Game Proposal

By: Andrew Hunter, Navin Pandey, and Lucas Papadatos

Brief Statement of Game Concept

The game is a top-down dungeon crawler-like shooter where the player gets upgrades in between runs to progress further and further every run.

The player must escape a labyrinth of hallways while avoiding and/or killing guards that are roaming the hallways trying to find and stop you. The player can choose to adopt one of two, or a combination of both playstyles: stealth, or aggression. Stealth players will quietly sneak around guards to avoid their field of vision. The alternative is players who would prefer to run loudly at full speed and kill any guards they come across, but they must watch their ammo, since there will likely be more guards than players have bullets.

When players inevitably die, they will get the chance to spend the money they've earned on upgrades that will be essential for the player to make it farther and farther after each run, as they get more upgrades. Only after the player gets enough upgrades will the player finally be able to reach the end of the level. Players will get money mainly by making it a far distance throughout the level, but also by picking up money found throughout the level. There are infinite, randomly generated levels, with the purpose of scaling the difficulty to match players' upgrades.

Novelty

Most gamers these days have come across a top-down shooter in some form or the other. It is a very popular video game genre that has been recreated many times in forms such as Dead Ops Arcade, Brawl Stars, God's Trigger, Hotline Miami, Neon Chrome, Monaco: What's Yours is Mine, and more. Most top-down shooters only have a few maps for the entire game that are hand designed from top to bottom as one extensive map. We wanted to take the top-down concept to the next level and revitalize the genre by making it an endless single player experience. We will achieve this by creating an infinite number of levels so the player's experience never ends and will only continue to grow. We also want the player to have a new experience every time they play a different level. To achieve this goal, we will create a handful of small chunks of map manually, then randomly combine these small chunks to make a long hallway. This novel layout will keep the player coming back to witness all possible floor layouts this game could make possible.

Another novelty this game has to offer is the way it engages players' creativity. We did not want to make another game where the player needs to follow a rule book or specific guidelines. We wanted to give the players the freedom to play how they desire to play. We made this possible by offering a stealthier approach, as well as an aggressive approach, forming two primary playstyles. Since the monkey escaped its containment cell, it is trying to avoid the guards and make its way out of the basement of the laboratory. Realistically, the monkey has the option of either going crazy and killing all guards or avoiding them in a stealthy approach. We plan to design the levels with two primary playstyles in mind: aggression and stealth. The player can hide from guards in some elements on the map and the field of vision of the guards is purposely reduced to their flashlights in order to play around them in the stealth playstyle. We also give the player the ability to switch between sprinting and sneaking. Sprinting will produce louder footsteps which will attract guards and will be more suited towards the aggressive

approach to the game. The overall goal of prioritizing two playstyles on the opposite side of the spectrum is to have new and original playstyles develop as players become familiar with the game and find an optimized playstyle to progress the furthest in the game.

A game mechanic that makes our game even more unique to the average game is using the upgrade system as a means of progression. Upgrades will be available to purchase after every time the player dies, giving the player the ability to go even further the next time with an increase in power. Upgrades consist of improving the stats of the monkey and upgrading any lethal weapons or equipment. In most other top-down shooter games, your skills improve through playing more and being able to progress further. However, this game consists of infinite levels with the goal being how far you can progress from the basement. We thought that an interesting element to add that would separate this game from the rest is progressing through upgrades rather than through skill. We plan to have the difficulty of the levels increase significantly where the upgrade system becomes a fundamental aspect of the game players must utilize in order to increase the overall power of your character to progress further in the game. Therefore, the player can keep dying over and over until they achieve enough money to upgrade the monkey to where he is super overpowered for the level he is on, making that level easier to beat while not relying on much skill.

The upgrade system also contributes to different playstyles and creative freedom the player has in this game. You can limit the upgrades you give the monkey to make it more of a challenge for the player as you can decide to use your skill for this level. You can also choose what types of upgrades you want to use to support your specific playstyle.

Outline of Gameplay

Lore/Objective

In this game, the player is a chubby monkey that is trying to escape a laboratory where he's been experimented on. The player starts controlling the monkey after he's broken out of his containment cell, and his objective is to traverse through the different floors of the laboratory, trying to make it to the roof to escape. While this is the lore for the player's objective, in reality, there are infinite floors and the player must try to get as far as they can. Concept art of the player can be seen on the right.



Gameplay at the 10 second level of play

During one 10 second chunk, the player might be navigating the hallways of the laboratory, trying to find the way to the staircase. However, it is unlikely that the player will go 10 seconds without running into a guard (although this might be changed when balance testing).

Another 10 second chunk might be the player trying to avoid a guard, by sneaking past, hiding while the guard passes by, throwing an object to distract the guard, or stealth-killing the guard.

If the player wants to be aggressive instead, the player will either sprint past the guard, or choose from a variety of weapons and shoot the guard.

The final activity the player will be doing is buying upgrades in the upgrade UI in between runs (after the player died).

Controls/Movement

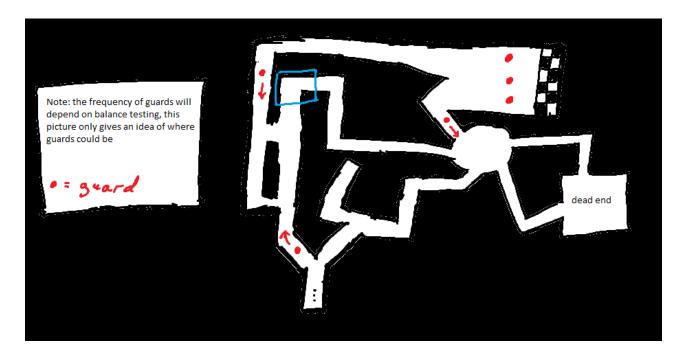
The monkey's movement will be controlled by user input using standard WASD controls. The player can toggle between sneak mode and running using the shift button.

The monkey will aim and fire weaponry using standard point and click controls. Pointing the cursor will aim the player's weapon, and other tools. The player will be able to see a laser pointer showing where the gun is aiming, or a cone if the player is using a shotgun. The player will left-click to fire or use the weapon/item.

The monkey can cycle through weapons in its current inventory using number keys (1-0). The player will use the 'x' key to activate their ultimate.

<u>Map</u>

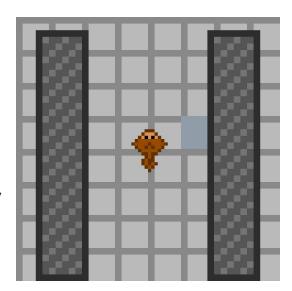
Each level will be randomly generated, but finite in length. However, since each level is randomly generated, there can be infinite levels. The following concept drawing shows what we envision the layout of a section of a level to look like, although it is important to note that this is not what the player will see during gameplay. The blue box indicates how the map could be split into chunks, which could be randomly combined to make randomly generated levels.



The following concept art is what the levels will actually look like, and roughly what the player might see. The blue box is a locker that the player can hide in.

Lockers are interactable objects that the player can hide in to avoid guards. However, lockers won't protect the player if a guard sees the monkey enter a locker.

Blockades are another interactable object. They can be randomly found throughout higher levels, but can also be created by the player. There will be stacks of objects in the hallway that the player can interact with to knock the objects over, creating a blockade. This is useful, as guards chasing you will be slowed down.



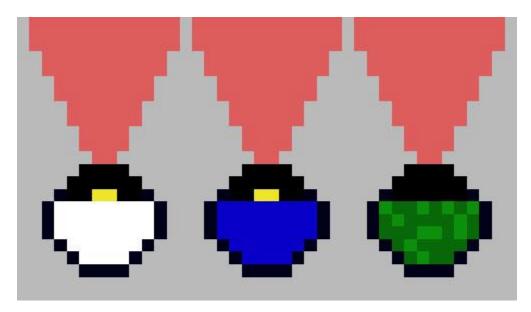
Enemies

Throughout our hero's journey, he will encounter many guards who wish to stop him in his tracks and send him back to his cage. The guards will have two attributes that the player should be aware of. First, is the guard's cone of vision. Guards will not be able to see the player if they're not in a guard's cone of vision. The second feature is that players can make noise, either by running (instead of sneaking), firing guns, or setting off explosives. Noise in this game will be visually indicated by a white circle, showing how far the sound travels. If a guard is inside that circle, they will hear the sound produced and will react appropriately. For example, if a guard hears footsteps, they will walk over to investigate, but if they hear gunfire, they will run over ready to attack the player.

Guards will have 3 behavioural states. Their normal state, where they have no idea a monkey has escaped, and will regularly be patrolling around or at a fixed position. If the guard hears or sees something suspicious, then they will enter an alerted state, where they will walk over to investigate, but if they don't find anything, they will return to their normal state. Finally, if a guard sees the monkey or hears gunfire, then the guard will actively pursue and attack the monkey. If the monkey hides in a locker or outruns the guard, the guard will eventually go back to a normal state.

Finally, there are 3 different types of guards, each with unique stats and weapons. Melee guards are the lowest tier, and only have melee weapons to attack the monkey. Ranged guards have tranquillizer pistols that they will use to tranquillize the monkey. Finally, super guards will have rapid fire weapons, and have a lot of health, but they are generally slower than the other types of guards.

The following concept art is what the guards might look like, and will give an idea of how we intend the field of vision feature to look like. This also shows how the different types of guards will look, with white indicating a melee guard, blue a ranged guard, and green a super guard.



<u>Ultimate</u>

The player can also have an ultimate that they can use once per round for only a short duration, although these can be improved with upgrades. The player will also have to select an ultimate before they enter a run, although they will be able to toggle between different ultimates in between runs.

The first ultimate is called Rage, where the monkey embraces his inner darkness and becomes more vicious and powerful for a few seconds, having increased speed, and health, as well as the ability to melee guards. This ultimate will only last a short duration.

The second ultimate is called Invisibility, where the monkey drinks a mysterious potion that grants him invisibility for a few seconds which will turn the monkey invisible for a short duration. If the monkey is being chased, guards will enter the alerted state so guards will stop pursuing the monkey.

<u>Store</u>

After every time the monkey is captured, the player will return to the store menu where they can spend gold. This allows the player to become stronger and progress through the game which keeps the game from growing stale. Gold is earned based on how far the player travels, as well as gold picked up in the lab.

The player can upgrade their stats permanently, including health, speed, speed while sneaking, and stamina.

Players can also permanently buy new weapons, however, the ammo for weapons is consumable and will need to be repurchased, although unused consumables will carry over to the next run. Weapons are generally very expensive, while ammo is rather cheap. Weapons include a pistol, shotgun, automatic gun, which will probably be unlocked in that order. Another weapon is the peanut gun, which will shoot a peanut a distance away, which will attract guards towards the sound it makes. This is useful for distracting guards away from the player, making it a good tool for the stealth playstyle.

There are also upgrades that affect weapons, like how much ammo you can bring into a level, weapons fire rate, and damage.

Furthermore, the player can purchase consumables, including handheld explosives, and banana peels, which act as temporarily immobilizing traps that trigger when guards walk over them.

Finally, players can purchase permanent upgrades related to making their ultimate stronger. This includes increasing the ultimate duration and increasing the number of times a player can use their ultimate per run.

Target Platform

Our game will be a browser game, that is, it will run in a browser. To access the game, the user will need a link.

Development Tools to be Used

- Unity, including the "WebGL Build" option
- C# programming language
- Visual Studio Code 2019
- GitHub, for sharing code
- Photoshop, for creating sprites.
- Unity Asset Store, for textures, and possibly sprites
- Freesound (the website), for sound effects
- Incompetech (the website), for music, both in the main menu, as well as during gameplay
- School provided web hosting facilities

Group Coordination Plan

We plan to do most of the actual work individually and on our own time, but we will have group meetings at least once per week to discuss weekly progress, what we should focus on for the next week, and dividing tasks between group members. During these meetings is also when we will discuss how game components are merging together in practice, problems anyone is facing, game testing results, balancing testing results, and any other decisions regarding the direction the game is going. We will use Discord for group meetings, as well as its text chat

feature to communicate when we're not in meetings. We plan to meet using Discord at least once a week, but possibly more, on Monday at 2:30 pm, for at least one hour, but possibly longer. Another tool we plan to use is Trello, to organize the progress of our game, including what we've already done, what still needs to be done, and possibly a priority to-do list. Finally, we will meet with our teaching assistant every other week on Thursdays at 2:30 pm over Microsoft Teams.