Overview

For this build, we would like to simulate the effect of navigating a 3D space through the use of 2D assets or Environment. We would like to produce a Cyclical Resource Management game, similar to Stardew Valley in combination with Plants vs Zombies.

<u>So what is this game really about?</u>

The end is upon the world and everything within the world is dying. The player is giving the role of the restorer and must use biotechnology to help restore the world from its near doom. However, there are creatures that attack during the night because they're threatened by the restoration of world because they thrive better in the dead world as they will cease to exist should the player fully restore the world.

The player can explore 3 different areas within the world. These areas each have different resources that are unique and produce either weapons or biotechnology when combined with each other.

Continuation of Overview

The world runs on a daily cycle and this cycle is divided into 4 phases. During the different phases, different resources either have more benefits, or accelerate in growth and certain areas present dangers to the player.

Waves of creatures will attempt to attack the player's home base, when they are awake and most active - in the night. However, players will not know when exactly they will strike during the night phase, but will still have the opportunity to ready themselves and prepare for an attack.

Weapons and force fields can be built, by farming, collecting and combining resources. Any damage done to the home base, will have an impact on the resources and in turn, decrease the progression of the restoration of the world.

Gameplay Loop

Farm/Collect Resources

Restore Area

Defeat Enemies/Defend Area

Progression Loop

The progression loop refers to how players will progress within the game which will eventually lead to the endgame.

This progression loop affects three major aspects of the game:

- The weapons system,
- the environment and,
- the daily cycle'.

The weapons system

- Players will have one weapon at their disposal which, in turn, will be able to perform different functions.
  - For example, imagine the player using a bow and arrow. When the player has arrows at their disposal they can shoot the arrows.
  - When the arrows have been depleted, players will then use the bow as a staff to perform melee attacks.

The weapons system (*continued*)

- We chose this system to enable the player to always a way to defend themselves from the waves of enemies while simultaneously giving players a choice in their method of attack.
- This weapon can be upgraded using the biotechnology that the player has collected.

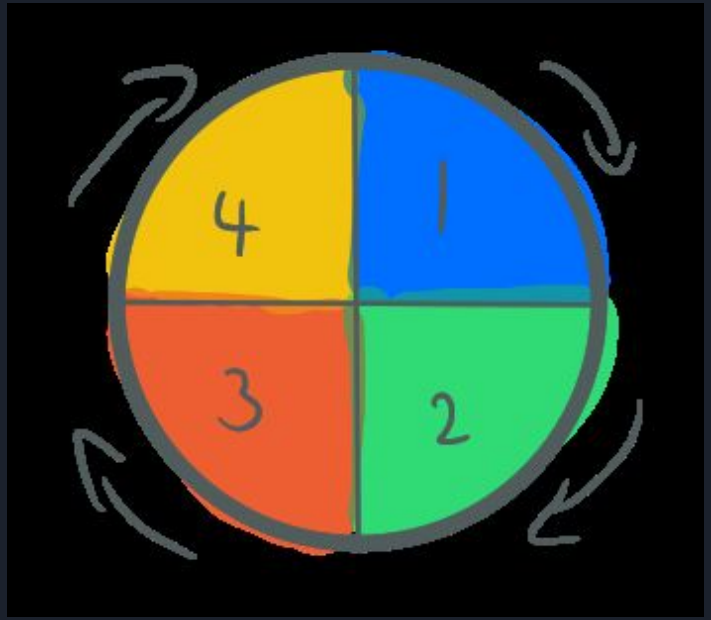
The environment

- The game will consist of different areas that players will be required to navigate.
- Players will farm for biotech in the main hub while collecting the biotech from the other areas in the game.
- Each hub:
    - has a different type of biotech that can be used for various purposes,
    - has an alien that patrols the area to prevent the player from successfully collecting the material
    - these aliens will respawn every time players re-enter an area

The ‘daily cycle’

The world runs on daily cycle. The cycle is divided into 4 time periods. During the different periods and different resource.

- The diagram on the right is a simple representation of how the daily cycle will operate.
- The first, second and third periods will determine which resource is available to the player (as mentioned above).

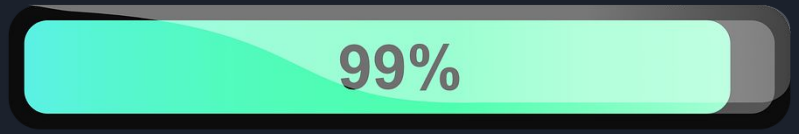


➔ While the fourth period is ‘nighttime’. This is the period where the aliens will attack the player’s main hub in an attempt to destroy the progress that the player has made to restore the world.

➔ This is because the sunlight depletes the alien’s energy thus resulting in very few of them out in the day.

The ‘daily cycle’ *(continued)*

- ➔ During the nighttime, players will have to fend off the waves of aliens to continue the world’s restoration
- ➔ When the fourth period is over, the daily cycle restarts with the first period as the waves of enemies stop attacking.



Progress Bar

The progress bar shows how close the world is to being restored.

Enemies inflicting damage on the hub reduces the progress bar.

The End State

There are two ways in which the end state can be met:

- a win - restoration of the world or
- a loss - failed to restore the world and as a result, creatures live and multiply.

The End State *(continued)*

- A win would mean that the progress bar has been filled and the player has successfully restored the world. This means that the creatures will die as they cannot survive in the new world.
- A loss would mean that players have died or the main hub has been destroyed. Thus resulting in a scenario where the world cannot be destroyed and the world can no longer be restored.

Player Interaction

The player interacts with various aspects within the game.

Firstly, there is an interaction between the player and the environment.

This takes place by having the player walk around and interact with the three different areas, as well as their home base.

- Farming - the player goes to certain areas to plant “Biotech” seeds or energy and waits for them to grow. After this, they collect these resources and store them.
- Amending certain areas - Certain areas need to be amended depending on which phase of the day it is. This is done because some resources in certain areas, don’t flourish well in other phases of the day, example, energy will not be produced when the sun is not shining, hence solar panels need to be put in place.
- Restoring - Through the use of resources that include various biotechnology and energy , the player can use this to add more substance into the deteriorating world. This is how the progression of the world is measured.

Continuation of Player Interactions

The player also interacts with creatures as well as weapons during combat

- Creatures - the player interacts with the swarm of creatures that come to attack during the night phase. The player's aim is to kill them off before they destroy resources needed to restore the world.
- Weapons - Through the combination of different resources, the player can build weapons needed to ward of the swarm. The player can fix damages made to weapons by collecting more resources .

Why should you care about this game?

Well, for starters, the fate of the world rests in your hands!

But more importantly, this game has a risk and reward element to it. The player needs to balance the risk vs reward during the phases of the day, to collect and use their resources in the most efficient way possible. Not to mention, that the player always has to be on top of their game, because the enemies are bound to attack and ruin their progress.

I think it could potentially be an enjoyable game that needs one to really strategize their play session. Many aspects need to be considered, in order to not only restore the world, but to also find the best times to plant and collect certain resources, as well as make sure you are well equipped to fight off the swarm that is bound to come your way!

References and Inspiration

Plants vs Zombies - defense mechanics and strategies

Stardew Valley - The mechanic of farming.

Call of Duty Zombies - Has similar mechanics to Plants vs Zombies, except here, enemies can tear down defense.

Bastion - the action of always returning to home base.

Minecraft Crafting Table - the mechanic of swarm attacking during the night and dying in the day