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COMP 446

Mini Project 1 Critical Analysis

My game, One Trillion Lions vs. the Sun 2, is a 3D take on the classic asteroids game.

The first lens, the lens of emotion, deals with invoking a particular feeling in the player. My game was an attempt to draw humor to the premise of shooting asteroids. Most of the artistic design decisions in the game relate to this jovial attitude; the ships are lion-shaped, projectiles are lions, the story involves lions grouping to fight back after the very sun assassinated the alpha of their pride, the sound effects of picking up power-ups are cat meows, the explosions jettison lions into space, and so on. A great amount of time was spent on keeping the art style focused on the running gag. Additionally, several gameplay design choices were centered on joy. In order to avoid anger at a swift death, the player spawns in a mothership and is shielded. This prevents early death and allows a small amount of time for the player to get his or her bearings. A similar artifact is the lion beam power-up. This ability changes the player’s meager lion shot into a devastating beam that cuts through asteroids and has the potential to clear a screen in seconds. Coupled with a lion roaring, it aids to a humorous experience.

However, happiness is not the only emotion the game evokes. As the player progresses into later levels, stress slowly builds as asteroids spawn in greater numbers. Additionally, stars start to spawn. Stars are another new addition to the game. They float around aimlessly and fire flares back at the player. They serve to build stress twofold: first, they endanger any player standing still with fast-moving projectiles, and second, they entice the player to fly through asteroid fields to end the threat quickly. As round number increases, stars also spawn in greater numbers and fire at different times. The jump to 3D, another extension of the original asteroids formula, was initially a style choice, but it became another source of growing tension. Although the player has the ability to move in three dimensions, they are still restricted to only moving forward. The camera moves with the player, meaning that quick movements are still difficult to pull off without accidentally colliding with asteroids. Additionally, the camera is situated behind the player, cutting off half of the play space from view and endangering the player by hiding threats from behind. Although the field of view was increased to prevent obscene difficulty, the scheme was kept to keep tension.

The second lens, the lens of essential experience, is meant to focus on inducing a certain experience. The experience this game is trying to mimic is an epic quest to avenge a fallen race by flying a space ship into hectic combat while keeping true to classic arcade style. The inclusion of a pregame “cut scene” to explain lore was a decision carried over from the last game, which served to set up the plot and put the player into the shoes of the pilot of the SS Lion. The console look simulates a 2-way chat log with mission command.

In order to simulate a death-defying dogfight with asteroids, the game transitioned 3D. The extra dimension allows mouse-based controls to simulate the rolls and spins that come with any aircraft, as well as aileron spins with the ‘Q’ and ‘E’ keys. However, a pleasing flying scheme can only do so much. If the player plays it safe by staying far away from the enemies and taking pot shots then the controls are moot. Therefore, power-ups, extra lives, and point pickups were added. These items spawn in after an asteroid explodes and stay around for only a short period of time. This incentivizes the player to brave dangers and weave around asteroids like a true pilot. The points also harken back to the emotional lens, creating tension and encouraging that tension with a reward.

The last change added to capture the feel of a fighter pilot was the barriers. A traditional asteroids game warps the player to the other side of the play space when they leave the screen, but this game opted for another approach. Walls keep the player centered in the game world and encourage thinking in a realer to life scenario. Yet, a constant barrier would ruin the immersion of the game, and so the walls instead only spawn in when the player gets close. Only enabling the renderer by proximity retains the ability to keep the player in the play space while tricking him/her into thinking that the battle is unbounded like a powerful fight, like the music, Holst’s Mars, implies.

The third and final lens is the lens of venue, which is where the game is played. This game was designed for the student laptops, and, by extension, portability and multitasking. The standard asteroid gameplay of slow, stage-based progression did not need much adaptation and as such was implemented as is. This gameplay cycle enables short bursts of play without discouraging more dedicated and long play sessions. Even if a player loses, he/she can still restart without much pain.

In order to enable the multitasking environment inherent to laptops, a pausing feature was added. This, in tandem with locking the cursor to the screen during gameplay, allows users to play in a separate window and pause the game when they wish to shift focus to another program or task. When they wish to return, they can simply focus on the game and un-pause. Enemies, bullets, power-ups, and the player avatar will be in the same places and states they were in when the player left. This makes the game more appealing to the laptop venue.

Developing games may require lots of coding and art, but developing in a vacuum without the aid of lenses can impede the effect of a game. Games are often fun because they are good at what they do, and they are only good at what they do because they are developed with planning in mind. Without these lenses, One Trillion Lions vs the Sun 2 would have been a much shallower game, aimless and pointless. With lenses, however, the game has become something much more impactful, even if the impact is humor.