

CSCI4120 Group 10 Progress Report

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Premise of the game

This game is an action and adventure game where the player can find treasures and power-ups in the room to counter the enemies of various abilities. The player's ultimate goal is to find the exit of the spaceship he/she woke up in.

Intended audience

Since we will develop a 3D action and adventure game, part of our intended audience would be those players who love 3D action game. And due to the difficulty of our game, more of our intended target audience would be those nonhardcore players, who like to spend one to two hours on an interesting game.

Genre

This game will be a 3D single-player action and adventure game, in which the player will use weapons in the terrain to attack the enemies while finding the exit of the room.

Target platform

The targeted platform of the game will be PC.

Overall story telling

Upon starting the game, the background story of the game will be informed to player through a few sentences shown on the screen. After the player wakes up in the spaceship and the first level starts, the progress of the story will be shown by the internal monologue of the main protagonist, which is shown as sentences on the bottom of the screen. Different dialogues will

appear when the player investigate, interact with specific scene objects, or trigger different events.

Background Story:

A mysterious spaceship flew across the sky one night and crashed into the nearby forest. You, as an investigator, are ordered to search inside the spaceship to look for a type of valuable ore that is only available on another planet. However, once you and your teammates got close to the spaceship, all of you passed out immediately.

Upon waking up, you found yourself inside a strange room which seems to be the inside of the spaceship. Everyone is missing, and you currently do not even have any weapons. All you know is that you can hear aliens lurking and roaming everywhere in the spaceship.

In this game, you must overcome different obstacles, by planning routes to avoid enemies and gathering items such as weapons, power-ups and treasures, with the ultimate goal of escaping the spaceship safely with as many ores as possible.

Beginning of the Game: (Stage 1)

Player wakes up in a room, hearing voices of alien monster getting closer and closer. Upon the first encounter with the monster, the player will have to start escaping, find the first weapon item nearby and attack the monster. Player will learn the basic control of running, jumping, hiding and attacking during this stage.

Mid-Game: (Stage 2)

Once the player gets more comfortable with the control, more enemies and items will start appearing in the game. Player will explore the map with different tactics and special abilities they gain along the way.

End of the Game: (Stage 3)

Player can find the exit of the spaceship during the navigation, but the boss must be defeated before they can exit the spaceship. Once the player chooses to leave, the game will end with a total score shown, which is affected by the number of enemies defeated and treasure gained. Once the player is captured or killed by the aliens, the game will be over, and their score will be reset to 0.

Level Design

Level Path:

Stage1: Area-A

Game begins in start room (r1), the player is trapped and should find an [iron bar] to break the door. Then the player will see only a few monsters on his way, which can be avoided by choosing other ways. Otherwise, the player can try to use the bar to defeat the enemies with extremely high difficulty. At the end of Area-A, player shall find an elevator to Area-B.

There are also some simple traps which player can easily overcome. There are no treasures in this area.

Monsters: 2-3

Treasure: 1

Power-Ups: 1-2

Stage2: Area-B

In Area-B, the player will face more traps and more enemies. The player can either find more power-ups and more powerful weapons to help him/her beat monsters in an easier way or pass through some challenging but interesting platforms and mechanism to avoid monsters (or just try to beat monsters without any assistance, which would be possible in theory but only in theory).

Also, some treasures will be hidden for players to find out.

Monsters: 6-7

Treasure: 3-4

Power-Ups: 3-4

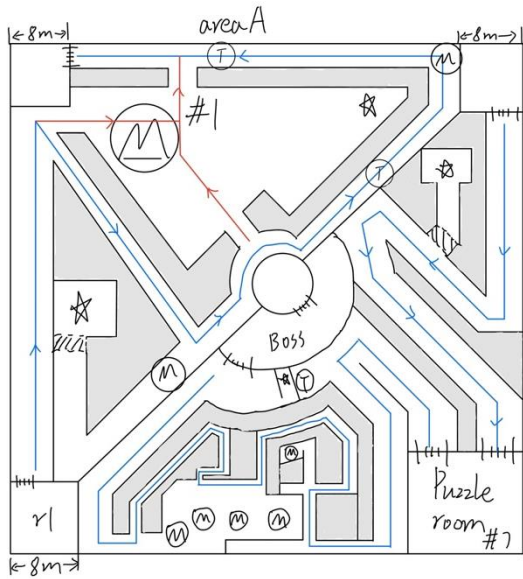
Stage3: Area-C

In Area-C, which is the last area, player will face more challenges. When reaching the front of the exit area, player can decide whether to enter it or stay in spaceship for a while. If the player enters, the Boss (maybe a group of monsters or another stronger monster) will show up. After defeating the boss, the player can exit from the central elevator, and the game ends with the player's score.

Monster: 6-7

Treasure: 2-3

Power-Ups: 2-3



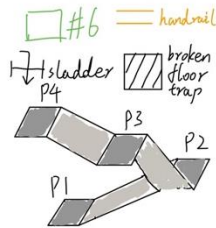
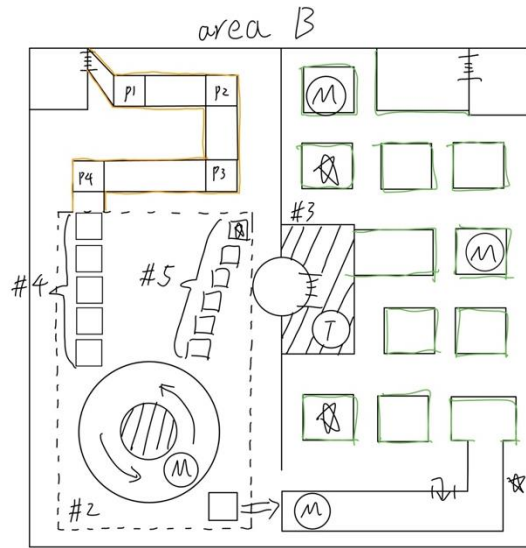
+++ door [|||||] breakable wall (M) monster (M) stronger monster
 → suggested path → back path (T) Trap ★ treasure/power-up

(In real implementation, would add some changes on altitude.)

#1 There is a strong monster which would try to attack player if player try bad path, which should force player change their path (unless the player is super skillful).

#7 Here is a puzzle room, where player must solve a puzzle to get out of this room.

area C

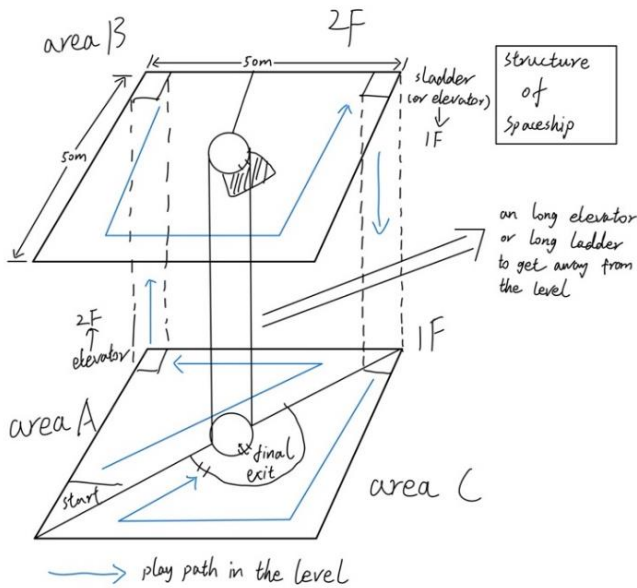


#2 If player fall from platforms, he will face a lot of monsters which are hard to be defeated. If player could survive, he can climb up from the slander st.

#3 The player will see the exit but cannot reach it because of the broken floor, which is a trap.

#4&5 Two sets of moving platforms challenges, #5 is apparently harder than #4.

#6 Every green areas will have 2-3 portals, which can delivery player into other area. Then this part of area 3 will become a portal maze.



structure of spaceship

on long elevator or long ladder to get away from the level

→ play path in the level

Enemy Design

Monsters

In each area, there exists a few monsters that chase and attack the player (see section 2). As the player get close to the treasures in the level, more monsters will be wakened to block the player. The player can either run away from or attack the enemies with the weapons found.

Different monsters have various abilities and status. As the game proceeds, enemies become more powerful as well. When under attack, the player's HP value will drop, and the movement speed (agility status) will be affected. Once an enemy is killed by the player, the total score of gaming will increase, and the XP score will increase according to the player's performance.

Environmental Mechanism

Except the monsters in the level, environment in the game may also impede the player from scoring or gaining treasures. Being hit by a radiating laser will reduce the player's HP. Traps on the ground can slow down the movement and barriers can prevent the player from approaching the treasures in each room. As the player get close to the power-ups or treasures, more traps will be placed. The player can see in advance the obstacles ahead and avoid them by bypassing. Once hit or trapped by the environment, the player's total score and status will drop.

Player Design

Character Stat

HP: Player's health pool. Reduced when player is attacked by enemies or fall from height. Upon reaching 0 the player will die. Does not auto regenerate. Reset upon entering a new level.

Stamina: Player's stamina pool. Consumed when performing certain actions. Auto regenerates.

Strength: Affect how effective player's attacks are. Higher strength means attacks will deal more damage. (cost less stamina)

Agility: Affect how effective player's movements are. Higher agility means certain movements will consume less stamina.

XP: Experience points gained from defeating enemies and clearing levels. Can be used to increase up stats. XPs and level-ups Does not stack over death and level resets.

Basic Abilities

Basic abilities are available to the player throughout the entire game. They include attack abilities, movement abilities and a single weapon. It is sufficient (but very difficult) to beat the entire game with basic abilities.

Movement Abilities

Walk: Standard walk. slow movement speed. Does not alert nearby enemies. Does not consume Stamina.

Run: Fast movement speed. Alerts nearby monsters. Consumes stamina overtime.

Basic jump: A single basic jump. Can be activated when on the ground. Costs stamina per activation.

Roll: A dark souls roll. It has a short invincibility frame when activated. Costs stamina per activation.

Edge Grab: grab onto edges of platforms for a duration of time. Consumes stamina overtime.

Fall: Passive movement. Activated when jump/fall from above a certain height. Causes minor hp reduction and alerts nearby enemies.

Attack Abilities

Basic attack: Normal attack. Can be chained into combos depending on the weapon. The final hit of the combo deals more damage and has special effect depending on the weapon. (cost stamina per attack)

Assassination: One-hit-kill ability which can only be performed on certain unalert enemies when on the ground.

Weapon

Bar: The bar from the yet to come half-life 3. Singlehanded Shortrange silenced weapon.

Power-Ups

Power ups are special items hidden around the levels that grant player special abilities when found. They are not essential to beating the game but will make the process easier and open up different playstyle options. Power-ups can be divided into the following categories: movement abilities, utility abilities, weapons.

Movement Abilities

Double Jump: Jump while in air with strong directional control. With this ability acquired two jumps in total will cost the same stamina as one basic jump.

Dash: Dash into a certain horizontal direction. Replaces the Roll ability. Can be activated in air once each time the player leaves the ground. Consumes stamina. Has a short invincible frame.

Ground Pound: Activate mid-air to quickly descend onto the ground. Cause stamina. Removes fall damage. Stuns nearby enemies without damage.

Weapons

Flying bar upgrade: The iconic tracking bar from the hitman series. Increased damage with tracking ability. Standalone cooldown. Will alert nearby enemies and around the thrown location and attract their interest. Can be used to activate triggers from a distance.

Double edge bar upgrade: Can only be equipped when the Reflection Shield upgrade is not active. Turns your bar into a double hand weapon. Increased damage and range. Gives you the ability to parry certain enemies. Parry cost stamina. Final hit of the combo has increased range and knockback enemies.

Reflection Shield: Can only be equipped when the double edge bar upgrade is not active. Gives you an extra shield with reflection and parry capability alongside your bar. Reflection has standalone cooldown and a short window of activation time, reflected projectiles will trace back towards enemies. Successful reflection and parry cost stamina. Final hit of the combo turns into a shield bash that can stun enemies.

Utility Abilities

Freeze: Freeze Enemies for a short duration. Has a standalone cooldown. Frozen enemies will have a higher resistance to damage. Also, able to freeze certain moving platforms for a short duration of time. Freeze time depends on target types.

Cloak: Hides you from enemies' visions for a short duration of time through invisibility. Certain actions will still alert nearby enemies, but they cannot trace you.

Hologram: create a hologram copy of yourself that can attract enemy attention. Enemy will NOT attack you while hologram is active unless you attack them. Enemies will be set back to unalert state after hologram disappears if you are not running and in any enemy's sight atm. Has a standalone cooldown. Holograms are also capable of activating certain triggers on the ground.

Camera

Normal gameplay: 3rd person over-the-head camera.

In certain scenarios: Fixed location camera.