

Game Title: Rise of the Undead

" The post-apocalyptic world is overrun with flesh-eating zombies and you must fight for your life. "

Team members:

Moosa-Jaisimhan, Adam

Mastronardi, Anthony

Vlas, Veaceslav

Anthony Carlosviza-Morales, George

Syed, Saqib Ahmad

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Game Overview

Game Concept: The game will begin in a large open world where the player can explore and scavenge for resources in order to survive the wave of zombies incoming. While exploring, he must also avoid and kill off the hordes of zombies. The longer he survives, the harder zombies will eventually become throughout the levels.

Target Audience: The target audience for our game can vary depending on the people but the primary audience would be:

1. People who enjoy survival games. Since the game is based off strategies and survival, they will love the challenge we provide.
2. Gamers who enjoy horror and scary environments will very much enjoy our game. People who enjoy horror movies, TV shows, haunted houses and jump scares will find this type of game will fascinate them. The zombies and suspense from the game will definitely add excitement while playing.
3. Action game fans will also enjoy the game we are creating since it will provide a fast-paced, intense action and combat skills to fight off zombies.

Genres: There are many genres that will be incorporated in the game including:

1. Our game will offer horror through visual, audio, and atmospheric aspects. The game will include creepy environments and limited resources to make the user slightly afraid and make the game more frightening.
2. Action: This genre will include the fast-paced and violent fights against zombies.
3. Survival is important for the user to remember while playing as managing resources, and avoiding zombies will be an important factor.
4. The person playing will need to be strategy as the game focuses on supply handling, and planning to survive the levels to stay alive as long as possible against the zombies
5. Exploring will be needed to gather equipment against the apocalypse incoming and having weapons, ammunition and health materials is fundamental towards survival.

Game Flow: Once the user starts the game, he will be spawned in a large, dark scary field. The player must collect and equip as much as possible before the zombie apocalypse starts. Once the horde starts coming for the player, must

achieve a safe point by fighting off the zombies. Each level/wave will consist of a different environment and equipment while the zombies start getting more numerous and stronger. The player must progress through the levels and survive as long as he can before the zombies kill him. Once the player is eliminated, the game will be over and he has the option to obtain a better and longer game.

Look and feel: The look in the game will really bring out a dark and frightening environment for the user. Since we are fighting zombies and surviving an apocalypse, the game must show alarming scenes. The player is made to feel the intensity the game provides. Overall, the feel will be foggy and scary for the user while playing.

Gameplay And Mechanic

Gameplay:

Game Progression: The player's only progression is to get the highest score possible and surpass his previous run.

Mission/Challenge Structure: We will implement for the player a score system in which he will be able to see his score at the end of the game and compare it with his previous score as well as his other games.

Puzzle Structure: There is no puzzle structure in the game as we intend the game to stay as simple as possible while having fun with other game mechanics that will be implemented.

Objectives: The objective is simple; the player needs to survive as long as possible before dying.

Play Flow: The flow of the game will be determined by the capability of the player adapting to different situations since the game mechanic of his gun makes it so that he will not abuse a certain gun for the whole game. The play flow will become like a cycle after he uses all the available guns in the game.

Mechanics:

Rules: Here are the implicit and explicit rules that will apply when playing the game:

Implicit Rules:

1. The game takes place in a world overrun by zombies, and the player must survive by avoiding or killing them with a weapon. The objective is to survive as long as you can.
2. The player can scavenge for resources such as health supplies and weapons to survive.
3. The player must avoid being hit by zombies, as this will result in health damage and eventually kill the player.
4. The player can use various strategies to survive, including stealth, combat, and fortification.

Explicit rules:

1. Zombies will be slower than the player and can be killed by gunshots. Over time, the levels will eventually get harder and there will be numerous zombies the player will need to avoid.
2. Resources are limited and the player must be cautious in order to survive the longest possible.
3. The game will include a permadeath feature, meaning that if the player dies, they must start over from the beginning.

Game Model: The game model components included in the game will be:

1. The environment will be modeled in 3D so players can explore. The environment will include buildings, objects, and material the player can interact with.
2. The game will include both a human and multiple zombie characters that the player must avoid or kill the enemy. The characters will need to have separate movement systems and attacks.
3. Weapons and equipment that the player will need in order to survive the game. The player will need to explore to find weapons and equipment to defend themselves against the zombies. Each gun will have different properties such as damage, range, and accuracy.
4. The player will need to collect resources to survive as long as possible. This can be obtained by exploring but can also lead to his death...
5. A user interface will be implemented with the game world such as a menu system, inventory and other controls.

Physics: The game would need to include a number of physics simulations to create a realistic and engaging experience to approach people. Some of those requirements include:

1. Collision detection when a game object comes into contact with another for example when a player would collide with a wall or with a zombie.
2. Projectile physics will be used to simulate the trajectory of projectiles such as bullets when a weapon is used.
3. Damage will need to be implemented when the effects of damage is done on game objects or zombies.
4. Gravity and physic-based movements will be used with the effects of gravity and physical forces placed upon game objects and the player character.
5. Weather and climate are used to make the game more realistic such as rain, snow, fog and more.

Economy: To allow the user to survive longer, he will need to acquire resources and upgrades necessary for his survival. Here are some aspects the player will need to consider while playing the game:

1. Resources: In order to survive the zombies, the player will need weapons, ammunition, and medical supplies to regenerate their health. The resources can be obtained by scavenging throughout the map and finding supplies.
2. Upgrades: As the player progresses through the levels, they will need to upgrade their gear in order to survive longer. The upgrades will vary between better armor or increased health. Speed and better abilities can also be possibilities for the player.

Character movement: The character movement will be fully dynamic meaning the user can move from side to side as well as move up and down. The player will also be able to jump.

Objects: When spawned, the player will not only need to survive the accumulation of zombies but also avoid obstacles such as large rocks, trees, and more. The user can use it to his advantage to cover from zombies, but also can be an inconvenience.

Actions: The player would need to move their character through the game world, using a combination of keyboard control inputs to walk, run and jump.

-Since the player is in a scary environment and getting attacked by zombies, he will be to fight them off using a weapon and strategies.

-Inventory management will be needed to be used to his advantage in order to survive. The player must manage his inventory strategically in order to survive for a long period of time.

-Interacting with objects in the game world such as doors, windows, outside nature and etc. They might need to press a button to open a door or another interactive object.

Combat: The combat mechanism will include the player and zombie. Since the player must survive and kill the zombies, his combat is to kill as many zombies as possible with weapons found around the map and considering his ammunition. If the zombie touches the player and gets hit multiple times, he will eventually die and have to restart.

Screen Flow: When the game is started, the user will be introduced with a Main Menu Screen. This will be the first screen the player sees upon launching the game and will provide multiple options such as a starting a game, exiting, viewing the controls, etc...

1. The game world screen will be when the player starts the game and is spawned in a world and allows him to explore it.
3. Inventory screen will be necessary for the user to access and view his resources.
4. Finally, a game over screen will appear when the player dies from the zombies. They will have the alternatives to either continue playing or quitting back to the menu.

Game Options: To make the game as entertaining as possible there will be various game options included such as:

1. The difficulty level will always get continuously harder when the player is surviving rounds. The strength of the zombies could increase, limitation of resources across the rounds to make the game more challenging.
2. Permadeath will be applied to make the character immediately restart once he dies from zombies. This increases stress for the player and makes the game more intense.
3. Weather effects will take place to create new challenges for the player and affect visibility and movement.

Replaying/Saving: Since the team decided to include a permadeath feature to make the game more intense for users, players will not be able to save and reload their progress to undo any mistakes they've done while playing. This makes the game much more challenging and unique from others.

Cheats/Easter Egg: Unfortunately, our game will not include any easter eggs or cheats to diversify the game. The main purpose is to survive a crowd of zombies attacking the player.

Story, Setting and Character

Story/narrative:

1. Back story: A world that has turned into a zombie apocalypse where civilisation is gone, and the only thing left is our main character and the zombies.
2. Plot elements: There's a zombie apocalypse that has plagued the world and our main character is the only survivor in a post dystopian world and must survive so that he can reach the exit.
3. Game story progression: The game story progression is simply the main character surviving by killing as many zombies as possible while progressing around the map, so that he can reach the exit.
4. Cut scenes: There's a zombie apocalypse that has plagued the world and our main character is the only survivor in a post dystopian world and must survive so that he can reach the exit.

Game World:

1. General look and feel of the world: The area and look of the map will be quite dark and somber. A lack of general sunlight and haunting vibe. The feel of the world would be barren and a lack of anything life. This is to give the world and the player a feeling of being solitude as the game character must be ready to mow down the zombies.
2. Areas:
 1. General description: Relatively somber with a dim lighting throughout the map to give it a more haunting atmosphere. Long trees in the woods of the forest with a general flat land.
 2. How it relates to the world: The areas are related to world by being connected from the starting house to the deep

woods of the forest and from the forest to the open plains.

3. What levels use it: All the levels will have a certain somber feeling from the starting house to the plain will be dimly lit.
4. Connections to other areas: Areas are connected by simple passageways to help lead the player and not stray away. However, the player can roam around the map, but to continue to the next level (areas) there will be passageway (e.g., dirt path) to indicate to the player where the next level would be.

Characters:

Main character:

1. Back story: Not much is known about him, but we do know that he once had a family and a normal life however, that's long in the past. He also seems to have prior military experience which he uses to help him survive the undead horde.
2. Personality: He's quite a reserved individual, after he has faced the trauma of losing his family he doesn't say much. He's though quite resourceful knowing how to survive in such peril conditions.
3. Appearance: He is a tall man with a rather built physique.
4. Abilities: He does not have special superpowers, however due to him having military experience he is well versed when it comes to handling weapons, such as firearms and tactical knives. He also has combat experience.

5. Relevance to the story: He is the most relevant character as he is the only character alive.
6. Relationship to other characters: There are no other characters in the game besides the zombies as he is the only survivor in the game

Levels

Training Level 5.1:

Training Level: Urban Street

Synopsis:

The Training Level is a beginner's level, designed to introduce the player to the basic mechanics of the game. It takes place in a virtual reality simulation, where the player must complete a series of training exercises.

Required introductory material and how it is provided:

The introductory material for the Training Level is presented through a series of text prompts and pop-up windows that appear on the player's screen. The prompts explain the basic controls of the game, such as how to move, aim, and shoot.

Objectives:

The objectives of the Training Level are to teach the player the basic mechanics of the game, including movement, aiming, shooting, and interacting with objects in the environment.

Details of what happens in the level:

Map:

The Training Level is a small, enclosed environment designed to resemble an urban combat zone, with obstacles and cover scattered throughout the space.

Critical path that the player needs to take:

The critical path of the Training Level consists of a series of exercises, each designed to teach the player a specific skill or mechanic. The exercises include target shooting, obstacle course navigation, and simple combat scenarios against stationary targets.

Important and incidental encounters:

The encounters in the Training Level are not incidental, consisting of stationary targets and environmental obstacles. The purpose of these encounters is to help the player learn the game mechanics, rather than to present a challenge.

For each level 5.2:

Level 1: Downtown Streets

Synopsis:

Level 1 takes place in a post-apocalyptic city, where the player must fight their way through the streets to reach a safe zone.

Required introductory material and how it is provided:

The introductory material for Level 1 is presented through a brief cutscene at the beginning of the level, which shows the player character arriving in the city and encountering their first zombies.

Objectives:

The objectives of Level 1 are to navigate through the city streets, fighting off zombies and collecting resources, to reach the safe zone at the end of the level.

Details of what happens in the level:

Map:

The map of Level 1 consists of a series of interconnected city streets, lined with abandoned cars, buildings, and other obstacles.

Critical path that the player needs to take:

The critical path of Level 1 leads the player through the city streets, gradually increasing in difficulty as the player encounters more and more zombies. The path is marked by flares and other visual cues, to help the player navigate.

Important and incidental encounters:

The encounters in Level 1 include both important and incidental encounters. The important encounters consist of groups of zombies and other enemies that must be defeated to progress through the level, while the incidental encounters consist of individual zombies and other obstacles that can be avoided or dealt with as the player sees fit.

Level 2: Abandoned Warehouse

Synopsis:

Level 2 takes place in an abandoned warehouse, where the player must fight their way through the facility to reach an extraction point.

Required introductory material and how it is provided:

The introductory material for Level 2 is presented through a brief cutscene at the beginning of the level, which shows the player arriving at the warehouse and encountering a group of zombie guards.

Objectives:

The objectives of Level 2 are to navigate through the warehouse, fighting off zombies and avoiding traps, to reach the extraction point at the end of the level.

Details of what happens in the level:

Map:

The map of Level 2 consists of a large, multi-level warehouse, filled with crates, machinery, and other obstacles.

Critical path that the player needs to take:

The critical path of Level 2 leads the player through the warehouse, gradually increasing in difficulty as the player encounters more zombies and traps. The path is marked by glowing arrows and other visual cues to help the player navigate.

Important and incidental encounters:

The encounters in Level 2 include both important and incidental encounters. The important encounters consist of groups of zombies and traps that must be avoided or dealt with to progress through the level, while the incidental encounters consist of individual zombies and other obstacles that can be avoided or dealt with as the player sees fit.

Level 3: Abandoned Forest

Synopsis:

Level 3 takes place in an abandoned forest, where the player must navigate through the dense foliage to reach a hidden military base.

Required introductory material and how it is provided:

The introductory material for Level 3 is presented through a brief cutscene at the beginning of the level, which shows the player entering the forest and encountering their first zombies.

Objectives:

The objectives of Level 3 are to navigate through the forest, avoiding traps and fighting off zombies and other hazards, to reach the hidden military base at the end of the level.

Details of what happens in the level:

Map:

The map of Level 3 consists of a dense forest, filled with hazards such as fallen trees, thick underbrush, and pits.

Critical path that the player needs to take:

The critical path of Level 3 leads the player through the forest, gradually increasing in difficulty as the player encounters more hazards and zombies. The path is marked by glowing arrows and other visual cues to help the player navigate.

Important and incidental encounters:

The encounters in Level 3 include both important and incidental encounters. The important encounters consist of groups of zombie animals and other hazards that must be avoided or dealt with to progress through the level, while the incidental encounters consist of individual zombie animals and other obstacles that can be avoided or dealt with as the player sees fit.

Interface

6.1 Visual System:

HUD:

The HUD (heads-up display) in the zombie shooter game includes a health bar, ammo counter, and objective tracker. The health bar decreases as the player takes damage and can be replenished by finding first-aid kits throughout the levels. The ammo counter displays the number of rounds remaining in the player's current weapon and can be replenished by finding ammo pickups. The objective tracker displays the current objective and any sub-objectives that need to be completed in order to progress.

Menus:

The game features several menus, including the main menu, pause menu, and settings menu. The main menu allows the player to start a new game, or access other options such as audio and graphics settings. The pause menu can be accessed during gameplay and allows the player to resume or restart the current level or access other options such as audio and graphics settings.

Camera model:

The camera model in the zombie shooter game is a first-person perspective that follows the player character as they move through the levels. The camera cannot be adjusted.

6.2 Control System:

Keyboard and mouse (PC):

On a PC, the player controls the game using a keyboard and mouse. The W, A, S, and D keys are used for movement, the mouse is used for camera control and aiming, the spacebar is used for jumping, the left mouse button is used for shooting, and the right mouse button is used for melee attacks. The player can switch weapons using the number keys and can reload using the R key.

6.3 Audio, music, sound effects:

The zombie shooter game features a variety of audio elements, including background music (Doom style music to keep the player sharp and engaged), sound effects for weapons, enemy attacks, and environmental hazards, and maybe a voiceover dialogue for story elements if time permits.

6.4 Help System:

The game includes a tutorial section at the beginning of the game that teaches the player the basic controls and mechanics of the game. In addition, the pause menu includes a help section that provides information on the different weapons, enemy types, and hazards that the player will encounter throughout the game.

Artificial Intelligence

1. Enemy AI: All the zombies will run at the player to hit him as soon as he spawns in the world
2. Friendly character: there are no friendly characters as our main character is the only one left.
3. Support AI: The only ai that the game will be using is for zombies.

Technical

Target Hardware:

1. Development hardware: The hardware is a pc.
2. Network: The game is single player. The game is played offline.

Game Art

The intended game art style is a gritty and realistic aesthetic, with detailed environments and character models. The art style is meant to create a sense of immersion in the game world, and to emphasize the danger and violence of the zombie apocalypse setting.

The game will feature highly detailed environments that are both urban and natural, with ruined buildings, and overgrown forests. The environments will be rendered in a variety of lighting conditions, including daytime, nighttime(maybe), and overcast weather, to create a sense of variety and realism.

The character model will be highly detailed, with a focus on realistic proportions and textures. The zombie models will be grotesque and decayed, with exposed flesh and bone, while the human characters will be designed to be believable and relatable.

The art style will use a muted color palette, with a focus on browns, grays, and greens, to create a sense of desolation and decay. The use of lighting and shadows will be employed to create a moody and atmospheric ambiance, and the game will feature a variety of weather effects, such as rain and fog, to create a sense of realism and immersion. Overall, the game's art style will aim to create a visceral and intense experience for the player, with a focus on the harsh realities of the zombie apocalypse.

Weapons:



Source: <https://assetstore.unity.com/packages/3d/props/guns/guns-pack-low-poly-guns-collection-192553>

Location Assets:



Source: <https://assetstore.unity.com/packages/3d/environments/unity-terrain-hdrp-demo-scene-213198>



Source : <https://assetstore.unity.com/packages/3d/environments/industrial/rpg-fps-game-assets-for-pc-mobile-industrial-set-v3-0-101429>



Source : <https://assetstore.unity.com/packages/3d/environments/hospital-horror-pack-44045>



Source : <https://assetstore.unity.com/packages/3d/environments/sci-fi/destroyed-city-free-6459>

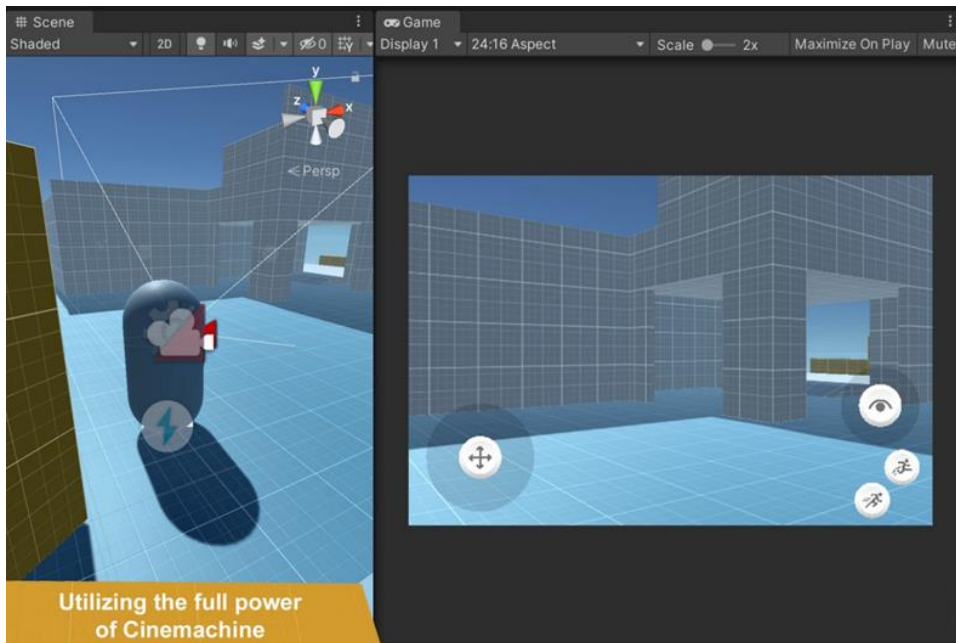


Source : <https://assetstore.unity.com/packages/3d/environments/flooded-grounds-48529>

Character :



Source : <https://assetstore.unity.com/packages/3d/characters/humanoids/humans/adventure-character-201384>



Source : <https://assetstore.unity.com/packages/essentials/starter-assets-first-person-character-controller-196525>

NPC :



Source : <https://assetstore.unity.com/packages/3d/characters/humanoids/zombie-30232>



Source : <https://assetstore.unity.com/packages/3d/characters/humanoids/modern-zombie-free-58134>

Other Objects:



Source: <https://assetstore.unity.com/packages/3d/props/exterior/rock-package-118182>



Source: <https://assetstore.unity.com/packages/3d/props/furniture/furniture-free-pack-192628>



Source: <https://assetstore.unity.com/packages/3d/props/exterior/street-lights-pack-31644>