**GameJam Script**

Intro

Welcome to our video demonstration for our Game Jam Submission titled NAT’S Phobias. The assigned theme to develop our game was Mental Health, where we aimed to provide our audience with a game showcasing what a phobia is. This was achieved through a top-down dungeon crawler to put on a friendly and fun twist on how one can interpret tackling one’s fears.

Overview

The game consists of three levels that have varying art styles but follow the same structure. At the beginning of each level, the player is spawned into a central room which is surrounded by other rooms. Because the map is procedurally generated, the structure and placement of these rooms will be different each time the level is loaded which was achieved through the use of Procedural Map Generation. When it came to the map generation we had in mind to implement a starting room with four exit points. Each exit would then spawn an appropriate room, and that room would spawn another room and so forth until a dead end is spawned which stops the expansion of the level. This creates a slightly different gaming experience with each run, making the game more replayable. The player must explore these rooms with the goal of finding the level’s boss. Every time the player enters a room for the first time, enemies spawn in the room which the player must defeat using the shooting mechanic.

The player cannot advance until they defeat the enemies in that room since there will be doors that block the entrances to the other rooms. Upon defeating these enemies, the doors will be opened, and the player may advance to the other rooms.

Once the player finds and defeats the boss, the next level (scene) is loaded

Movement

Movement can be performed by pressing the ‘W’, ‘A’, ’S’, ’D’ keys, according to the direction in which the player wants to move. ‘W’ moves the player character upwards; ‘S’ moves the player character downwards, ‘A’ moves the player character to the left and ‘D’ moves the player character to the right. The horizontal and vertical movement button respectively can be pressed in pairs to move the player in a diagonal manner.

Shooting

Shooting can be performed by pressing any of the ‘U’, ‘J’, ‘H’, ‘K’ keys, according to the direction in which the player would like to shoot. ‘U’ shoots upwards, ‘J’ shoots downwards, ‘H’ shoots to the left, while ‘K’ shoots to the right. Upon pressing one of these keys, a projectile in the form of a stone is fired from the player’s slingshot in the desired direction.

Dashing

The dashing mechanic can be performed by pressing down the spacebar key while moving in the direction which the player wishes to dash towards. This mechanic gives movement a higher level of fluidity, making the game more enjoyable. When dashing, the player’s movement speed is doubled for approximately 0.2 seconds, after which it is set back to the default movement speed. Additionally, during the time frame in which the player is dashing they are immune to taking damage. This is done by ignoring collisions between the player and any enemies during that time.

Levels

The game is split up into three levels, each with their own unique theme, challenge, enemies, and bosses.

First Level

In the first level, the spider boss will shoot projectiles at the player in the form of eggs which inflict damage upon hitting the player. Baby spiders will also be spawned in the vicinity of the boss every 4 seconds and chase the player using the A\* algorithm, which is an algorithm used to implement a pathfinding element to the NPCs throughout the game.

Second Level

In the second level, the eye boss will shoot projectiles at the player which inflict damage when they hit the player. The limited sight effect created by the vignette present throughout the level may also provide an increased level of challenge to the player when fighting this boss as the player is forced to get close to the boss to see him, making it difficult to dodge incoming projectiles.

Third Level

In the third level, the anglerfish boss will chase the player using the A\* algorithm and inflict damage when colliding with the player. This is by far the most challenging boss because of the boss’s size relative to the room. This means that players must be familiar with all of the game’s mechanics, specifically the dash mechanic if they want to beat this boss and finish the game.

AI Techniques