

## **Reflection D**

### ***Learning Highlights***

In module 7, I have learned about different types of ethics that really help with making decisions, especially when it comes to designing application systems. For example, deontological ethics is all about following moral rules and duties, while utilitarian ethics focuses on trying to create the best for the most people. Then there's virtue ethics, which is more about developing good personal traits, like honesty and responsibility, so you can make ethical choices naturally. By understanding these different approaches, I feel more prepared to tackle tough ethical issues and design systems that are fair, transparent, and respectful of everyone involved.

In module 8, we covered some emerging technologies like AI and blockchain. Now, I have a much clearer idea of how AI works and the process of machine learning, especially its ability to handle tons of data and spot patterns that humans just can't. Machine learning allows AI to learn from labeled or unlabeled data and keep getting better, which makes it useful in areas like healthcare, finance, and self-driving cars. Blockchain, on the flip side, is all about decentralization and security, making it great for tracking transactions and preventing fraud. After diving into these technologies, I can really see how they could change the way we design apps, making them smarter and more user-friendly.

### ***Implementation***

Although I have not applied the concepts learned in modules 7 and 8 in real life, I have a plan to incorporate machine learning by training a model for customer support in the application I referenced in Reflection C. Of course, I will not build the model from scratch, as I lack the expertise in machine learning, and even if I had it, this would cost a lot of money. Fortunately, ChatGPT offers a feature called "Custom GPT," which allows us to feed specific data into the model to specialize it in a certain area. I guess this process is kind of like supervised learning.

### ***Challenges***

AI technology emerged rapidly in 2022 when OpenAI released its GPT-3 model. Module 8 provides an overview of artificial intelligence and explains how machine learning works. I tried to expand my knowledge, so I searched for additional learning resources online and quickly realized that AI is an extensive field. Unlike previous module content, mastering artificial intelligence demands tons of time and requires expertise in various branches of mathematics, such as linear algebra, statistics, calculus, numerical analysis, and information theory.

### ***Connection and Future***

In the future, AI is going to be a big part of a lot of jobs, especially in IT industries. I don't think it will completely take over all IT jobs, but it will definitely help reduce the workload for software engineers. That's why I believe it is a good idea to learn how to use AI tools properly and get a basic understanding of how they work behind the scenes. It's a good way to stay ahead and make your life easier when you're working in tech.