COVID-19 Destroyer 2020

Design Document

By: Evan Clark

**Description**

*Synopsis*

COVID-19 Destroyer 2020 will make use of the test level provided by Unity’s “Creator Kit: FPS” template. The kit establishes a world where a doctor has been miniaturized and sent into the body of a patient to help fight off unwanted germs. The player plays as the doctor, and makes use of their pistol, machine gun, and grenades to eliminate instances of COVID-19 as quickly as possible without harming any of the healthy, nearby blood cells.

*Theme*

The game is set in the many inner organs of a human being. The player has been shrunk to be able to explore the narrow passageways of these bodily systems, and so I imagine the environment feeling akin to traversing through a myriad of twisting caverns that would be easy to get lost in. But unlike a normal cave system, the walls of each room are surrounded by the constant droning and churning noises of everyday bodily function. The soundscape feels vast and organic, and almost has a quality of feeling alien with how microscopic the player’s perspective is.

**Sound Effects**

Most of the sounds in the game are going to spawn diagetically from the observable world that the players can see around themselves. Sounds are going to be listened to from the player’s first-person perspective, and we assume that they will be hearing the sounds from ears based on the left and right of the player’s FOV. The player needs to move and therefore will create footstep sounds. The surface of the world is an unearthly slimy texture, so footstep sounds will need to incorporate this strange surface. Ideally, FMOD’s randomization parameters will allow us to create footstep sounds that are similar but not identical to each other. This will help walking sound fresh with each step, as moving around should not bore the player. The same is true for player jumping. The player also has multiple weapons to fire, and each will have a similar but unique sonic feel. All the weapons have a seemingly sci-fi/electronic feel to them. Rounds from the guns appear to be laser bullets and the grenade creates a small, blue, explosive cloud with electric particles mixed in. Sounds will have to be designed to reflect the advanced nature of such weaponry. Other interactable entities within the game include germs, red blood cells, keys, and doors. Germs and red blood cell sounds should match the slimy, organic feel of the rest of the body. But germs should somehow feel more sinister as they are supposed to be destroyed by the player whilst the blood cells are to be protected.

**Dialog**

Creating dialog for this game is an interesting option that I think would only be completed after the more essential sounds are implemented. The game requires no dialog but certainly has the potential to use it to build out a story that explains why a man has been miniaturized into another human body. If dialog were to be implemented, it would likely involve conversations between the player’s doctor character and NPCs from a room outside the patient’s body. Dialog would be a great option for teaching the player how to play the game, being as how there is no tutorial or controls menu to help the player know what to do. Otherwise, dialog would occur at various checkpoints in the game to move the story along as the player completes objectives. To communicate with the outside world, the player character would have to be using some sort of radio transmission device. Therefore, incoming dialog to the player might sound filtered as it is transmitted between devices.

**Interface/UI**

The HUD interface in the game is not interactable and should not require any sound design. Pulling up the main menu allows the player to select various options and sound should be present for these actions. Currently actions on the menu include select, confirm, and negative. Some simple synth sounds should work well here corresponding with the minimalistic and clean menu design.

**Music**

Any music for the game would come in the form of non-diegetic background music. I imagine this music as simple, futuristic, adventurous, and mysterious to match the intensity of an FPS and the uncertainty of the environment. Any backing track for the game will be created after all essential game sounds are completed in order to be sure requirements for the game are met first. Any music must also be sure to not interfere too much with the ambience of the world as the atmospheric sounds are vital for the player’s immersion.

**Ambience**

Creating a proper ambience is going to be one of the greatest sound design challenges for the game. Sounds of the human body need to be replicated but on a massive scale as the player is literally surrounded by the many gushing sounds of human innards. It would be great if we could use FMOD capabilities to create different levels of ambience based on the players location in the body. Naturally, sounds occurring in the heart cavity are going to vary wildly to the sounds near the stomach. Yet although the types of sounds per region will change, unity will be created between the soundscapes via effects that make every organ system feel like a unique section of an otherwise connected system of tunnels.

**GitHub:**