Enhancement Narrative 2

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Briefly describe the artifact. What is it? When was it created?

The artifact is a game I made for a game jam competition. The jam was limited to a week of development time. My game scored 2nd place when judged by the other contestants and the hosts of the jam. This took place on the week of April 29th 2024.

Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in algorithms and data structure? How was the artifact improved?

This game showed off my ability to quickly prototype an idea, a vital skill in game development. The continuation of this game will show my capabilities to adapt a prototype into a functional game. My inclusion of an endless mode with enemies with ever increasing stats using a different algorithm for each stat will show my ability to include algorithms into my game design practices. The game will be given a different game mode to allow players to test out the ingredient combinations in game.

Did you meet the course objectives you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?

I did meet the requirements I set out to complete with my original plan. At this point I would have covered 3 out of the 5 needed outcomes with my code review and the 2 enhancements. This enhancement would have covered the "design and evaluate computing solutions that solve a given problem using algorithmic principles and computer science practices and standards appropriate to its solution, while managing the trade-offs involved in design choices." Outcome. I reached this outcome since my endless mode uses an algorithm to create enemies of ever growing difficulty.

Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?

The most interesting part of the enhancement was some of the interactions with the events I had active. When an enemy is killed the game manager invokes the OnEnemyKilled event but for my EnemyGenerator the listener for OnEnemyKilled set up on it never went off. After some debugging, I found out that the listener EnemyGenerator set up before the GameManager had initialized and therefore nulled the listener. It took awhile to set up and has me considering options to make sure listeners are properly set up before testing. This was the first time I ran into this issue and unity never throwing an exception for it so I had less information on where to look.