

# Instructor Notes Description for Page 1

The handwritten notes cover the topics of digital currency, blockchain, and cryptography.

- **Digital Currency:** The notes start by introducing digital currency and its different forms, such as cash, cards, and online transactions. It then explains the concept of a bank and how it facilitates the exchange of money between two parties. The notes also discuss the role of the SWIFT system in international money transfers and the challenges associated with it, such as high fees and slow transaction times.
- **Blockchain:** The notes then move on to the topic of blockchain, explaining that it is a distributed ledger system that records transactions across multiple computers. It highlights the key features of blockchain, such as decentralization, transparency, and immutability. The notes also discuss the different types of blockchains, such as public, private, and consortium blockchains.
- **Cryptography:** The final topic covered in the notes is cryptography, which is the science of secure communication. The notes explain the different types of cryptographic algorithms, such as symmetric and asymmetric encryption, and how they are used to secure data. The notes also discuss the concept of a digital signature and how it is used to verify the authenticity of a message.

Overall, the notes provide a comprehensive overview of digital currency, blockchain, and cryptography. They are well-organized and easy to follow, and they provide a solid foundation for further study of these topics.

# Instructor Notes Description for Page 1

The handwritten notes are about the difference between centralized and blockchain systems.

Centralized systems are controlled by a single entity, such as a government or a corporation. This entity has the power to make decisions about how the system is run, and can change the rules at any time. This can make it difficult for users to trust centralized systems, as they may not know what to expect.

Blockchain systems are decentralized, meaning that they are not controlled by any single entity. Instead, they are run by a network of computers, each of which has a copy of the blockchain. This makes it very difficult to change the rules of the system, as any changes would have to be agreed upon by all of the computers in the network. This makes blockchain systems more secure and trustworthy than centralized systems.

The notes also discuss the different types of consensus mechanisms that can be used in blockchain systems. Consensus mechanisms are the way in which the computers in the network agree on the state of the blockchain. There are a number of different consensus mechanisms, each with its own advantages and disadvantages.

The notes conclude by discussing the potential applications of blockchain technology. Blockchain technology can be used to create a variety of different applications, such as cryptocurrencies, smart contracts, and supply chain management systems. The potential applications of blockchain technology are still being explored, but it is clear that this technology has the potential to revolutionize a number of different industries.