Level Design prototype – Assignment 3

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Intention

When learning about the overall concept of level design, I aimed to apply my newly acquired knowledge into designing a sense of progression into my turn-based combat system. My rudimentary concept of level design was that it consisted of geometric elements such as platforms and obstacles, and now I understand that it is the overall incline in difficulty and complexity to keep the player engaged and challenged. The aim was to be able to better understand level design compared to my initial understanding, and to effectively communicate it within a turn-based game. This will be achieved through refining and expanding my prototype's number of battles and player stat growth, to imitate similar mechanics and events from Pokémon games such as the XP system and the levelling up or evolution mechanic.

The goal will be to have three different enemies that increase in their damage output, the second enemy having an alternative move and the third having an additional healing move. The player will also be given the choice to boost stats such as HP, attack damages or heal amounts at the end of each battle. Furthermore, the stats for each of these aspects will scale slightly in each round, in order to develop a comfortable and enjoyable difficulty and complexity. In terms of my personal hypothesis, I do believe that I will gain enough knowledge to understand how level progression exists in many different facets of gameplay.

Process

The averages of each move were calculated for the first battle: Solid attack would deal on average 4dmg, hard attack 5.25dmg, the heal restored 4.5HP and the enemy would deal 4.25dmg. These all took into consideration the percentages of failure as well, and it was clear that the values were all in proximity, but for the heal move it was not a good thing, as it made it that only 0.25 HP was ultimately restored in comparison to what the enemy dealt. For this reason, the value was increased for the heal to make it an average of 5HP healed.

The enemy also dealt less damage in the first battle now, as his damage bracket changed from 3-7dmg to 4-6dmg. This was chosen so the player could get a better idea of what amount the enemy could deal by only having 4, 5 or 6dmg possible, thus easing the player into the battle system without taking the player off guard with unfair, high damage attacks.

The enemy's base attack damage was increased each new battle by detecting which scene was currently active. Furthermore, a second attack was introduced in the second enemy, with the third having a higher chance of performing the move over the lesser attack.

Table showing all values associated with each unit

Round	Player HP Max option	Enemy HP	Player atk1 max option	Enemy atk1	Player atk2 max option	Enemy atk2	Player Heal max option
1	24	24	3-5	4-6 (85%)	5-9 (75%)	-	3-6
2	30	30	5-7	4-7 (85%)	6-10(75%)	6-8 (70%)	5-8
3	36	36	6-8	5-9 (90%)	7-11(75%)	7-11(80%)	6-9

The max option was chosen for the graph because if the player did not invest the boost choice at the beginning of the round into that stat, it would just stay as the same value from the first round. This table was used and altered heavily through the design process, as it clearly lays out all the chances and comparisons between the enemy and player's stats which aided in gauging the level progression. Increases in the enemy values was necessary to keep the player engaged – having to play the same battle would eventually mean that the player would figure out how to best beat the enemy. With the numbers growing in each battle, it meant that, for example, the heal move would come in handy when the enemy landed a hard attack. This was because the player was informed of the enemy move's name, and could deduce that there was a chance that it would miss, thus meaning that the heal had a higher chance of being more effective.

Reflection

Overall, this prototype was the most challenging as it dealt with micro and macro level design features. Both are equally as valuable to build a good sense of level design, but my enemy and player stat changes were mostly micro examples within their respective levels. Although I implemented three enemies, two with a second move, a healing move was not implemented for the third. This was not attempted as for it to feel natural, at a certain point the enemy should determine when the most optimal point would be to heal and to not abuse the move.

Most aspects regarding the player were achieved, with their HP scaling slightly throughout the battles, but the moves values did not change unless the player invested their boost into one of

them. This was a missed opportunity as if a singleton were used, the player's choices could have carried over into the next scene, but time management did not allow for it.

The enrichment of the enemy behaviour did, however, provide a sense of progression in a way that allowed the player to understand the system initially, then in the second battle hey could come across the enemy's second attack occasionally, with the final enemy more frequently dealing far greater damage amounts, increasing their threat unto the player. The decision to randomise every move amount was planned back in the data design prototype but works as a micro level design as complexity is added to each move.

The concept of level progression through numerical increments was a challenging thing for me to grasp, but ultimately it did teach me about the side of level design that I was unaware of, as well as highlighting how important it is within the entirety of the game feel, meaning that my hypothesis was met.