**Final Project: Mini-Game Design Document**

**CONTROLS**

A/D or Left/Right arrows to move

W/S, Up/Down arrows, or Spacebar to jump

Left click or X to attack

Right click or Z to use equipped magic spell

P to open the pause menu

Xbox Gamepad is also supported

*Original Challenge:*

My final project was based on Challenge 2. No additional changes were needed to meet the requirements of that project.

*Visual Changes:*

Coin pickups have a spinning animation using an animation component in Unity Enemies have a 2-frame animation and will also flip according to which horizontal direction they are moving in. Additionally, the player’s sprite has been replaced and a new attacking animation has been added. Tilemaps for the level use a new brick sprite.

*Audio Changes:*

Multiple new sound effects have been added. The player now how sound effects for jumping, taking damage, and attacking. The player’s abilities all have unique sound effects. Enemies have sound effects for when they are damaged and killed. Coins and items have sound effects when they are picked up. Additionally, new music has been added and changes when the player moves to a different area.

*Gameplay Changes:*

A number of significant changes have been made to gameplay. A combat system has been added, allowing the player to attack enemies with a melee attack and four unique spells. The player’s health and mana are indicated by a UI element in the top left corner. Enemies and the player can be damaged and killed when their health runs out, with damage numbers appearing when they are hit. Enemies have random drops when they are defeated, including coins and new spells.

An experience and leveling system has been added. The player can earn experience points by killing enemies, triggering a “level up” pop-up when they earn enough. Levelling up increases the player’s stats, including maximum health, maximum mana, strength (affects the damage of melee attacks), intelligence (affects the damage of spells as well as mana regeneration), and constitution (reduces damage from enemies), as well as restoring the player’s health and mana to full. **The player’s stats can all be viewed on the pause screen, accessible by pressing the P key. The player’s equipped spell can also be changed from the pause menu, if they have collected any new ones.**

The player no longer needs to collect coins to unlock the exit to an area, but they will need to use different mechanics to reach the end of the game. The player can unlock a double jump by collecting an item in the first area, allowing them to reach higher areas. The first area contains spinning gears that will move the player when they are stood on. The second area has a windy zone that will push the player upward while inside it.

A UI element will appear in the bottom right corner when the player collects items or hits enemies, displaying the name of the enemy or item, or the value of the coin collected.