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<div align="center">Cor 100 Final Essay</div>

Through the theme of the year one course, Game Programming with Python, I have encountered new challenges, surprising insights, and moments of both difficulty and growth. Just as Meno experienced confusion and revelations in his dialogue with Socrates, I too have encountered growing pains as I got into the world of coding, game design, and Python programming.

When I first began into the world of game programming, I had little to no understanding of the complex elements that would be involved. I approached the course with curiosity, but also was nervous on how it would end up turning out. However, as I gradually through myself in the course, I began to understand more about the core principles of game design and the power of programming. The theme of the course, centered on learning Python as a tool for game development, was initially very eye-opening. I learned about concepts such as variables, functions, loops, and conditionals, which are the fundamental building blocks of any Python program. At first, these terms seemed like unreachable knowledge, but over time I started to understand their importance and how they came together to make a working game. As I progressed, I learned how to make a number guessing game.. What struck me most was the emphasis on problem-solving. Each assignment presented a challenge, and as I worked through them, I realized that programming wasn't just about writing code, but it was also about thinking critically, breaking down problems into manageable parts, and finding solutions. This approach

gave me a new way of looking at the world. Where once I may have seen a situation as something negative, I now saw it as an opportunity to create something positive.

As I encountered new concepts, there were moments where I felt overwhelmed and uncertain, similar to Meno's confusion when trying to define virtue. In my first few weeks of the course, I often found myself staring at lines of code that didn't seem to work or facing errors that I couldn't explain. I had moments where it seemed as though nothing was clicking. This feeling of confusion was not unlike Meno's when he questioned Socrates about the nature of knowledge, struggling to understand how learning could occur. A particular instance of "growing pains" came when I was first introduced to functions and how they make blocks of code that can be reused. At first, I didn't fully know the significance of functions and kept rewriting code rather than organizing it in a reusable format. I felt the weight of inefficiency, like Meno realizing that his understanding of virtue was incomplete, and I had to go back and reassess my approach.

At times, it was difficult to tell whether I had truly learned something or if I was merely going through the motions. However, moments of clarity arrived when I could apply the concepts I had learned in practical situations. For example, after struggling with loops, I was finally able to write a loop that correctly iterated through a list of enemies in my game, performing an action on each. The moment I saw the program run as expected, I realized that I fully know this concept. The feeling of learning something new wasn't just about understanding theory; it was about being able to apply that knowledge to solve a problem effectively. Much like Meno's realization that learning is not just about recollecting but also about understanding, I recognized that learning in programming was about more than just memorizing syntax. It was about being able to use that it to create something functional and meaningful.

Despite the progress I've made, I recognize that I still have much to learn about Game Programming with Python. There are numerous aspects of game development that I have yet to explore in depth, such as more complex algorithms, game physics, artificial intelligence for non-player characters, and optimization techniques for smoother gameplay. Python, while a versatile and beginner-friendly language, has many advanced features that I have yet to master.

In conclusion, my journey through Game Programming with Python has been a mixture of learning, growth, and occasional frustration. It has opened my eyes to the possibilities of creating interactive digital experiences and has taught me valuable lessons about problem-solving and perseverance. While I have made significant progress, I know that learning is an ongoing process, and there is still much to explore in this fascinating field. Like Meno, I will continue to question, reflect, and learn, always to strive to understand more deeply the complex difficulties of the world around me.