Reflection Essay

Class: Game Programming with Python.

Topic: The meaning of Meno.

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In Plato's Meno Socrates asks us to think deeply about knowledge and how we understand what we know, or what we think we know. This question fits well with my experience during my first year studying here at Lyon, and more specifically in the Game Programming class. Even though I had some programming knowledge before, my journey this year was a mix of familiar and new things. I grew a lot, discovered new skills, cultures and people, and reflected on myself. Taking the role of young Meno, I will talk about what I learned, the challenges I faced, how I knew I was learning, and what I still need to work on.

Before this course, I already knew programming languages like C and C++ thanks to my high school, and Java and R for other classes that I've taken alongside this semester. These gave me a good base for understanding programming concepts, but Python was completely new for me. Therefore, in this course, I started learning this new language, which is easy to use and very practical, through a serie of assignments and mini projects, focused on making games, which made the learning process fun and useful, but more essentially on understanding the bases and main things of Python.

Although we didn't have much time and classes, I found the methodology very captivating and dynamic. When you start this kind of course, you expect that it would be a kind of rest from the other classes and not very demanding, but it wasn't pretty much like that. With a serie of classes in which the flow didn't stop for a second, I had to be very attentive to don't get lost and capture all the contents in my mind.

The main project was a "Guess the number" game, in which the user has to guess which number did the program created randomly with a kind of help every time the player takes a guess. This was a very funny and fluid way to learn deeper the language and its contents, such as loops, errors, conditions, and so on.

What I found most interesting about Python was how simple and clean it looks compared to other languages I know. It made me realize that each language is good for different things, and learning Python made me more flexible as a programmer.

Despite I knew some programming, learning Python was not always easy. The first assignments made me adjust to Python's rules, like using indentation instead of braces. At first, this was hard because I was so used to the way C or Java works. For example, when I coded the game that I mentioned before, I had trouble remembering to format my code correctly.

Of course that I can't forget mentioning the very exciting and funny experiences of the rafting race, including the construction of the boat, and the H.A.T.S. presentation with the making of the poster (or sign, I don't know how to call it properly), in which I gained team working experience and positive anecdotes.

At the same time, reading Meno added another challenge. The questions Socrates asks made me doubt my knowledge sometimes, just like when I found bugs in my code or realized I didn't fully understand something. These struggles taught me the importance of patience and reviewing basic ideas to make progress.

I could see that I was learning through moments of success. For example, when I finished the diverse homeworks and projects, or when our team successfully presented our project, I felt proud of what I had achieved. Debugging my code also showed me I was improving because I learned how to fix mistakes and make my programs work better. Also, the investigating about the code errors and those things on my own, helped me with the process of learning.

There were also moments where I realized something deeper. Like Socrates says in Meno's lecture true knowledge means knowing what you don't know yet. During this course, I started asking myself better questions about my code. I wanted to know why an algorithm was good or how Python libraries could make things easier. These questions showed me I was thinking more like a programmer.

Even though I learned a lot in Python, there is still much more to explore. I want to learn advanced topics like object-oriented programming, game physics, and artificial intelligence for games. I also want to get better at using Python libraries like Pygame so I can create more complex and interesting games.

I know I still have more to learn because of my own reflections and feedback from others. In the reading, Socrates talks about the need for self-awareness, and I have seen this in my programming too. When I struggle to add a feature to my game or make my code more efficient, it's a sign that I need to study more.

Feedback from my classmates and teachers also helps me understand what I need to work on. For example, when they pointed out ways to make my code cleaner or faster, I knew I had areas to improve. These moments remind me that learning never really ends, as well as I perfectly know by myself that I am not completely prepared to be a good programmer and make a living from it as I would like to be.

Plato's Meno asks us to think about knowledge and how we grow in understanding. My experience with Game Programming with Python has been a journey of learning new skills, recognizing what I still need to learn, and reflecting on how to improve. By facing challenges and thinking about my progress, I have gained not just technical knowledge but also a better understanding of myself as a learner. Like young Meno, I am ready to keep learning with curiosity and determination.