## **Intention**

This prototype was created to explore how effective level design could be implemented for a turn-based combat system. Different complex mechanics were isolated by level, before being integrated in a final level to facilitate learning and a sense of progression.

## **Process**

To create a sense of progression, two additional enemies were added so that there were three enemies in total. These enemies act as levels which the player must defeat to progress. In the first level, a healing mechanic is introduced to the player along with a melee (basic) attack. If the player chooses to heal themselves during their turn they will return to full health, but their defense will decrease by 1 until it is 0. This increases the likelihood that the enemies will deal damage to them. The reason for this addition of the heal spell was to provide variance in the actions presented to the player. It also allowed for the increasing difficulty of levels as the player is able to heal themselves and have more control over their health. This level functions to familiarize the player with this mechanic and how it impacts gameplay before it is integrated with other mechanics in the third level. To teach the player the function of this mechanic, the enemy's attack power was changed to 3 so the player was forced to use it to pass the level. To make sure that this enemy was not overly difficult, the enemy's defense was made 1 and the enemy's health was changed to 10. The first level focusses on this heal mechanic because, as the player is given more control over their health, level 1 can be considered easier than level 2.

The second enemy or level focusses on the fireball spell which the player can use to attack. This is presented along with the melee attack as the two attacks available to the player in this level. The health of the enemy is increased to 12, so that this level 2 enemy feels stronger than the level 1 enemy. Furthermore, this increased health makes it necessary for the player to make use of the fireball spell. By doing this they will learn how it functions and will understand that they have a 50% chance of being burned by this spell. As the enemy's attack is only 2, it does not feel as powerful as the level 1 enemy to some players, however its defense is one higher than the level 1 enemy, so it is less likely to be hit. This, coupled with the showcasing of the fireball mechanic, makes it more challenging than the previous level. To further make sure that it is more challenging, the damage done to the player by the fireball spell if they are burned was increased from 2 to 3. Again, a single new mechanic is focused on during the level so that the player is able to familiarize themselves with it and learn how using it impacts the gameplay. To do this, the healing mechanic is not present in this level.

The third level gives the player all three abilities; the heal spell, the fireball spell and the melee attack. The purpose of this level is to present a challenging boss battle to the player which incorporates all the mechanics which they have made use of up until this point. The health of the dragon enemy is increased to 15 to provide for an increase in difficulty. Furthermore, the defense of this enemy is 2 and the attack is 3, making sure that it is the most difficult enemy presented to the player. The difficulty of this third level shows the importance of the heal mechanic, as the player's health remains 10. This makes the use of this mechanic necessary to finish the level. Additionally, the importance of the fireball spell in this level can be seen as it is very difficult to defeat this enemy without the increased damage of this spell.

## **Reflection**

There are several ways in which the level design of this prototype can be improved. This prototype would become increasingly complex if, instead of providing the player with more abilities, the existing abilities became more layered as the levels increase. For example, the player could choose an upgrade for a selection of abilities at the end of each level, with the quality of the upgrade being based on how well they performed during that level. This would give the player more agency in deciding how they would like to engage with enemies in later levels. Alternatively, the player could be presented with a loot item from each enemy defeated, which would upgrade the ability taught that level. Thereafter they could choose which loot item they wanted to equip in order to strategically improve a specific statistic or ability.

Another aspect to the level design which could be improved is that each level is arguably too short to properly showcase the abilities and attacks. For example, one of the people who play tested this prototype did not experience being burned by the fireball spell in the first level. This means that they were unprepared for the third level and how using this spell might impact their chances of winning. In this regard the first level only partially served its purpose. This could be rectified by scaling down the attack damage and healing done by both the player and enemy.

Furthermore, it would be ideal if more varied enemy interaction with the player was added, such as an enemy special attack or a heal. This would have added to the difficulty of the harder levels and would have provided a more engaging experience.

Although there are several elements of this prototype which can be improved, the level design of this prototype showcased each mechanic effectively. Furthermore, the challenge increased with each level before these mechanics were integrated in the third level.