Detailing A Game Environment

Parasymbiosis

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Game Mechanics

My game will have basic mechanics that a platformer has such as jumping and moving. The other mechanics that I added are shooting, grappling, crouching, blocking, and melee. The players are also able to switch between their human form or parasite form. With the human form, the player is only able to shoot enemies with their guns and do basic movements but unable to use the parasite's powers. There will also be a health point system between the player and the enemies. There is also a limited time when the player has access to the parasite form.

Space

The game is in a 2D platformer format. The game has one big space but it is divided into sub spaces. Since the gameplay of the game is pretty linear, the game format is going to be similar to a regular platformer but the player is able to move back to the previous sub level, making the game classified as a network layout. It is continuous since the player's movement is not restricted but it will restrict the player in a single sub level until that level is finished when the player comes across it. For example, if a player comes across a section in which the player needs to kill all the enemies and solve the puzzles first to proceed, the player's ability to move backward and forward a sub level would be restricted until the level is finished.

Time

There are 2 types of time based mechanics in the game. One of them is the timer in the upper right edge of the screen that shows the player how much time they have spent when in the specific level. This aspect of the time based mechanic doesn't really affect the player's gameplay but it affects the amount of stars that the player can get in the end of the level since each level has a time criteria for one of the stars.

The other time based mechanic of the game is the parasite's time bar which is going to be displayed on top of the player when the player is in the parasite form. This shows the limit of time that the player can become a parasite. Since in parasite form , the player is very powerful, the player will need to reconsider the option to become the parasite and not waste the seconds on the form when it is not necessary. Both of these time based mechanics are continuous since it will run realtime. But the parasite time mechanic only runs when the player is in parasite mode and it will pause when the player is in human mode.

Objects, Attributes & States

In each level there are several things to watch out for. Those things are the enemies, items to collect, puzzles, and traps.. Enemies are typically aliens equipped with guns that shoot at you when you are in line of sight. The guns that are equipped vary depending on the level progression. As the level progresses, the aliens will have better weaponry overall. In some of the levels there are also bosses that are located at the end of the specific level. The aliens will also have an AI that fits each individual enemy. The AI will also act similar to a human using a weapon in the real world. The example of this is the need to reload when the gun is out of ammo, taking cover behind boxes, and others. The traps also scale up as the level progresses. Traps create tricky levels that the player has to find a way to beat. There are various traps examples in the game such as, shock traps, spike traps, etc.

When the player is in parasite form, the enemy's dead body will have a red outline indicating that it can be eaten by the player to increase the time length of being in parasite form. There are also yellow flashing indicators of certain spots that show that the player's grapple can be used there. There's also boxes that the enemy can take cover in that can also be destroyed by the player. Health drops can also drop out occasionally when the enemy dies which replenishes the player's health. There are also stars that the player can get when they finish a level. There are 3 stars in total, 1 for finishing the level, 1 for finishing the level in a specified time, and 1 for an extra challenge in the level (no deaths, no hits, get bonus item, etc). For the puzzle part, it is usually marked by targets that the player needs to shoot.

Actions

The basic actions that the player can take are jump, move , shoot, and crouch. These actions can be done when the player is in human form. When the player is in the parasite form, the player can block, melee attack, shoot laser beams which are significantly more powerful than a regular gun that the player has in human form, and grapple. The melee attack when the player is in parasite form is also a viable attack option since the speed of the attack is faster than shooting laser beams. While grappling, the player could also gain momentum and swing to the platform within the level. While grappling, the player could also go up and down, perform attacks, and block attacks. The player could also use a button to switch between the human and parasite form.

These actions can be used to complete sub-task such as grapple into an area to get to a separate platform, block attacks from an enemy with heavy weaponry, and defeat enemies faster. The basic movements are also important since some areas can only be accessed when crouching. Sometimes players can also combine specific actions to create a different style of gameplay. For example, some players might want to charge in and attack everyone while other players might want to approach the enemies strategically and subdue the enemy one by one which the game supports either way.

Rules

In this game, there are obvious rules that are available in every platformer such as, you are unable to go through walls, u can only reach platforms when u jump in a certain high, etc. The other rules in this game are :

- The player has 3 health points in human form and times three of what the player has in health points when the player is in parasite form. For example, if the player currently has 2 health points because they lost 1 health point earlier, the player's parasite form will have 6 health points.
- Enemy's health points vary depending on what kind of enemies it is but most enemies' base health points are 9 health points.
- The alien's weaponry varies depending on the level. For example, at the start of the level, the aliens might be using melee attacks but as the level progresses, the aliens will start using rail guns and rifles.
- The player inflicts 1 health point worth of damage with a regular gun in human form and 3 health points worth of damage with the laser beam in parasite form. The player also deals 3 health points worth of damage with the melee attack while on the parasite mode.
- The enemies inflict 1 health point worth of damage to the player every time the player is hit by a projectile that the enemy throws or a melee attack from the enemy. The damage may vary depending on what the enemy has as a weapon.
- The player heals for 1 health point when a heart container is picked up in human form. 3 health points of healing from the heart container when the player is in parasite form.
- Traps deal 1 health point damage to the player and puts the player back to where the player was before when the player hit the traps. The player also has a 2 seconds invulnerability where the enemy cannot see and attack the player after going back to the area before falling into the trap.

- The Player can only block the area that they are facing and when the player is blocking, the player cannot shoot or melee the enemies.
- Each time a player is in the parasite form, the parasite bar which is located on top of the player character will keep decreasing in a total of 30 seconds and everytime the player eats an alien dead body, the parasite bar will increase by 10 seconds. 30 seconds is the max amount of time the player is able to stock up on time when in parasite form.
- If the player's parasite form runs out of time, the player will return to the human form and the player will have a cooldown to turn into a parasite for 30 seconds.
- If the player decides to switch between human and parasite form, there's a 10 seconds cooldown to switch
- The player cannot eat an alien dead body in human form
- When the player encounters a boss, depending on the boss, there can only be certain parts of the boss's body part where the boss can be hit.
- The bosses health points vary depending on the type of the bosses and how the player can inflict damage to the boss. For example, if the boss's body part that can be hit is hard to access, then the boss should have lower health points compared to other bosses.
- In the end of each level, the player will receive up to 3 stars, 1 star for completing the level, 1 star for finishing the level below a specified time, and 1 other star for completing the level with a challenge that depends on the level (no damage, no deaths, etc)
- The enemies cannot damage each other
- All of the enemies and the player's character models can overlap
- After the player finishes the whole game, hard mode is unlocked to give the player extra challenge when replaying the game. Hard mode will make the enemy have more health points and the player have less health points and many other tweaks.

Skills

In this game, mental and physical skills are tested. Physical skills being hand eye coordination and reflexes regarding the engagement between the player and the enemy. The mental skills are the strategy that the player needs to come up with when approaching a sub level to finish the sub level optimally. The strategies that are present within this game vary depending on the player's liking. The small puzzles that are present within the game will also test the logical thinking capability of players.

Chance

The chance aspect of the game is the randomness of the AI. Even if it seems like the enemy will only attack the player if the player is in the line of sight and that's it, the enemies can also have the option to take cover behind the environment such as boxes, other enemies, etc. The bosses will also have a random aspect of the AI since the bosses actions will be randomised. The only thing that the bosses actions are going to be based off is the bosses phase and its own health points. The drops that the enemies produce when the player kills them are also a chance aspect of the game. Sometimes the enemies can drop heart containers but most of the time the enemies can just drop nothing and leave the player empty handed.