

Game Design Document

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Title: CYPHERSCAPE

Milestone One

Main Objective:

The player is trapped in a dark maze with only a torch to light their way. To escape, they have to navigate the maze while avoiding a zombie patroller. The player must also ring all the bells in order to get the key to get to the next level. Once the player portals to level 2, they find themselves in underground catacombs. This level is full of AI patrollers, and a final boss. They must navigate the catacombs without dying and defeat the monster.

How does a player win/lose?

A player wins by successfully navigating to the end of level one, and defeating the final boss in level two. The player loses by getting killed or by not being able to escape.

What is the main focus of the gameplay?

The main focus is to escape the levels, you do this by either navigating the maze or defeating the AI.

How will gameplay be challenging / rewarding / interesting?

The gameplay is challenging because you have to navigate the levels while also avoiding AI enemies. It is rewarding/interesting because once you solve the maze/puzzle in level one you get a key to escape. There are multiple different elements to each level to keep it exciting.

How will a player progress in the game and how is progression tracked?

In level 1, the player progresses by navigating through the maze and ringing the bells. Once the bells have been rung, a key appears that they can use to open the door to the portal.

Progression is tracked by the bells. In level 2, the player must defeat the AI boss in order to win the level. They must also get past the AI patrollers as well.

How will the level of difficulty increase as the game progresses?

The AI gets harder to escape. There is only one patroller in level 1, and there are multiple in level 2. You have to get past the AI in level 2 while also navigating the catacombs.

Main Character:

Walking Forward



Walking Backward



Running Forward



Running Backward



Idle Turn Right



Idle Turn Left



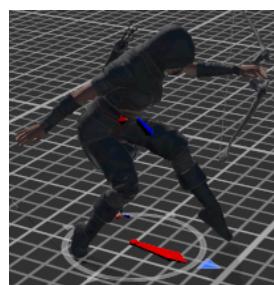
Idle



Death



Crouch Forward



Crouch Backward



Aim



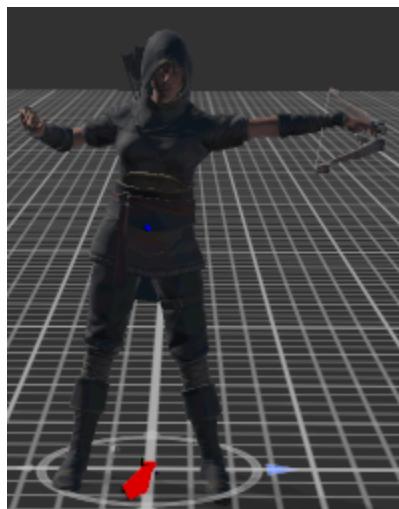
Walk Aim



Draw Bow



Recoil



Player Controls and Keybinds:

- Walk Forward {W}
- Turn Left {A}
- Turn Right {D}
- Walk Backward {S}
- Interact {E}
- Run {Shift}
- Crouch {C}
- Aim Bow {Right click}
- Shoot arrow {Left click}

Player Perspective:



Player Rewards:

In level 1, the player can pick up torches. These torches make it easier to see in the dark maze. The player also can pick up a glowing key once all the bells have been rung. They can then open the door to the portal.

In level 2, the player is automatically given a bow with arrows so they can attack. There are also potions that give the player power ups.

In both levels there is also a map UI that helps the player navigate the levels. It shows where they are on the map as well.

Milestone Two

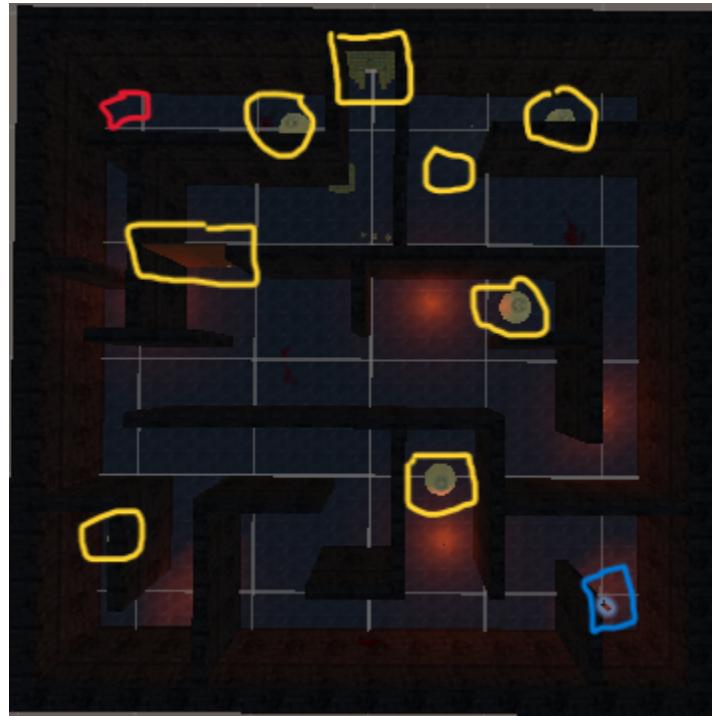
Level Design:

Level One Overview:

The bells are planned interaction points and an AI patroller will follow the sounds of the ringing.

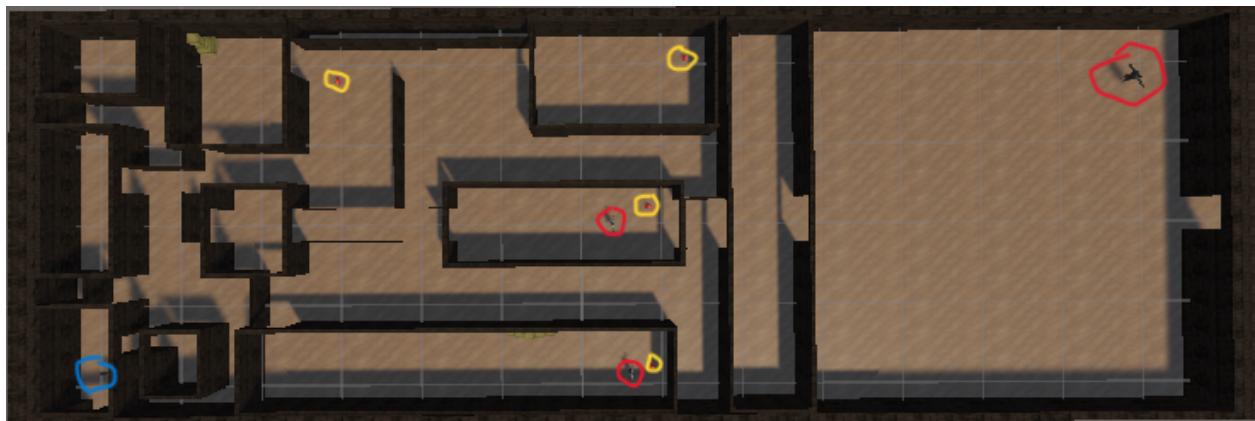
The AI will chase the enemy within sight, and then hit the player for one damage point. The player has 10 health and will ‘die’ after ten hits from the enemy. There are torch supply checkpoints for the player scattered around the map. This mechanic creates ambiance for the player as running out of torch light would mean complete darkness.

Level One:



Everything circled in yellow are the planned interaction points. The player starts at blue and the AI Enemies start at red.

Level Two:



Antagonistic Elements:

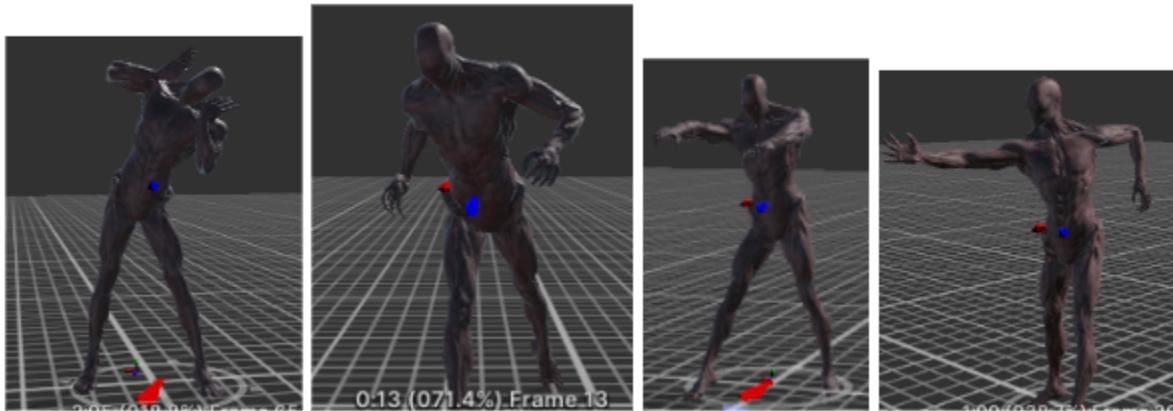
For level one we used a Zombie AI patroller. This AI patrols the map and chases the player if they are in range. We also added big ring bells around the map. The AI will run to the bells once they are rung by the player. The maze is another obstacle the player has to get past. They have to try to navigate through the maze without being killed by the AI. The player also has to ring the bells in order of increasing pitch to pass the level.

For level two we used two AI Patrollers that will go after the player. The player has to get through the catacombs, past the AI in order to get to the final boss. The final boss is the final antagonistic element the player must defeat in order to win.

AI Enemies:

Level 1:

When the AI has not come in contact with the player and does not hear the bell, it is patrolling throughout the maze. It will detect the player if it “sees” them and runs towards them. It will also run towards bells that have been rung. The AI will attack and decrease the player’s health by one if close enough.



Level 2:

The AI patrollers chase after the player. They attack and will decrease your health if you're too close. The final boss is in the last and largest room. You have to kill the final boss with the bow and arrow in order to win.



UI Elements:

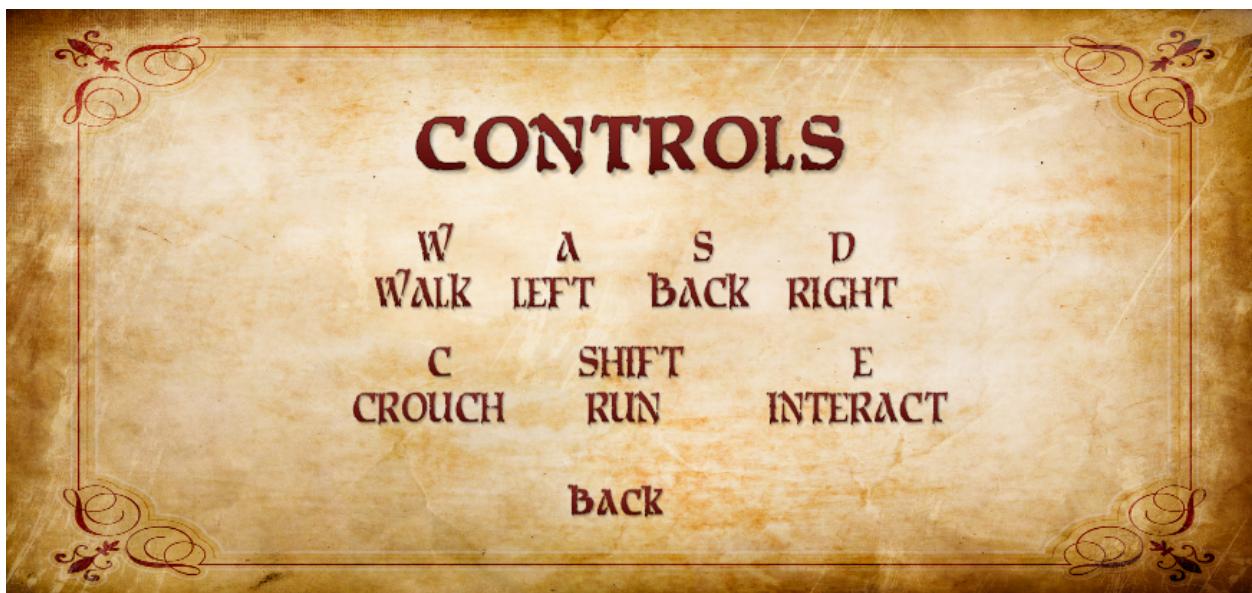
For the UI, we have a health bar that keeps track of the players health. It will decrease every time the player's health decreases. We also have a minimap that the player can open that

shows the player their location and an overhead view of the map. There is also a home screen, info screen, and a tutorial on how to use the controls.

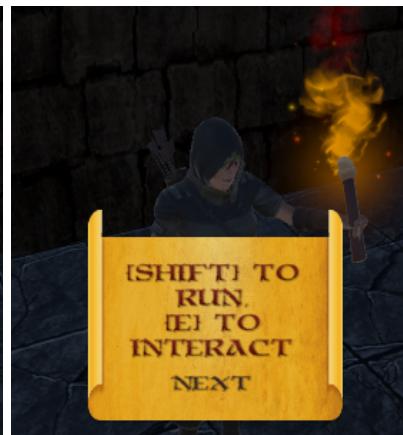
Home Screen:



Info Screen:



Welcome UI:



Map UI:



Final Milestone Progress:

Jaden - AI, obstacles, navmesh, map design

Rose - UI home screen, map, game design document, level planning, etc

Tan - Player movement/animations/interactions, map build, game logic.

Igor -

We also all met over zoom several times throughout the quarter and worked on different aspects of the game together.