

Hw1 report:

We started our game from scratch and created our character that would be able to move. Once we created the ball for our character, we programmed the 'wasd' controls (1) to make the character move. We also implemented the space bar button, so that the user could jump. We created one map to begin writing our code and to test our game. Our first level was a flat map, so that we could control the movement of the ball. We then created a platform that the player could jump onto and it would take us to the next level. For the collectable (4) we created a glowing orb that could be picked up on the map. When the player collected the item, it would unlock the door, so that the player could advance to the next level. After we got all that working, we started designing four more levels (2). Each level increased in difficulty (7). We added more enemies and added obstacles (9) like walls or missing tiles, so that it would be more difficult to traverse through the map. Along with adding difficulty into the maps, the user can select the difficulty at the start of the game. Increased difficulty would increase the movement speed of the enemies. After all of that, we added a health bar (5) onto the hub. The bar would decrease whenever a player hit an enemy. Once the health bar got to zero, the player would respawn (6) at the beginning of the map. We also added a respawn for whenever the player fell off the map. We also added a soundtrack to the game (11) and added other sound effects for when the player got a collectable. We then implemented a winning and losing screen (3). We made it so that if you lose all of your lives, then an end screen will come up saying that the game was over and you would need to start the game over from the beginning. You won the game by completing all the levels. We then implemented a way that would track your score (10). At the end of the level, your score was calculated on the number of lives that you had left and from the time that it took you to complete the level. We also implemented a way to keep track of your progress (8) on the level. In order to complete the level, the player needed to collect a key. In order to keep track of our progress the player needed to know if they had picked up the collectable. You will see a text once the item has been collected.

Game Demo video:

https://www.youtube.com/watch?v=bRz0_Z5dg3c

Blueprint showcase video:

https://www.youtube.com/watch?v=h2ULvC4v_es