

# Analysis of Micro Duel Prototype

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As it is an interactive project, the prototype of Micro Duel is constantly changed in response to feedback and new ideas, with this particular iteration having a specific focus. The first version of the prototype simply focused on creating a strong aesthetic of risk-vs-reward, using the Mechanics, Dynamics and Aesthetics game analysis framework as a guide (Hunicke, Leblanc & Zubek 2004). The core aesthetic of the game was solid but without good player feedback and no real design in any of the user experience elements, the game was not very engaging and did not properly communicate its various states and options to the player. But also by improving these aspects, this could only further build on that core aesthetics by giving clarity and better information for players to make their decisions with, adding to that risk-vs-reward choice dichotomy.

Before starting on the new version a decision on how exactly to proceed needed to be decided on, and as stated by Bruce Phillips in his article *Rethinking Feedback to Keep Players in the Game* good feedback stems from learning goals as opposed to goals based simply on performance or outcome (Phillips, 2009). Instead of making sure the player is winning the majority of matches, it is better to focus on giving the player clear feedback on all their actions and possibilities so they can learn the limits and options in the game, giving them room to learn and grow more organically, and meaning even if they lose more often they still understand how and why they fail. With this in mind, the attention on this prototype became focused mainly communicating every option the player had, and the responses from the enemy to their choices.

## The Process

The start of making the necessary changes was difficult, not least because a lot of the existing code needed to be changed to be more dynamic to facilitate certain new features that the previously hard coded segments would not allow. So the actual start of the new version began with all of the existing code being deleted, and new UI elements being added in while adjusting existing ones. Once all the existing features had been replicated, a decision was made to rewrite the algorithm used to calculate player and enemy hits. The previous algorithm took in a variety of different variables to output a hit chance, but this was unclear to the player and didn't reflect any information they saw on screen. So the algorithm was changed to simply take in two variables, plus additional bonuses which were always clearly marked to the player when they would have an effect.

With this new simplified hit system, a way to let the player know how effective their various attacks are was needed to help give feedback to how their previous action helped or hindered their chances of hitting the enemy. This led to the addition of a visual hit chance text element that shows the player their chance to hit the enemy with their currently selected attack. It also features text to inform players of any bonuses they would get if they successfully hit the enemy. This feedback made a big difference as it made the entire hit chance system no longer opaque, and players now always know by how much their chance to hit will increase or decrease, and can see how it relates to the enemy and their own stats.

The new UI also changed the visuals of selecting enemy body parts to attack, with animated wounds now appearing on parts where players hit successfully. The UI centres the hit chance while keeping all the relevant stats, information and buttons for selecting actions at the bottom, with the log of events shrunk down and put in the top centre just to inform players of enemy actions. The visualization of the wounds gives players immediate feedback to successful hits both against themselves and the enemy, before it was just in text and easy to miss. Another UI change was how actions that are used on the player themselves have been changed to work immediately when pressed instead of requiring to be clicked first then on a relevant body part. This just makes it more simple and straightforward, and doesn't require extra tutorialisation.

## Reflection

Overall while some of the changes made to this version were small, adjustment of UI, adding new elements which simply exposed stuff that happened in the code before, and minor visual response elements, the difference between it and the previous build are vast. Both simplification and adjustment of the existing systems made the actions of players have an even greater effect on their chances, making skill more important and really emphasising the need to take risks and back off at the best times to win. Players are punished much more by the new algorithm for getting their risk levels to the highest points, but this punishment is offset by better visual communication, so players know the consequences of their actions. Because players better understand their risk, and that of their enemies, they can learn quicker and start making better 'bets' and winning more.

Micro Duel with each iteration builds on its core aesthetic, and the addition of player feedback and communication simply makes the game a better play experience with clear communication directly giving the player more options and approaches for every single moment of the battle.

## References

Hunicke, R., Leblanc, M.G., & Zubek, R. (2004). MDA : A Formal Approach to Game Design and Game Research.

Phillips, B. (2009). Staying Power: Rethinking Feedback to Keep Players in the Game. [online] Gamasutra.com. Available at: [https://www.gamasutra.com/view/feature/132559/staying\\_power\\_rethinking\\_feedback\\_.php](https://www.gamasutra.com/view/feature/132559/staying_power_rethinking_feedback_.php) [Accessed 1 April. 2021].