

 **Name of the game: Super Zombie Street Fight**

 **Stakeholders:**

- Dev:
- Design: Chance Cornell
- QA:

Overview



Project scope

- Budget: Unknown
- Timeline: Unknown



Elevator Pitch

A pixelated bullet-hell rogue-like adventure where players play solo or team with others to build their own weapons, gain experience to buy new power ups, and collect gear to customize their character. Super Zombie Street Fight will also have a Battle Royale game mode where players enter a randomly generated level to attack each other and the enemies of the world. The last one to survive will become the victor.



Monetization

Briefly explain how/if you plan to monetize the game.

Create enough content for a \$15 price tag. Single player and Cooperative game play for the main game mode. Have a Battle Royale game mode where players attack each other as well as world enemies in a randomly generated level.

Story

A one-paragraph synopsis of the story. If the story is too long, save the details for a separate document.

Gameplay

*Super Zombie Street Fight would have multiple game modes listed in the **Game Modes** section. All game modes revolve around the same core concepts. A randomly generated level would be created for the player to explore that has enemies placed amongst the world. The enemies would also be randomly generated, as their bodies are separated into multiple parts. Each part has a series of styles that will be selected at random upon object creation. This idea presents the player with different looking enemies that they shouldn't see twice in the same game/level.*

The player will move using the traditional WASD or Arrow keys, while using the mouse cursor as a tool for aiming their weapon. The player will traverse through the level eliminating all enemies and collecting random loot before exiting the level through a safe room door.

While in the safe room the player will be able to spend their experience points to purchase new passive power ups to aid their character. Using the currency items they collect along the way they will also be able to purchase new items, health, and ammo for their weapons.

The loot that the player picks up is randomly generated upon drop and will range from ammo, health, currency, main weapons, and weapon upgrade parts. The player will be able to equip two weapons at a time, one on each hand. Each hand input action button will be associated with the same side button on the mouse. To use a weapon placed in the left hand, the player will press the left mouse button. To use the weapon in the right hand, they will use the right mouse button. Weapons will have a magazine size and an ammo type. If the player has no ammo for that weapon, they will not be able to shoot the weapon. There will also be melee weapon types.

To equip weapons, players will press the inventory button (unknown at this time) and the game will pause. The player will be able to equip weapons, weapon mods, and armor. If they so choose, the player will also be able to drop items back into the world (This would be beneficial if the player's inventory is full or if they are trading items to another player in co-op mode.).

The player will take damage and lose health if they are hit by an enemy projectile or a projectile that they themselves shot (Example: Ricochet bullets). If they collide with an enemy and they touch, the player will also take damage. If the player reaches zero or below health, they will die and the game will be over. There is no restarting the level or checkpoints. The player will lose everything and if they play again, they will start from the first level again (Rogue-like gamestyle).

Game Modes

Annihilation Mode (Standard Game Mode) - *This is the base game mode where the player will spawn in a randomly generated map. Hordes of zombies will be placed amongst the map, all ready to attack the player when they are within their attack radius. While attacking enemies, the player will collect supplies such as armor, base weapons, weapon mods, ammo, and currency. The player must attack the enemies and kill them all before unlocking a safe room door. Once inside the safe room the player will have the option to buy new items, health, and*

ammo. They can also spend the experience gained to purchase power ups such as max health boost, ability to hold more items, and buffs to their rpg stats (str, agl, def, etc.).

Co-op Annihilation Mode (2-4 player LAN/Online) - This game mode is the same as standard Annihilation Mode, except 2-4 players will be able to join in the gameplay through either Local Area Network or Online play.

Survival Mode (Alternative Game Mode) - This game mode is much like the Annihilation mode, except the player has contracted the zombie disease and the antidote is on the zombie enemies. The player slowly loses health over time and the only way to stop the infection is for the player to kill zombies and pick up the serum. The serum temporarily stops the infection and replenishes the missing health. The player must not only fight off hordes of zombies, but race against death by continually using serum. The randomized maps, item drops, safe houses, and power ups are the same as Annihilation Mode.

Deathmatch (2-4 player LAN/Online) - This game mode is a classic deathmatch style gameplay. 2- 4 players will enter the **non-randomized level** to attack each other and the last one standing wins the round. Several modifiers can be changed in a pre-match list. This will allow for different ways to play the game and keep the players engaged.

Battle Royale (30 player max Online) - In this game mode a large randomly generated map is created where a maximum of 30 players can spawn in at random locations to start the game. The players will start with no items and must loot, kill, and scavenge for items. The same items that drop in Annihilation Mode will also drop in this mode. The map will also have random enemy AI spawns, causing the player to have to fight normal game enemies as well as other players. A large circle will spawn in a random area of the map after a set amount of time, this is to draw all the players in the right direction. The circle will get smaller after a time limit until only one player remains. There are no spawn rooms or power ups. The players are still able to craft their own weapons using base weapons and weapon mods, as well as wear armor for protection. Players will be able to loot other players and pick up their items if they choose. The final player alive is the winner.

Game Mechanics

Character Creation

- Details: Players will be able to customize the appearance of their character through an array of options for each of the following area: sex, body color, hair type, hair color, shirt, pants.
- How it works: In the main menu the player chooses the 'Character' button that brings them to the custom character creator. From there, they can change the appearance of certain body points by clicking on an arrow on the left or right of the body area. When they are finished, they click 'Finished' at the bottom of the screen.

Random Enemy Creation - Zombies

- Details: Each level will generate a random amount of enemies. The appearance of these enemies will also be randomly generated. These enemies will be generated from the following body points: sex, body color, hair type, hair color, shirt, pants, headwear.
- How it works: Upon level load, a custom randomizer will choose one piece from the array of options in each body point. Once all pieces are chosen, the enemy creation will be complete and will spawn in the level. Not all enemies will have a shirt, pants, or headwear.

Random Level Creation

- Details: Each level of the game will be generated at random from an array of 'blocks' that have different obstacles and enemy spawn points. Each level will be generated with a clear path to the level ending safe room.
- How it works: Small level 'blocks' will be created with different paths and blockades. These blocks will be placed in a manner that allows the player a clear path to the level end, however also presents alternate routes for the player to explore. This system is similar to the random level generation of Spelunky.

Movement - Player & Enemy

- Details: **Player** - The player will move using inputs from the mouse and keyboard.
Enemy - The enemies will move using player tag location.
- How it works: **Player** - The player will move directional using the WASD or Arrow inputs. They will be able to aim their weapons using the mouse cursor.
Enemy - The enemy AI will be searching for the object in the scene tagged 'Player'. They will have a nav mesh agent component attached to them to avoid blocked off areas of the level. Once the player is within the radius of the enemy, the enemy will begin to shoot and follow the player until either one is eliminated.

Health Systems - Player & Enemy

- Details: **Player** - The player will have the ability to gain and lose health and have that displayed on the health bar portion of the HUD.
Enemy - Enemies will not have a health bar, but will flash white when they are taking damage. When they are dead, their bodies will still lay in the level as a grayed out corpse.
- How it works: **Player** - The player will have a health bar on the HUD that displays their current health. The red portion of the health bar represents the amount of health left. The health bar will adjust the red portion to reflect the current health percentage (base max health is 100). The player will be able to obtain more health by picking up health objects

(see **Item Pickup**). The health will not exceed the current max health total. If the player is at current max health, the health object will not be able to be picked up. The player will take damage and lose health if their body collider collides with either an enemy collider or a projectile collider. If the player's health reaches zero or below, they are considered dead and the game is over.

Enemy - Enemies will take damage and lose health if their body collider collides with a projectile from the player shooting or a collider from a melee weapon the player is carrying. The melee collision must occur sometime during animation after the player pressed the input. If the enemy health reaches zero or below, they are considered dead and their body will display gray and remain in the level until completion or player death.

Attack System - Player & Enemy

- Details: **Player** - The player will be able to attack enemies using mouse input buttons. The player can choose between melee weapons to attack enemies in close range or use weapons that shoot projectiles to damage the enemies from a distance. They can hold two weapons at a time, one in each hand.

Enemy - Enemies will be able to use melee weapons to attack the player at close range or use weapons that shoot projectiles to damage the player from a distance. The enemies will not have an ammo amount for their projectile weapons.

- How it works: **Player** - If the player presses the left mouse input button and has a weapon equipped in that hand, the player will perform the attack associated with that weapon, whether it is melee or a projectile weapon. The same goes for the right mouse button, as the player is able to wield two weapons at a time, one in each hand. Projectile weapons will have an ammo type where the player must continually pick up and monitor the amount of ammo they have for their weapons. If a weapon does not have any ammo, it will not shoot. Melee weapons will not have an ammo type and can be used as often as needed.

Enemy - Enemies will have a radial component on them checking if the player is within range. If the player is within range of the enemy, they will attack the player by means of whatever weapon they have attached. If the enemy has a melee weapon, they will move towards the player attempting to attack them in close contact. If the enemy has a projectile weapon attached to them, they will shoot at the player until either the player is dead, or themselves. If the player moves away from the shooting enemy, the enemy will advance towards the player until it's inside the radial component with the player. Once the player is in range of the enemy, the enemy will continue to move towards the player, regardless of distance away.

Item Pickup

- Details: The player will be able to pick up items that are dropped by enemies or from chests. Once the player walks over the items they will be collected and applied. Weapons and weapon mods however require the player to press an input key to collect

these items, as the player might not want to automatically change weapons every time they walk over a new weapon object.

- How it works: For weapons and weapon mods, the player will walk on top of the object then a text box will appear with the name of the weapon or weapon mod as well as a button icon telling the player to press the input to collect the item, if the item is a weapon mod it will be placed in the player inventory. If the item is a weapon and the player presses the input, the new weapon will be switched with the current equipped weapon. All other objects such as experience points, currency, ammo, and health will automatically be collected upon collision, unless the max amount is full.

Inventory System

- Details: When the player presses the input for the inventory, a new overlay will appear with an area with backpack slots for item storage and a character area with slots for equippable items (See **Equip/Unequip Item**). Only items that can be equipped on the player will be able to move to slots in the character area.
- How it works: When the player presses the input to launch the inventory, an overlay will appear and pause the game. The player will see two areas, a character area, and a backpack area. As the player collects items, they will be placed in the backpack area.

Equip/Unequip Item & Weapon Mods

- Details: **Equip/Unequip Items** - Items that the player has in their inventory may be able to be equipped on to the character if the player chooses. Those items might have additional stats such as speed, defence, attack speed, and damage.
Weapon Mods - The player is able to collect weapon mods that fit into specific slots of weapons. When the player clicks on a weapon equipped, a new overlay window will appear and allow the player to add mods to specific slots. The weapon mods will have different effects on how the weapon is being used.
- How it works: **Equip/Unequip Items** - From the inventory overlay the player is able to drag and drop items to the slot that they associate with. Items are slot specific and can only be placed in those slots when equipping. If the item being equipped has additional stats, those stats will be automatically assigned to the player and adjusting their hidden stat values. Once an item is equipped, the character's appearance will also change to represent the item being worn. When an item is unequipped, the stats and appearance of the item will be removed from the character.
Weapon Mods - Weapon mods will act much like most armor with having special attributes. When the player clicks on a weapon, a new overlay will appear with slots in specific areas of the weapon (muzzle, stock, body, magazine). These areas are able to be equipped with weapon mods and will cause the weapon to react in different ways (example: a shotgun muzzle that causes the bullet path to be circular.)

Shop System

- Details: When the player finishes a level and reaches the safe room, they will be presented with a shopkeeper who will have items they can purchase using currency they gathered in their playthrough. Purchased items will be in the players inventory at the beginning of the next level. The player will also be able to purchase a power up using their total experience points. This power up is passive and automatically added to the character.
- How it works: When the player reaches the safe room and enters a new screen will appear with a shopkeeper and an area of random items they have for sale using game currency. These items will range from health, ammo, weapon mods, and more rare weapons. Each item will have a price and if the player has the amount of currency that the item costs, they will be able to purchase the item and have it in their inventory when the next level begins. The players currency will be decreased to represent the transaction. If they do not have enough funds, they will not be able to purchase the item. In another area the shopkeeper will have a section of power ups for sale using the players total experience. If the player chooses to purchase a power up, their experience points will decrease to represent the transaction. The power up will be passive and the effects and stats will be automatically changed to the character for the duration of the playthrough. If the player does not have enough experience for the cost of the power up, they will not be able to purchase the power up.

Experience System

- Details: As the player kills enemies they will gain experience points that are associated with the enemies. These experience points are a form of currency and can be used to purchase power ups from shopkeepers in end of level safe rooms.
- How it works: Each enemy will have a specific value assigned to them for experience when killed. When that enemy is killed, that value will be added to the current total the player has. When the player reaches the safe room they will be able to purchase power ups using their experience if they choose. The experience value will decrease when a transaction occurs.

Random Power Up Choices

- Details: In the shopkeeper screen, there is an area for the player to purchase up to three power ups using their experience points. These power ups are presented at random. Once the player purchases a power up, the effects will automatically be added to the character.
- How it works: When the player enters the shopkeeper, three random power ups from an array will be presented to the player. Each power up will have different attributes to alter the gameplay of the character. If the player purchases a power up, the effects and attributes will be added to the character on next level load. If a power up is purchased, it

is available to be listed again at another safe room shopkeeper. If purchased again, the effects will stack.

Game elements

Describe your game world, including all the characters, location, object, and other elements in it.



Characters

- The player would be able to create their own custom character in the main menu. This chosen character model would be used each time the player starts a game. The player would be able to change the appearance of the character at any time while in the main menu.
- ...
- ...



Locations

- ...
- ...
- ...



Levels / missions

- ...
- ...
- ...



Objects

- ...
- ...
- ...

Assets

Here is where you will include all of the assets needed as well as brief descriptions.

Art

- ...
- ...
- ...

Sound

- ...
- ...
- ...

Animation

- ...
- ...
- ...