**Game Design Document for:**

# Solitary Edge

**The Zombie Space FPS**

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Version # 1.00

Sunday, November 21, 2021**Table of Contents**

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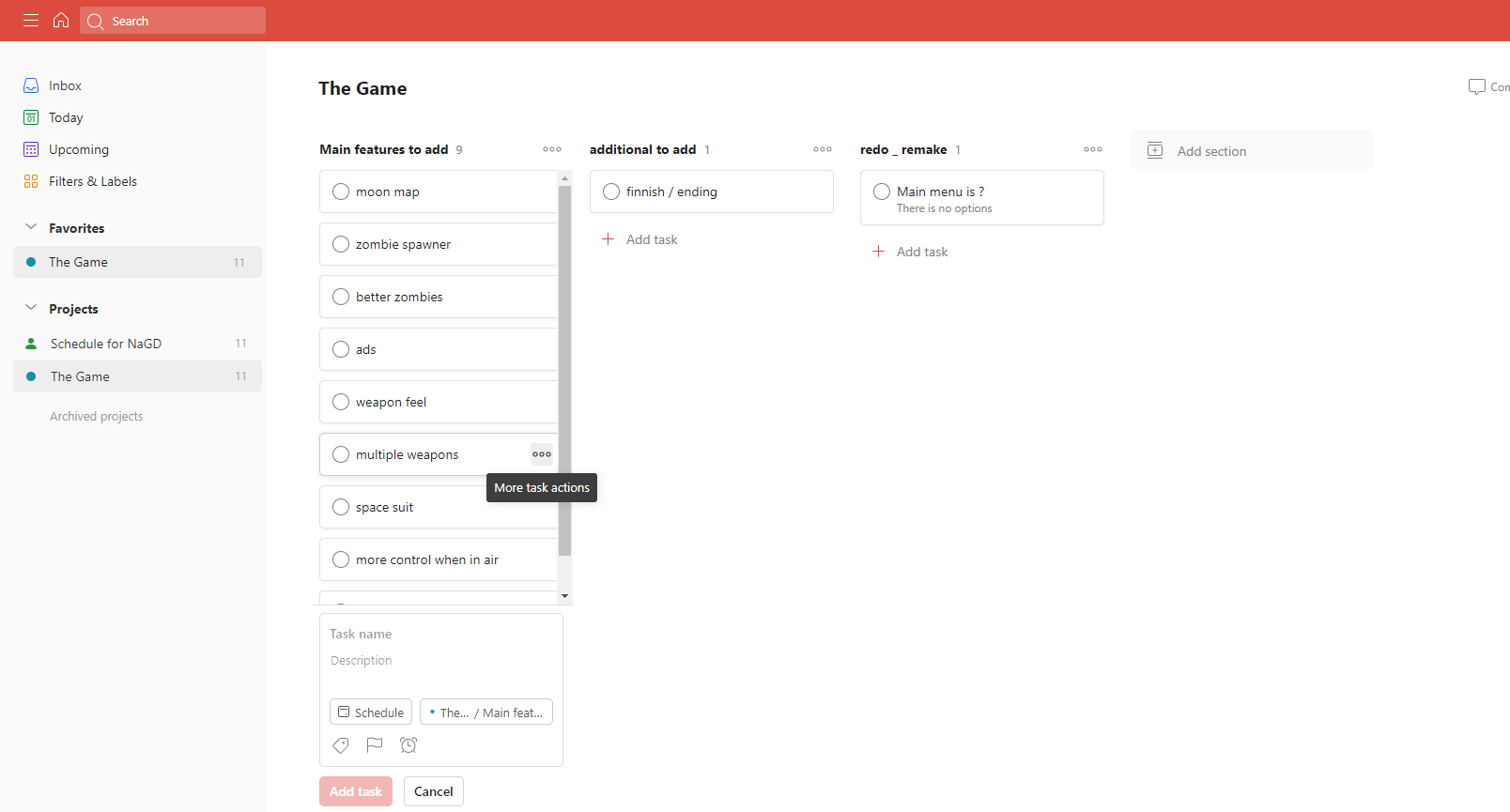
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Time table and road map, maybe idea generation.



**https://trello.com/invite/b/ypCeVat7/c86cbb95e0b7a65842cd274cbb73187b/solitary-edge**

This will change as time goes on as I will have more ideas and try and implement them into the game. This will have a base for the game.

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Updated board for the game as bugs kept appearing.

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, application, Word

Description automatically generated

[schedule (1).xlsx](https://tottonac-my.sharepoint.com/:x:/g/personal/18015_totton_ac_uk/EVJOUrUOmXpGqfJFuB6eu-wB5Q5x4Ujy2Xlf4U2sd8gK8g?e=xj0cJd) – please use the one with this project called schedule.xlsx

# Project Management

## Version 1.10

Version 1.10. had some experimentation of the full capabilities that I can have. Turns out that Unity counter underlines and I need the game to be more simplistic and less of Call of Duty fan game. Is may be because my PC cannot handle rendering high meshes and light reflection and refraction. I also settled on the name called Solitary Edge as it's got a nice ring to it. This also is kind of self-explanatory as you are alone with the stresses of being in space as well.

## Version 2.00

Version 2.0. I refined the game a bit more, added a tutorial area for the main base game and have learnt that, making a map is more difficult to run Unity as the Global illumination takes a lot more time to process on a larger mesh. This means maps need to be short and simple. The code is also missing some annotations, making it hard to understand and getting quite messy. Need to revise that in version 2.10. The main idea of a Call of Duty shooter has been boiled down to a core element of weapons and an obstacle or something, such as score is something the player can get for shooting zombies and can use to pay for items. I also want to add weapon pickup so you can change your load out, but that's not really going to change Much except the damage in the file right off the weapon and sometimes range.

I also realise that it's going to be hard to implement this map and I'm going to have to have Maps that are individual to each other, which is going to be a shame also They’re going to be very blocky and simple with minimal lighting too, But the player will have a flashlight.

## Version 2.10

I might tweak the document a little bit and I’m tempted to throw away the escape third place or have a way to implement it, easier, like a trigger in a certain spot on the map. Overall, the main premise of the zombie FPS will stay, the time constraints are very harsh and will make it more difficult.

# Game Overview

## Philosophy/ theme/ morals

The main influence is the zombies game mode from the popular AAA games Call of Duty series. The game mode is where zombies spawn in through barricades and attack the player, so the player needs to defend themselves while eliminating all the zombies to progress per round. This I really like as you set your goal. My favourite map was the space map from Call of Duty, is one and three where you are on the teleporter pad and got to stay there for a short period time before progressing then onto the space map, which is called moon on one and three. You then need to put on a space suit after arriving and, similar to the standard zombies coming through the barricades, you will have an Easter egg you can solve and a boss with a random name from your friends list and put on a big space suit zombie. That is a lot harder to kill and can almost kill you by putting you in 1HP. Another fun thing about the moon are the little game modes of the strike as well just like a little ester egg overall this has some inspiration to implement a unique mechanic but mainly I think jumping around high over zombies is the strong mechanic in my opinion. Another fun thing are the weapons where you must use your score which you get from hitting zombies, you get 10 points which you can buy weapon wall buys which gives you a gun and if you already bought it then you can buy ammo for the gun. other place you can spend points and another mechanic is the pack a punch machine which gives your gun a more powerful kick to it which decreases recoil but increases damage dealt to zombies. What I really like is just the map moon where you can jump around zombies, it just gives you a nice adrenaline feeling. There is also another thing if you jump wrong or do something wrong slightly, you can also forward to your death or dive into a bunch of waves of zombies.

### Philosophical point #1

The game is going to be about a space zombie survival shooter FPS game where the player needs to survive the hordes op zombies that come for you. You will be able to jump around and shoot zombies and run off building and slopes for more airtime. The game will help you buy weapons, but the game is going to try and focus more on the premise of you trying to survive the waves of zombies that spawn. You won't need a space suite, or hopefully buy blocked doors with points or similar to Call of Duty. The game is going to focus more on the space feel on a space station and you're stranded, and you need to get out before you die from the ever-growing horde.

### Philosophical point #2

This game will try and achieve the basics of Call of Duty but with fun gameplay with an ammo box you can use to fill your Max Ammo, weapons that you can use to fight the zombies, zombie spawn locations and a moon map. the screen will show your points, rounds and ammo count. There will be a pause menu that pauses the game and there will be a main menu title that will allow the player to change map, go to the settings and quit the game.

## Common Questions

### What is the game?

The game is where zombies try and attack you and you, the player, will need to fight them back with weapons, trying not get stuck and keep progressing while trying to escape the ever-growing horde in a limited space. The different between this game and Call of Duty is this game simpler in the style and the gameplay, but the core elements are where you have weapons and you can have Max Ammo and you just have a lot of fun Really, the grind in zombies as well, while completely strikes as the series go on, it gets harder to complete the Easter egg like origins in quality Black Ops 2 where you have to unlock Samantha from the plane and wake her up from a dream. You will need to build and use a drone that can go outside the map and by completing step by steps set out by the game developer, then once completing this and the game ends. A cut scene will play with Samantha Playing with us the players as figurines. Over these games, more boiled down into the point where you're on a space station, stranded. You have to get out before the rounds get too high and out of control fast, leave forever and never come back.

### Who is the target audience?

The target audience would be 16-year-olds, as the game is not overly gory with humanoid characters. The only thing about the game would probably be the gunshots and the blood effects from the zombies that will move it up to a PEGI 16. This means I can't go too overly detailed in the assets as this will be too like real life as you will be shooting essentially human beings which would mean it will be an 18, but the zombies are human like characters that will put it down to a 16. Another reason why we target this is because the game is likely to appeal to the younger generation, as fewer older people would play this sort of thing as they are more dedicated to CoD. Also, it’s easier with the younger demographics as they want something where you can shoot something. They also like the simplistic gameplay as well, as it is easier to understand and maybe Ican add more difficult gameplay so the player can get challenged.

### What themes are present in the game?

The game theme is a horror/space/war theme, not like in the sense of Star Wars, but more like you are on the Moon shooting zombies. Another thing would be FPS shootout as you would be shooting zombies in space. The sad thing would be the zombies as there's zombies in the game and you're trying to fight the zombies and trying to escape, which is the main premise of the game.

### Where does the game take place?

The world is set in the near future, ten years since humans have been established. A successful mining operation on the Moon, they found a new element, called Element Z, which will turn people into zombie like people that are controlled like a hive mind that attacks nearby people. This goes into testing and mass operation before there is a containment breach and the whole station goes into a permanent lockdown until they can get destroyed or backup garage to clear the horde. The plan that spawns in is one of the survivors and survived the breakout of Zombies. This is fiction setting.

### What/who do I control?

Describe what the player will control- it's mainly a narrative game so focus on that area

The player can be controlled, the survivor that survived the breakout in this station and there will be under time pressure before the Horde gets immensely out of control for their weapons and will need to get to the emergency space shuttle to leave the space station. Before Eva, the space station gets bombarded by all 2 missiles or a backup clean-up crew will clean the whole station by shooting anything that moves. There won't be an actual time pressure.

### What is the focus?

The whole premise of the game is to survive as many rounds or get the high score or as many kills you possibly can before you cannot handle the wave. There are many ways to survive the wave, but the game is very simple, so you'll be given a very small amount of weapons. This will increase the difficulty to survive higher rounds. But if you find the correct strategy, you will be able to survive as many rounds as you possibly can. Another way would be to get and beat your high score that you got last game.

### What is different?

Compared to the Triple A titles such as Call of Duty, and any other games similar to Call of Duty Zombies, the difference from Call of Duty in the AAA titles is this game is solo play only which removes the multiplayer aspect of the game. There is no full-on weapon pack, a punch perks, different maps are all in one location with limited weapons and an ammo crate that you can get. The game will be simpler compared to Call of Duty in the sense that the game is static, won't look good, the zombie models are the same and the maps haven’t got the comical Easter egg or similarities to references in real life movies or games.

# Feature Set

## General Features

Brief overview:

The location is on the moon, which means the gravity there is going to be lighter. This implements a new mechanic which gives you increase amount of jump.

The game is built infinitely, meaning that you can keep fighting waves upon waves. Upon waves of zombies until you die or the game crashes or breakdown.

As you progress with these rounds the zombie difficulty will start to increase. The rounds will last longer. And the zombies will get slightly stronger and faster.

Gameplay loops and mechanics:

Gameplay loop:

1. Use weapon / shoot
   1. Reload
2. Look at zombie
   1. Aim at zombie
   2. Use weapon / shoot
   3. Zombie dies
3. reload
   1. Low on ammo
   2. Reload weapon
4. Out of ammo
   1. Look for ammo box
   2. Go to ammo box
   3. Refill ammo at ammo box
5. Survive
   1. Kill all zombies
   2. Progress round
   3. Save points

Game mechanics very basic:

1. R to Reloading the weapon
2. F to turn on the Flashlight
3. No crosshairs, only aim down sights with right mouse
4. Shoot the weapon with right mouse
5. Switch weapons with 1 and 2 or scroll wheel
6. Jumping with space. (Moon gravity)
7. Smooth FPS movement
8. Sprinting

## Gameplay

List items here that are key to the gameplay experience

* Will be a small variety of weapons at the player can use to kill the zombies and progress on rounds.
* The rounds will be infinite and ever growing as the zombies get more and more difficult.
* Different locations on a single map Which will mean only loading one map.
* The gravity will be last, meaning the player will jump higher allowing for unique places to go and to get out of sticky places where zombies can pin you down and eliminate the player.

# The Game World

## Overview

Provide an overview of the game world. Here you should outline the concept and premise of the narrative. The way you shape this document can vary, you can use flowcharts, diagrams, tables or other means.

This is mainly a section that you can briefly use to cover mechanics. Add or remove sections that are applicable.

Overall, the game is a zombie survival way. The player must fight in agonising Tara as the zombies trying to attack the player and eliminate them, or the players struggle to stay alive with the bare minimum weapons they have and its very small amount of ammo they have unless they go to an ammo box which will be in a common spawn area for zombies.

The crafty there will be lighter, meaning the player king outmanoeuvre the zombies and get to higher ground very quickly while the zombies must walk another mile.

## World Feature #1

The main feature is the jumping in the movement of the character as well as the zombie filled, but just focusing on the jumping, you can jump high and further, but is uncontrolled, meaning that you have to calculate your jump before you make the jump. So, if you miscalculate the jump or go too fast or too slow. You can end up falling to a ditch and dying and losing your game and having to restart from the beginning.

## World Feature #2

The second feature would be mainly the weapons and the zombie theme in space where you got to survive and trying to escape before you get killed by the horde. And basically, the map itself where you want to space drilling station drilling for this element and it's all over the place and you're stuck in this suit. And you got to get out and survive before Clean-up crew arrive or the station gets orbital boomed.

## The Physical World

### Overview

The game world is the moon on the location of the drilling site Alpha, where a contaminant infected the whole entire space station. Causing a permanent lockdown to be in place. The station is on the edge of humongous create about is in the dark because there's no sun shining, you know. So when the player looks hot, it is quite black. Other than that crater is the main station Weather materials drilled and mind will be collected and processed. This is also how element Z was found as well and is also in the laboratory section on the left front side of the section-on-Section Alpha section beaters, where the materials are processed. Sent back to Earth for money. The third section is where the ports are for the space stations and section Charlie and section. 4 is Delta. This is where the crew is living and the main affection has spread where there's bunk beds, kitchen utility's and so on for the crew to live.

### Key Locations

The crater is 1000-metre-deep crater That is steep on the edges, meaning that if anyone was to fall in, there could not get out. This is unexplored by anyone unless they can use the elevators, which has been cut due to the lockdown and can never be restored as the emergency brakes have been placed. The drilling arm is attached to the edge of the space station, an crater where it goes down and rules the massive walls of the craters and sends the crater materials back through the Conveyers.

In the main corridor in Sector one or alpha is where the science lab is located and where the element Z was founded and was refined into a slime like serum that was tested on. Crew and animals. When they tested on humans, they put them in test tubes filled with A strange liquid that keeps the Organism alive, but asleep at the same time. This is why the first contaminant was spilt, causing the initial lockdown after it escaped. All the scientists in there were brutally infected by this specimen, and the whole science lab was trashed while the specimen was escaping.

On the other side of the science Lab, Sector 2 or beta Is where the standard route moon material is processed for auction water and other materials such as Iron, Niko, silicone for Earth to be sent back there stored in these giant crates and silos for. Depot and once they're ready for launch, there will be put into sector 2 Charlie. This area is on lockdown 24/7 anyway and is sealed off to the player, but if they can, they control and access it through a hidden hatch or control module on the rear side.

Site to three or Charlie is where the ports are. This is where the ships are stored, and ships are ready to dock are located. This is how the crew, material and element Xe is passed to Earth and moon on the station without the poor, the station will be doomed. As well as it’s protected by security measures, turrets and blast doors to make sure it stays In working order. Due to the lockdown of the specimen escaping the blast doors were already sharp, but some sort of explosion from the science lab affected shuttle two and three, causing them to rupture their fuel tanks and mix it with the option and sparking. Therefore, causing a huge explosion on one side of the station three will sent out to Earth and four is in maintenance and disrepair. This will mean the player will need to grab parts for Shuttle 4 to escape.

Sector 4 or delta Is where most specimens and infection were spread, as this is where the crew lives, the kitchens and bathrooms are, and the habitation modules and the Dome. Is a horrible mess in the sector and was wide open during lockdown. The spend every single crew member in that room was infected by the specimen and turned into zombies Like creatures. This is also where they discover it as a massive breach in one the windows where the specimens leapt towards a crew member Have broken a window causing a Max vacuum. Therefore the specimens are spread out across the moon and also shows that why they don't need a suit which is deeply concerning for the Earth organisation institution. No.

### Objects

There will be weapons scattered across the floor for the player to pick up and use against the zombie menace as well as Ammo crates for defending the players themselves. There will be shuttle parts across the whole map from the explosion port.

# The World Layout

## Overview

Site Alpha is located on the north side of the moon, where the massive crater is 1000 Metres deep. The site is split into four parts, with the main corridor following into the drill rig. They're also elevators attached to the bottom of the drill rig so they can deploy into the bottom of the hole.

## World Layout Detail #1

## World Layout Detail #2

# 

# Critical Reflection

# Extra Miscellaneous Stuff

## Overview

Anything that could be or is going to be implemented into the game. This could be zombie classes like tanks to attack the player or. Better settings or themes.

## Junk I am working on…

I have an idea to implement hard or difficult zombies or the zombies are different to each other and compose the immediate threat at the beginning for the player and could wipe their start and making them to start again.

I was thinking of a Max ammo drop where if you kill one off zombies you might get around him spawn of Max ammo. That will mean that you can refill your current two weapons.

# “XYZ Appendix”

The XYZ Appendix is the list of all objects or references, Diaries, images, story, appendix, World maps, dialogue, branches outside the demo, ending outcomes classroom notes. And anything in data needed for the player. Or person reading this GDD.

# “Objects Appendix”

The BL58 Is a space weapon like the AK. It can fire a lot of rounds in a short period of time. Not as far as the BM34 salt rifle built for the security for Task Force. The Bell 58 is a specialised weapon for civilians to use, going down into the hole. This weapon has a 30-round mag and shoot 30 millimetres bullet.

The BM34 is an assault rifle used for the security Task force to defend the space station. These are less powerful as the BL58 and is mainly used against people, but there's also another assault rifle called the BM34 – AC for armour penetration.

The BM34-AC is used for armour penetration of incoming shuttles docking into the station there, unauthorised or ones escaping. You can also see these gun Mechanisms attached to gun turrets defending the station as the gun is super reliable in space and vacuum pressures.

The GC84 Darcy is a hand pistol given to all civilians on the station to defend themselves from the specimens. In case of a fatal breakout. This gun has a four-millimetre bullet, mainly used against civilians, and the specimens stored in the science lab.

The ammo crate ammunition for all type of weapons and tourists. This is how they’re supply all weapons in the station as it scattered across near hot areas. The crates can also be seen in the security area in the sector for Delta.

The shuttle parts Or scattered across the space station ever since the explosion, they are shiny and very reflective in the sun and can be shining towards the player for the player to pick up. They can be used to repair the ship. And to for the player to leave. ~Scrapped.

# “Diary/journal submissions”

# “Images (flowcharts, mind-maps, diagrams etc)”

# “Story Appendix”

# “World map”

# “Endings/outcomes”

# “Classroom notes”

# “Playable demo”

<https://github.com/domibron2/TheGame2> - down load from my GitHub page.