otherwise the music would sound quite off rhythm.

Maybe this can be achieved by placing this data (beats per bar, amount of bars and tempo) in the tags of the audio files. The game software reads the metadata and simply counts.

## Possible music-layers

* Basic layer
* Battle layer (how does the battle happen? Potion - spell - hand-fight - weapons (sword, knife, random items)
* Low health layer
* Boost layer

# Art

## Art style

The game’s art style is based on the art style of journey.

## Animation

The game’s animation is done making puppet-like character rigs inside the Godot game engine and the animation is also done in-engine, this allows for animation blending to make animations look better and it also allows for more rapid animation prototyping.

### Animations sheet

TODO - List of the animations per character, enemy and other interactive elements of the game.

#### Oveworld animations for pepper

|  |  |  |
| --- | --- | --- |
| Animation | Purpose | Notes |
| Idle0 | Looping idle animation |  |
| Idle1 | Not looping idle animation | To be played randomly when idling |
| Walk | Walking animation |  |
| Run | Running animation | Will be blended with the walk animation for joystick users |
| JumpS | Jump start | Not looping, to be done while ascending |
| JumpL | Jump loop | Plays looping after the JumpS animation ends and loops until hitting the ground |
| JumpE | Jump end animation | Jump end animation, player can move out of this animation to cancel it, has high blending ratio with Walk and JumpS |
| CarrotPutdown | Puts down carrot | To be used when controlling carrot |

## Cinematics

Cinematics are built in a similar way to Child of Light, you can have the character walking with speech bubbles (this is achieved with animation functions in godot) or you can have visual-novel like closeup cinematics, both are extremely cheap, because they allow for immense reuse of assets without making the game worse and allow for longer speeches.

Examples:

[VN style cinematics](https://youtu.be/KBHq_EVPa-U?t=437)

[World cinematic](https://youtu.be/KBHq_EVPa-U?t=252)

## Scenarios

Check [the wiki](https://github.com/Deevad/peppercarrot/wiki/Places)

## 

## General recommendations

· Use spritesheets: OpenGL performs better when using big textures instead of many smaller ones.

· Use as much open source software as you can.

# GUI

Minimalistic UI, with as many elements off the screen as possible, make things come up as needed so that the user can focus on the game world and looking at it instead of the UI.

### 

# Tools

We encourage the use of the following tools, especially for art:

Art: Krita (or krita gemini)

Sound & Music: Ardour (4), Linuxsampler, Audacity, Musescore, lilypond

Communication: Slack

Meetings: Discord

Programming IDE: Any IDE will work, although it’s usually the best idea to use Godot’s built in IDE.

Game Engine: Godot

Planification: Taiga

File storage: Google drive

SCCS: Git

SCCS host: Bitbucket