Decryption Design Document

For the 2024 Pirate Software Game Jam

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Game Summary:

Arcady 3D maze the player has to navigate before it expands its reach and complexity such that you're lost forever.

Theme Interpretation:

The theme this year was the idea of "It's spreading". We chose to interpret this in terms of the environment spreading. This is in terms of the maze physically expanding its size and number of connections between the rooms making it more and more confusing and time consuming to traverse.

Story:

Player wakes up in a labyrinth, they hear a scream of a minotaur. All know they have to escape to live, as they hear the roar of a beast in the distance. .

Design Pillars:

Anxious, Lost, Adrenaline filled.

Gameplay Experience

How to launch:

All that is required is to download and run the .exe file provided.

Controls:

Two control schemes:
1. WASD Space   tab
2. Arrow keys   Future development

Game Design

The player's objective is to leave the labyrinth before their time runs out. The gameplay loop is adventuring looking for the exit, which in this game comes in the form of a minotaur boss battle.

The core mechanic is incorporated into the environment that the player has to adapt to. The labyrinth will continually expand its size and increase the complexity of the passages over time. This was achieved by focusing on creating a game that can procedurally generate a maze every time.
The player views the world through a first person camera view.
There is a difficulty scaling option where the labyrinth will expand faster or slower.

Prototype:

| #	Assignment	Type	Status	Finish By	Notes
1	Design Document	Other ▾	Finished ▾	Jan 26…	
2	Tackle procedural generation	Coding ▾	Finished ▾	Jan 16…	Maze generates in basic building blocks
3	Player Character	Coding ▾	Finished ▾	Jan 19…	Can be really short, player won't be on main menu for long
4	Environment Assets	Art ▾	Finished ▾	Jan 19…	Walls, torches…
5	Minotaur Asset	Art ▾	Finished ▾	Jan 22…	Minotaur model in blender finished
6	Simple player movement	Coding ▾	Finished ▾	Jan 21…	Move single cells around and collide with walls

#	Assignment	Type	Status	Finish By	Notes
7	Wall and ceiling procedural generation	Coding ▾	Finished ▾	Jun 22...	Tiles around each building block.
8	Main menu	Coding ▾	Finished ▾	Jun 22...	Implement spike and holes mechanics
9	Difficulty Selection	Coding ▾	Finished ▾	Jan 25...	Able to select easy - hard difficulty.
10	SUBMIT	Other ▾	Finished ▾	Jan 26...	Create Itch Page and upload

Known Issues:

These issues have come up and there was not enough time to fix these issues before the prototype's deadline. However it will be interesting to attempt to solve these issues later in order to learn how to next time.

- ❖ The spawnPlayer function in the game.gd script currently does not place the player in a room after warping. We understand that there is something related to global and local space that may be causing the error.
- ❖ The labyrinth starts expanding the moment the game launches, which eats resources before the player selects difficulty. Once the player selects the difficulty the labyrinth regenerates a fresh design.
- ❖ There is an error with the procedurally generated walls as as the level expands there is a chance for rooms to spawn without connecting hallways. This also is

the same error for some walls not spawning at all.
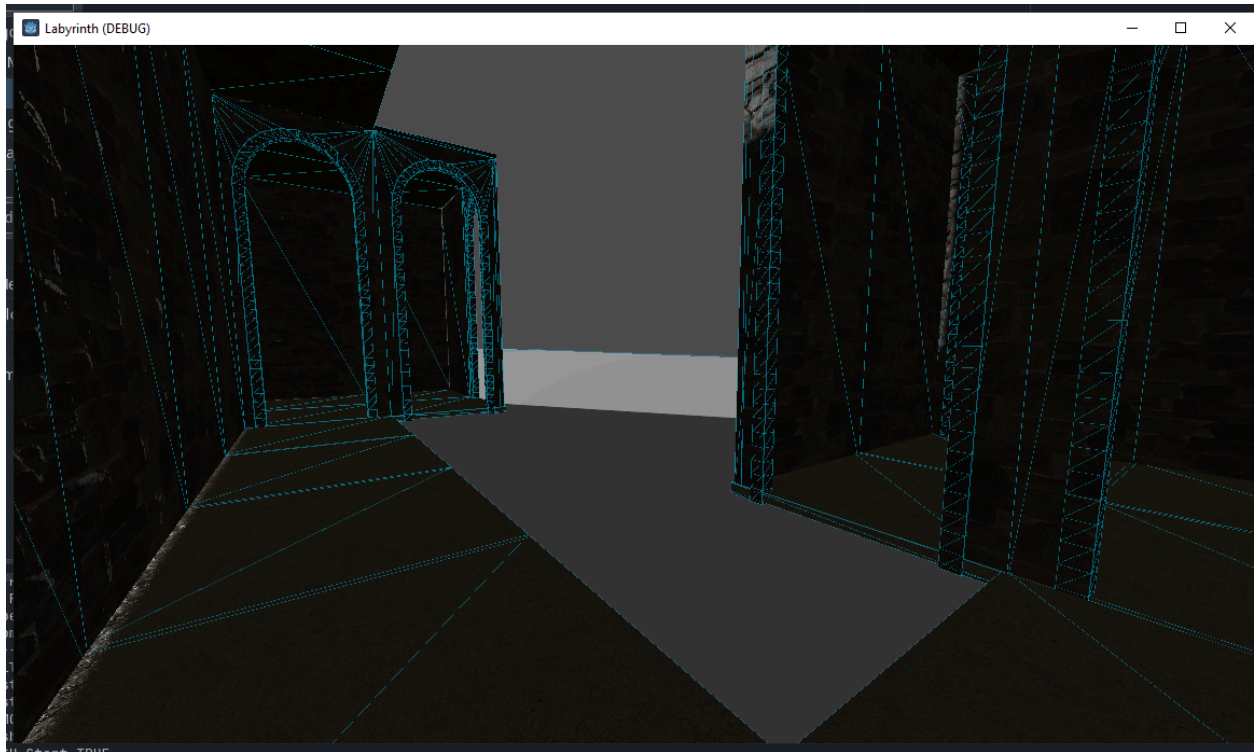
Future Plans:

- ❖ There was not enough time to incorporate the minotaur, so that is the next thing to incorporate into the game. As that allows us to have a reason to play the game as well as means for the player to win the game.

- ❖ Learn more about the materials and textures to move away from open source materials and create our own from scratch.
- ❖ Implement better navigation ai for the minotaur to attempt to cut off the player character.
- ❖ Add lesser enemy mobs that the player has to combat throughout the labyrinth.
- ❖ Add a minotaur boss fight at the boss room for the player to win the game.
- ❖ Add torches and other lighting to brighten up the labyrinth from very dark to somber.
- ❖ Add different types of rooms such as an empty room, a shop (and money system), a locked room that only opens after emerging victorious over an elite mob fight.
- ❖ Player model to be designed later.
- ❖ Different weapons to be available throughout the labyrinth

- ❖ A health bar / insanity bar that acts like a timer. The longer you take the higher chance your bar will reach 0 over time.
- ❖ Add an introduction cutscene in order to explain the story.

Art:

Art Style:

Realistic minotaur art style

Music/Sound:

No music or sound has been started yet.