Space

CAP 4053

Group Members

• Shravan Yandra

• William Gross

• Patrick Maier

Game Concept

- Top-Down view
- 2D shooter with puzzle elements (find the key, eliminate all enemies, etc.)
- Score based on completion time
- Time restricted space walks
- Rooms to progress, boss in final room



Game Structure

- Menu with instructions
- Game can be paused at any moment
- The character wins by defeating the boss and solving puzzles in various rooms
- The character loses by running out of time on puzzles or by taking too much damage from enemies

Puzzles

- Step on all special tiles without repeating the same tile
- Figure out correct order to slide objects to open up a path
- Fire ricocheting shot in dynamic room to hit a sequence of buttons
- Treacherous room where character must keep moving (flickering lights, so must avoid dangers based on memory)



Character Mechanics

- W,A,S,D movement inputs
- 360° aiming based on mouse pointer
- Shooting on mouse click (fire rate cap, hold for continuous fire)
- Infinite ammo standard weapon, pick up stronger weapons with limited ammo
- Character has health
- Lives and Checkpoints?

Enemy Types

- Standard Guard Enemy
 - Patrol State, Detected State
- Tank Defender Enemy
 - High health, Protects its allies,
 Follows aiming direction
- Evasive Enemy (*Randomness*)
 - Quick, Less health, Stronger

attacks



Weapons & Power-Ups

- Melee weapon that can reflect projectiles
- Guns as main weapon type
- Few different weapons stronger than standard
 - Main gun with unlimited ammo
- Possible power-ups for main gun that disappear on death

Platform

- Unity
- Windows
- Knowledge about C#



Graphics & Sound

- 2D Sprites
- Ambient sound/music for each room
- Sounds 'cue' on taking damage
- Weapon sounds
- Different tiled floors for each level

Assets

- We will find sprites and tiles from free sites
 - We are planning on reusing/editing the tektite sprites from zelda for the evasive enemy



- Opengameart.org
- itch.io

First Playable

- Player movement and firing implemented
 - At least one upgraded weapon type implemented
- One Standard enemy and at least one 'special' enemy implemented
- One demo enemy room
- One demo puzzle room with movement in between

Development Roles

• Shravan Yandra - Enemy Implementation, UI

• William Gross - Player Controls, Sound Design

• Patrick Maier - Level Design, Graphics