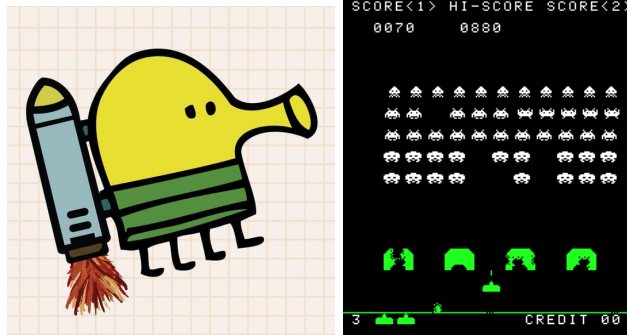


Software Engineering Final Project

Independence Month



John Pocasangre
Justin Alejo
Andrew Ibrahim
Jacob Acosta
Gustavo Jimenez

Introduction

Will Smith is attending Jada's 3rd birth of his child. The aliens from Independence Day(1996) come back for revenge with their new and improved technology. They found a way to imitate the incomparable power of the sun. Their main mothership seems to be surrounded by solar flares destroying everything in its path. Will Smith's family was unfortunately lost to the flames, but he was able to get a hold of a spaceship to leave what was left of planet Earth. The game starts as the giant sun ship follows Will Smith(the player), but the alien sun ship is so powerful he has to be flying while dodging debris and platforms which will also be needed to help block the ship's radiation and help the ship cooldown. The ship will explode if exposed too long without cooling down, or if it crashes with debris. As he survives longer the mothership alien leader(Garkaka Rock), grows infuriated and starts shooting solar flares at him.

Game starts as simple dodge and land on non-moving debris game, then you need to dodge moving objects

(optional-if time allows)

Power-Ups: Speed boost, Cool down, Increased fire rate, Shield bubble, Ultimate(all 4)

Boss Fight: Boss disappears from the bottom and is now on top of the screen. Shoot it to destroy and win

Technical Requirements

- Programming in C++
- Graphics with OpenGL
- Program frameworks (lander as baseline)
- Inputs
 - Keyboard

- Movement with A (left), D (right), W (up), space (shoot weapon).
- Mouse
 - Use to start and end game

Product Features:

- Art
 - 2D
 - Background Music
 - Sound effects
 - Sprites
 - Some ship animations
- Physics
 - Collision with Debris
 - Contact with projectiles
 - Physics with landing on debris
 - Dying if you touch the bottom of the screen or by getting hit too much by lasers
 - There will be asteroids that if you hit them they will deal damage to you, and you can shoot them to prevent them from hitting you.
 - So there will be flares and asteroids
- System
 - Score count for how long you have been alive
 - Score for shooting at aliens, landing on the debris for the debris you can land on
 - The game keeps going on, there is no end to it. You're trying to get the highest score (time survived) while also trying to evade the flares from Chris rock's alien ship.
 - The boss ship will be shooting flares at you when you get a score 500, so when the game starts they'll just follow you, but then once you're 500 they start shooting, Eventually they will disappear and send smaller ships at you that will be quicker and shoot faster, but eventually the boss ship will come back

Overall Goals

- Gets harder to survive
- Game doesn't look plain