|  |  |  |
| --- | --- | --- |
| Project Design Document | |  | | --- | | *02/06/25*  Student Names  Daniel Almond Gabe Alonso Gannon Bardasian  Eric Goldstein  Isha Iva Thoreson | |

|  |  |  |  |
| --- | --- | --- | --- |
| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *Player* | | in this   |  |  | | --- | --- | | *Top Down* | game | |
|  | where   |  | | --- | | *wasd/mouse* | | makes the player   |  | | --- | | *Move around up ,left, down, right/aim at the mouse* | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Waves of Zombies will A boss will*  *Shops will*  *Dropped Loot will* | appear | | from   |  | | --- | | *All sides of the screen*  *Every 5th round*  *In between waves*  *From dead zombies* | |
|  | and the goal of the game is to   |  | | --- | | *Complete each wave of zombies and bosses to survive through 10 waves total.*  *(Might add an endless mode too)* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *Gun fire/Zombie growls/dying/walking/coins* | | and particle effects   |  | | --- | | *When shooting the gun/blood when zombies are shot.* | |
|  | [*optional*] There will also be   |  | | --- | | *Background music, that maybe ramps up as the game progresses* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *More enemies will spawn*  *Stronger Enemies will spawn*  *Unique Boss Enemies will spawn* | | making it   |  | | --- | | *More difficult to complete each wave* | |
|  | [*optional*] There will also be   |  | | --- | | *Shops that appear to help the player upgrade their character, and a set up phase between waves that the player may utilize to set up defenses or strategize.* | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5 **User**  **Interface** |  | The   |  | | --- | | *1. Wave Number 2. Zombies Left 3. Ammo in Gun/Ammo Total  4. Player Health* | | will   |  | | --- | | *1. Increase 2. Decreases 3. Decreases/ Increases 4.Decreases/ Increases* | | whenever   |  | | --- | | *1. The set up phase concludes*  *2. As the Zombies are killed off*  *3. As shots are fire/ammo crates are picked up or bought*  *4. As the player takes Damage/picks up health packs.* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Starting Menu* | will appear | | | and the game will end when   |  | | --- | | *At the end of the 10th waves.* | |

|  |  |  |  |
| --- | --- | --- | --- |
| 6 **Other Features** |  | |  | | --- | | *If time permits, we plan to create an alternative game mode that has endless waves.* | |

# 

# Project Timeline

|  |  |  |
| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | | |  | | --- | | * *Top-down view of Player, can move with wasd always facing the user's cursor.* | | |  | | --- | | *02/06* | |
| **#2** | | |  | | --- | | * *Map: Fully Sketched Out Map* * *Scenes: Complete the "Main Menu" Scene* * *Player Weapon Interaction: Reload Functionality* * *Wave Manager /Tracking Script: Spawn In/Destroying* * *Boss Design: Created Unique Movement for 2 Bosses* | | |  | | --- | | *02/13* | |
| **#3** | | |  | | --- | | * *Map: Significant progress on creating the map In Scene.* * *Scenes: Complete the "Shop" Scene* * *Player Weapon Interaction: All 3 Unique Guns created* * *Wave Manager/Tracking Script: Tracking Player's Movement, Zombie AI* * *Boss Design: Created Unique Attacks for 2 Bosses* | | |  | | --- | | *02/18* | |
| **#4** | |  | | --- | | * *Map: Fully Created with collisions.* * *Scenes: Created the General UI for the player's view* * *Player Weapon Interaction: Fully Implemented* * *Wave Manager/Tracking Script: Fully Implemented Doing Damage to the Player when hit.* * *Boss Design: Fully Implemented as Prefabs* | | |  | | --- | | *02/20* | |
| **#5** | |  | | --- | | * *ERA OF VISUAL EFFECTS!   For each aspect of the game, begin experimenting with Assets and applying them to the game's prefabs. Bug Fixing where is necessary* * *Map: Create Prefabs for Trees, Buildings, Bridges, etc., or find Assets for them. Begin placing them around the map.* * *Scenes: Create the "Pause/Settings/Quit" Scene, ensure good UI Practices on each Scene put in place.* * *Player Weapon Interaction: Find Assets for the Player, And each weapon.* * *Zombie Design: Create the Zombie Enemy or Find Assets.* * *Boss Design: Create the 2 Boss Designs or find Assets.* | | |  | | --- | | *02/27* | |
| **#6** | |  | | --- | | * *Map: Add In Prefabs and start decorating the map. Add In Sound effects based on where the player Is moving. Look Into water flowing effects.* * *Scenes: Create an Interactive Settings Page, where the player can re-route button Inputs, change the volume, and so on.* * *Player Weapon Interaction: Particle Effects and unique sounds for all 3 weapons.* * *Zombie Design: Create sound for when the zombies spawn In, when they are hit, noises as they approach.* * *Boss Design: Create Particle effects for when the zombie spawns in, sound unique sounds from the boss, and death noise when defeated.* | | |  | | --- | | *03/04* | |
| **#7** | |  | | --- | | * *Map: Start wrapping up the map's design, adding in any last details necessary.* * *Scenes: Victory Scene and Death/Loss Screen* * *Player Weapon Interaction: Animation for the player, Including taking damage, dying, movement, and so on.* * *Zombie Design: For Dead zombies, have their bodies fall on the ground and stay around for a variable amount of time.* * *Boss Design: On death, spawn a chest that gives loot/gold to the player* | | |  | | --- | | *03/06* | |
| **#8** | |  | | --- | | * *Tie every aspect of the game together. I should have finished the product now. Look into any extra features that may be easy to add or investigate any bugs that need to be fixed.* | | |  | | --- | | *03/13* | |
| **Backlog** | |  | | --- | | * *Endless Mode - not a part of the minimum viable product* * *Extra Weapons/Shop Items - not a part of the minimum viable product* * *Story Features - not a part of the minimum viable product* * *Fetch Tasks for Extra Gold - not a part of the minimum viable product* | | |  | | --- | | *If Time Permits* | |

# Project Sketch

A screenshot of a game

Description automatically generated