# WSOA3003A: Microproject 3 Analysis

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## Demonstration of Intent

The overall goal of this microproject was to demonstrate effective level design through a turn-based combat system. To achieve this, the microproject will consist of multiple levels in which various changes are made in each level to give the player a sense of progress as they play the game. This will be achieved through both micro and macro level design. The focus of this prototype is to improve upon the game's various mechanics and systems and to create new sub-mechanics and systems which will support the game's main mechanics. Each level will focus on proving the player with content to allow them to fully engage with the game's systems and mechanics, that will be effectively paced, providing a balance of both challenge and skill to the player.

## Demonstration of Process

**Level Design:** Each level of the microproject built upon the mechanics and systems of the previous. Initially, the designer intended the game to have 5 levels however due to time constraints and concerns of over-scoping, this microproject has 4 levels. Each level increases the game's difficulty and challenge through adjusting the game's systems (i.e.. Health points and card points) while providing the player with new mechanics to utilizes to defeat the AI in each level. The following subsections will go into detail about how each system and mechanic was adjusted to create effective level design in the project.

**Health Points:** *Figure 1* illustrates how both the player's and enemy's health points were adjusted in each level. Initially from level 1 to 3 both the player and the enemy's health point amounts are equal. This was done to make the game feel fair as both they and the enemy start off with equal health points and mechanics. However, the designer felt that in order to provide a challenge to the player, in level 4, the enemy has more health points than the player. This was done because in level 4, the player is introduced to a new mechanic which the enemy does not have access to (the shield mechanic), so in order for the game to feel like a challenge while the player has greater mechanical advantage over the enemy, the enemy's health was buffed up. This therefore increased the game's difficulty curve and providing a new challenge to the player while they utilize their new skill.

**Card Points:** *Figure 2* illustrates how the range of values of the cards were adjusted in each level. As the player's health points increase in each level, so does the card points. This was done to allow the player and the enemy to exponentially increase their damage

to their opponent. The designer felt that if the card values did not increase alongside the health points, the game's pacing would be significantly slower, as it would have taken much longer for the player to damage an enemy with high health points with low valued cards. This would damage the player's experience of flow. Giving the player the option to choose higher level cards as the levels increase provide a greater range of choice and agency to which cards the player picks in a level and gives a sense of progress.

**Mechanics:** *Figure 3* illustrates where mechanics were implemented into the game's system in each level. *Figure 4* details what each mechanic in the game does and why it was implemented in the game. From the previous iteration of the game, the designer added additional mechanics to the game to increase the player's mechanical input. The designer wanted to ensure that each mechanic could demonstrate a complex mechanical systems and provide the player with dynamic gameplay. The reason why the level 1 starts off with only one mechanic and as the player progresses through the level, a new mechanic is added was because the designer wanted to create a sense of progress as the player is rewarded with a new mechanic as they complete a level. As a result of this, the player's sense of agency increases through the levels, and creates a sense of increase pacing through increase the player's mechanical input. Each turn when a player or enemy performs an action they can block a high leveled card from their opponent, thus limiting the amount the opponent can attack or heal by, disadvantaging the opponent while giving the combatant a advantage.

## Demonstration of Reflection

Overall, the designer feels that the microproject achieved a good sense of microlevel design by focusing on increasing the player's mechanical input, card values and health points as the levels progress.However, the designer feels that they could have improved on the microproject's macrolevel design as each level exists separately from each other and thus have no affect on each other. In a future iteration and if the designer can achieve it through coding, they would ensure that the player will experience a sense consequence to their actions in each level as they progress. For example, if a player wins a level, in the next level, the enemy will start off the game without a full health bar and vice versa. In addition, the designer potentially will add a point system to the next iteration of the project. When a player or the enemy does an action (i.e.. Heal, Attack, Block etc.) the action will cost them a certain amount of points to perform, which would prevent either from spamming one action continuously.

# Appendix

| Level | Max Player Health Points | Max Enemy Health Points |
|---|---|---|
| 1 | 10 | 10 |
| 2 | 20 | 20 |
| 3 | 30 | 30 |
| 4 | 40 | 60 |

Figure 1: *A table showing the player's and enemy's maximum health points they can have in each level.*

| Level | Card Points Value Range |
|---|---|
| 1 | 1-5 |
| 2 | 1-10 |
| 3 | 1-15 |
| 4 | 1-20 |

Figure 2: *A table showing the card points value range in each level.*

| Level | Player Mechanics/Actions | Enemy Mechanics/Actions |
|---|---|---|
| 1 | Attack | Attack |
| 2 | Attack/Heal | Attack/Heal |
| 3 | Attack/Heal/Block | Attack/Heal/Block |
| 4 | Attack/Heal/Block/Shield | Attack/Heal/Block |

Figure 3: *A table showing the mechanics/actions both, the the player and enemy can do in their turn in the game's different levels.*

| Action /Mechanic | Description | Why it was implemented: |
|---|---|---|
| Attack | Damages the opponent by the amount in the card value they picked | To deplete the opponent's health so that the combatant can win the game |
| Heal | Heals the combatant by the amount in the card value they picked | To prevent the combatant's health from reaching 0 and losing the game |
| Block | Blocks the opponent's turn and the combatant gets to go again. It also allows the combatant to block a high-level card in their turn. | To block the opponent from taking a high-level card when the combatant picks a card. It also allows the combatant to go again and do an action that would disadvantage the opponent while limiting their access of card by two. |
| Shield | Blocks an attack for one turn before being destroyed | Prevents the combatant from taking damage for one turn potentially preventing them from taking high amount of damage.<br>In a future iteration, the designer would implement the shield mechanic to the enemy's AI as well, |

Figure 4: *A table showing what each mechanic/action does and why it was implemented in the game to create a certain dynamic.*