

For this assignment, we are working on the standard HW2 issue. We had already completed homework assignment one, so we were able to work on this. This document will explain our approach to the project and what changed from our proposal. I also talk about everything else we implemented in our game.

The two teammates that were working on this project were Max and Drew. Drew started working on the homework by designing all the maps, adding textures, and adding torches around the map to improve the lighting inside of the maze. He was also in charge of writing the ReadMe file and the document that you are reading. He is creating a demo that explains the code and another video that showcases the game. Max was working through the game functions. He designed the menu for the user, added in the collectibles, the stopwatch, sound effects, and music, and programmed the buttons for the user to use. Since he had the Oculus headset, he could test the game.

For this homework assignment, we added some more details from the initial proposal that we discussed in the assignment. For this game, we created four maps for the user to play on. The game design is a maze as we discussed in our proposal. The maze has increasing difficulty as the user progresses through the game. To increase the difficulty of the game, each maze has more dead ends, and paths that may look like the correct way, but ultimately lead to a dead end. We followed our initial proposal by adding multiple dead ends throughout the entire map. We designed the walls so that the user is not able to look over them. When you are in the game, you are surrounded by massive walls. One thing we did not implement as much as adding different themes to each map. As a team, we liked the design of having the walls and the floor be a stone texture. We did make the last map in a night setting to add more emersion and increased difficulty. We followed our proposal by placing the user in the center of the map and they need to follow one specific path to escape the maze. We did not add enemies in the

game, since we already had a lot going on with the overall game. We did not want to add too much noise to the map. We added a stopwatch to keep track of your time, and we implemented teleportation to travel through the maze.

Although there were a lot of similarities with our proposal, there were a few more things that we added. When you start the game, you always start at the same place. You can press the joysticks to view a small menu on your hand. If you look down, you will be able to see the timer and a menu where you can decide to restart the level or quit the game. As you go into the maze you will be able to find one totem on each map. You can carry the totem with you around the map. Once you press the front trigger on the remote controller, you will teleport above the maze so that you can look around the map. You can then teleport to a specific spot from where you are floating, and then you will be teleported back to the ground. This was designed to assist the user with finding the exit of the maze. Once you reach the end of the maze, there will be another item that you can collect. Once this item is collected you will get another menu on your left hand. You will have the option to advance to the next level from there. There is another item in the maze that can be picked up that looks like a tree. This item will reduce your time by 30 seconds.

We completed all the requirements for our homework 2 assignment. We wrote a proposal with images, we added two forms of interaction from manipulation and travel. To not cause VR-induced motion sickness, the user is able to control where they want to look by moving their head. When the user moves, the screen jumps a few frames further. We also added the heads-up display on the hands, so that it is not right in front of the user's face.

HW2: Demo https://www.youtube.com/watch?v=-0CunTfLB3M&ab_channel=LivelyShively

HW2: Blueprint https://www.youtube.com/watch?v=S-Z4K4Hmpl4&ab_channel=LivelyShively