A07 AI in Block Chain Class Notes

Reflection on Blockchain Class

Introduction

In this reflection, I'll talk about my experience in a class discussion on **blockchain technology**, its **key concepts**, and real-world applications. The professor explained how blockchain works, pushed us to think critically, and challenged us to engage in discussion. This reflection will cover the main ideas I learned and how they changed my understanding of the topic.

My Experience

The class focused on **decentralization**, which means there is no central authority controlling the data. Instead, blockchain operates on a **distributed ledger**, where transactions are recorded across multiple computers, called **nodes**. The professor emphasized that this makes blockchain more secure and resistant to fraud.

We discussed **use cases**, such as:

- **Cryptocurrencies** (e.g., Bitcoin, Ethereum) that use blockchain for secure transactions.
- **Supply chain management**, where blockchain helps track goods in real-time.
- **Smart contracts**, which are self-executing contracts where terms are written in code and automatically enforced.

A key takeaway was learning about **immutability**, meaning that once data is recorded in a blockchain, it **cannot be changed or deleted**. This is what makes blockchain highly secure and trustworthy.

The professor also mentioned an opportunity to develop smart contracts and **Non-Fungible Tokens (NFTs)**, which are unique digital assets stored on a blockchain. He even offered to fund a student project, which made me realize the **real-world value of blockchain applications**.

My Thoughts and Feelings

At first, I felt uneasy because the professor called on students randomly to explain concepts. However, I realized this was meant to push us to **think critically and not just memorize information**. By the end of the class, I appreciated this approach because it made me more engaged and forced me to actually understand the material instead of just reading definitions.

What I Learned

One of the biggest lessons I took from this discussion is that blockchain **isn't just about cryptocurrency**—it has applications in **finance, healthcare, cybersecurity, and even digital art**.

The discussion on **illegal uses of blockchain** also caught my attention. Because blockchain transactions can be **anonymous and difficult to trace**, it has been used for **money laundering** and other crimes. This made me realize that **new technologies can be both beneficial and risky, depending on how they are used**.

I also learned the importance of **being prepared for discussions**. The professor expected us to have read about blockchain before class, and it was clear that students who had done so were able to contribute more meaningfully.

How This Helped Me Grow

This experience made me want to **study new technologies in more depth** instead of just memorizing definitions. It also showed me that **actively participating in discussions helps reinforce learning**.

Skills I Gained

This class helped me improve my **critical thinking, problem-solving, and communication skills**. The professor's questioning made me realize that I should always be prepared to **explain technical concepts in simple terms**.

How I'll Use This in the Future

I plan to **study blockchain security and smart contracts further**, as they connect to my interest in **AI and cybersecurity**. I also want to **improve my ability to explain complex ideas clearly**, which will help in both academic and professional settings.

If the opportunity to work on a **blockchain-based project** arises, I would be interested in participating, especially in areas related to **cybersecurity, AI, or financial technology**.

Conclusion

This class helped me see that **understanding a topic is more important than just memorizing it**. It also reinforced the value of **active learning and participation**. Moving forward, I will take a more **engaged and analytical** approach to technical subjects and seek opportunities to apply what I learn in real-world projects.