Zombie Outbreak

Working title

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Table of Contents

[Overview 2](#_Toc431166154)

[Concept 2](#_Toc431166155)

[Genre 2](#_Toc431166156)

[Target Audience 2](#_Toc431166157)

[Target Platform 2](#_Toc431166158)

[Monetization 2](#_Toc431166159)

[Project Specifications 2](#_Toc431166160)

[Development Tools 2](#_Toc431166161)

[Asset Acquisition 2](#_Toc431166162)

[Schedule Overview 3](#_Toc431166163)

[Risks & Contingencies 3](#_Toc431166164)

[Project Description 3](#_Toc431166165)

[Game Modes 3](#_Toc431166166)

[Gameplay Mechanics 3](#_Toc431166167)

[Progression 4](#_Toc431166168)

[Difficulty Adjustments 4](#_Toc431166169)

[Locations 4](#_Toc431166170)

[Weapons 4](#_Toc431166171)

[AI 4](#_Toc431166172)

[Story 4](#_Toc431166173)

[User Interface 5](#_Toc431166174)

[In-App Purchases 5](#_Toc431166175)

[Appendix 5](#_Toc431166176)

[Core Features 5](#_Toc431166177)

[Secondary Features 5](#_Toc431166178)

[Tertiary Features 5](#_Toc431166179)

[Example Weapons 5](#_Toc431166180)

[Example Locations 6](#_Toc431166181)

[Example Upgrades 6](#_Toc431166182)

[References 7](#_Toc431166183)

# Overview

## Concept

Players take to the streets to escape a city overwhelmed with zombies. Armed with a single weapon, the player must find their way through a hostile environment to a safe zone, such as a helicopter pad. However, the longer the player takes to escape, the more zombies start to appear on the map, all heading to attack the player. To make matters worse, as the player progresses through harder and more dangerous locations, the zombies also become stronger and more dangerous. Thankfully, the player will get stronger as he survives each location, allowing him to combat this deadly situation.

## Genre

Top-Down Shooter

## Target Audience

This game will be targeting users between 18 and 55, primarily male, who enjoy simple zombie shooters. This audience also are common thriller movie fans and/or enjoy a bit of survival role-playing.

## Target Platform

The game will be developed for Android devices, of 3.2 and newer versions.

## Monetization

There will be an in-game currency, which will be used for purchasing new weapons and unlockable content. Users will be able to spend money to purchase bundles of currency, allowing them to unlock certain content faster. There will also be some extra maps and variant expansions that can be purchased with money.

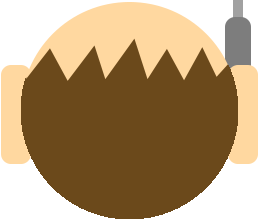
# Project Specifications

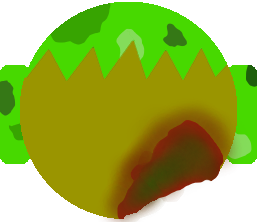
## Development Tools

The game will be developed with Unity 5’s 2D suite. 2D Assets will be created with Adobe Photoshop, Adobe Illustrator, and GIMP. The primary coding language will be C#. For the in-app purchases and currency, the Soomla plugin shall be used.

## Asset Acquisition

Most of the assets will be simple images that will be created in image manipulation software, such as Adobe Photoshop and Adobe Illustrator. Audio assets will come from royalty-free sites, such as Freesounds.org, and edited to fit the game.

   
Example sprites, from *Last Man Standing*. (2014)



## Schedule Overview

At present, the schedule is planned to give tasks substantial amount of time to allow full development and debugging. Even so, the project is intended to be completed in approximately 20 weeks, not accounting for testing and external issues. A list of milestones are given below:

Week 2: Basic gameplay and Zombie functionality is completed.  
Week 3: Initial menus and basic location are created.  
Week 6: Location and weapon variants are created.  
Week 8: In-App Currency and In-App Store is set up.  
Week 10: Survival mode is completely implemented and functional.  
Week 11: Audio is implemented.  
Week 14: Zombie Variants are added and fully integrated.  
Week 15: Campaign mode is completely implemented and functional. Settings menu is implemented.  
Week 16: Time Trial mode is completely implemented and functional.  
Week 18: Leaderboard and Social Connect are implemented.  
Week 20: Project finalized.

## Risks & Contingencies

The largest risk for this game is not completing the tasks within the assigned time. If the appropriate tasks are not completed in a timely manner, then the project timeline may have to be extended, or certain features would have to be cut. To help prevent this, the schedule will include a large overflow time-period, to allow for as many unexpected issues as possible.

# Project Description

## Game Modes

The game will feature a campaign mode, a survival mode, and a time trial mode. In the campaign mode, the player will complete each level in progressive order, with no time limit and a clear goal. As the player progresses through the campaign mode, more content will be revealed to the player over time, including enemy variants, locations, and new weapons. In survival mode, the player will be placed in a location without a goal on the map. The player will have to attempt to survive as long as possible, while the number of zombies consistently increases. In the time trial mode, the player will be given a map with a goal, just like in the campaign mode. However, the game will be tracking how long it will take the player to reach the goal.

## Gameplay Mechanics

The base gameplay will involve the player controlling his avatar by moving the character about and shooting at zombies. The character can move in a separate direction than he is facing, allowing the user to advance or retreat while in firing his weapon. Usually, upon contact with a zombie character, the player will immediately lose the level. As time passes in the game, the map will start to generate more zombies, whom will start to swarm towards the player when within a certain distance. In most game modes, the player will be seeking an ending point, such as a helicopter pad, which will be highlighted to allow the player to recognize it faster. Upon reaching the ending point, called a safe zone, the player will have completed the level successfully.

## Progression

As the player completes levels, he will earn some currency, called money, with which to buy more powerful weapons. The player will also be able to purchase upgrades to permanently increase some of the stats of his character. The player will not gain traditional levels, but will be able to increase his abilities through purchasing new weapons over time.

## Difficulty Adjustments

The game will feature three difficulties: Easy, Normal, and Hard. The game will default to Normal, where none of the gameplay will be adjusted. On Easy, the player will be able to take multiple hits from the zombies before losing. Most zombies will also have three-quarters to half of their normal health. On Hard, the player will only be able to take a single hit, while zombies will have more health than normal. Likewise, zombies will also travel faster on hard mode.

## Locations

There will be a variety of locations that the player will be able to play through, including a city map, a forest map, an open farm field, and a highway map. All locations will contain a number of obstacles which players cannot walk through, nor shoot through. These obstacles do not prevent zombies from being able to see the player, though they do prevent zombies from walking directly towards the player. Different maps will have obstacles of different sizes and shapes, as well as vary in density on the number of obstacles. In campaign modes, the map will be pre-selected for each level. In survival and time trial modes, the player will be able to select the map.

## Weapons

Between levels, players will able to select new weapons to enhance their capability on each level. New weapons allow for doing more damage, as well as better accuracy. Different weapons also offer different fire rates, usually inversely proportional to the weapon’s accuracy. Players can buy weapons between levels, using the in-game currency that they earn from completing levels. Weapons with generally better statistics will cost more than other weapons. The weapons will be only generic guns, named off of generic gun styles rather than specific guns. Each weapon will have a set amount of shots they can fire before needing to reload, referred to as a clip, though the player has unlimited ammo otherwise.

## AI

The zombies will run on a very simplified artificial intelligence. Whenever the player gets within a certain range of a zombie, it will attempt to go straight towards the player. If there is an obstacle between the player and the zombie, the AI will continue to move towards the player in a straight-line, without attempting to move around the obstacle. More advanced versions of the zombies may use better intelligence, allowing them to properly move around obstacles, as well as perform unique actions, like shooting or hiding.

## Story

The story for the game only appears in the campaign mode, where it will show in static images and text between the levels. Before each level, an image and some text will appear to explain the story elements leading up to the character’s situation at the current level. After each level, another image and text will appear to explain the aftermaths.

The general story is of the player attempting to escape and travel across the desolate landscape in search of a safe place to escape the outbreak. The player will be starting in a city, and will be traveling along the roads to get away from the city, including across farmlands.

## User Interface

While playing, the player will tap the screen to shoot in a chosen direction, towards where the player taps. There will also be a small area in the lower left where the player can move the character around by tapping on one of the sides of the area, like on a controller’s directional pad. In the upper right corner, there will be a counter showing the current amount of ammo the player has remaining in the current clip. Tapping on the ammo counter will cause the player to reload the clip to max capacity. A small button in the upper right corner will allow the player to pull up the pause menu and access settings or quit the current level.

## In-App Purchases

Players will be able to purchase soft currency bundles, which allows them to buy in-game upgrades, weapons, and locations. There will also be some alternative enemies, such as aliens and monsters, which players may purchase as expansions to the game. Future special content will also become available for purchase as expansions as well.

# Appendix

## Core Features

* Zombie Functionality
* Zombie AI
* Firing Guns
* Movement
* Multiple Weapons
* Multiple Maps
* Survival Mode

## Secondary Features

* Time Trial Mode
* Zombie Variants
* Audio Effects
* Leaderboards

## Tertiary Features

* Social Connect
* Character Color Customization
* Psuedo-random maps

## Example Weapons

* Pistol – Low fire rate, medium accuracy, low damage. Starting weapon.
* SMG – High fire rate, low accuracy, low damage.
* Shotgun – Low fire rate, low accuracy, high damage. Effective in short range only.
* Assault Rifle – Medium fire rate, medium accuracy, medium damage.
* Sniper Rifle – Low fire rate, high accuracy, high damage.
* LMG – High fire rate, low accuracy, medium damage.
* Sword – high fire rate, high accuracy, high damage. Short range only. Expansion weapon?

## Example Locations

* City – A dense environment of buildings and cars. Common safe zones would be helicopter pads, buses, highways and military cars.
* Highway – A narrow and dense environment full of cars. Common safe zones are busses and cars at the end of the highway.
* Airport – Dense in some areas, but sparse in others. This environment is filled with luggage vehicles and airplanes. Common safe zones are airplanes, helipads, and military cars.
* Farmland – Sparse fields with an occasional tractor or barn. Common safe zones are cars, military cars, and barns.
* Forest – Dense area with numerous trees. Common safe zones are the edge of the map.
* Medical Lab/Hospital – Internal environment full of tables, medical trays and corpses. Safe zones appear as doors leading outside, or to specific rooms.
* Military Base – Environment filled with military vehicles, tents and encampments. Possibly contains military enemies. Safe zones include military cars and helipads.

## Example Upgrades

* Running shoes – Increase running speed.
* Armored vest – Increase player’s health.
* Scope – Increase gun accuracy. (Applies to all guns.)

# References

Suson, A. (2014). *Last Man Standing* [Mobile Game]. New York, NY: Avram Suson.