School: ..... Campus: .....

Academic Year: ..... Subject Name: ..... Subject Code: .....

Semester: ..... Program: ..... Branch: ..... Specialization: .....

Date: .....

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement : Crypto Timeline – Evolution of Digital Currencies

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

Objective:

The aim of this experiment is to study and understand the evolution of digital currencies and their impact, from early cryptographic systems to modern-day cryptocurrencies.

* Softwares used

- Internet-connected computer
- Web browser
- Word processing software (e.g., Microsoft Word, Google Docs)

*As applicable according to the experiment.
Two sheets per experiment (10-20) to be used.

* Implementation Phase: Final Output (no error)

Crypto Timeline: Events Explained :

David Chaum introduced the idea of digital cash, enabling private, encrypted, and untraceable transactions through blind signatures. This concept laid the groundwork for anonymous electronic payments.

•1970s – Birth of Cryptography

The foundation of digital currencies began with public-key cryptography, allowing secure data exchange and digital signatures — essential for future cryptocurrency systems.

•1983 – David Chaum's cash

David Chaum introduced *eCash*, the first concept of digital money that used cryptographic methods to enable anonymous and secure transactions.

•1995 – Digi Cash Founded

Chaum launched *Digi Cash*, a company that implemented eCash. Although it failed commercially, it laid the groundwork for privacy-focused digital payments.

1998 – "b-money" and "bit gold"

Wei Dai's *b-money* and Nick Szabo's *bit gold* proposed decentralized digital currencies that inspired Bitcoin's later design.

2008 – Bitcoin Whitepaper Released

The anonymous figure *Satoshi Nakamoto* published the Bitcoin whitepaper, outlining a peer-to-peer system for digital cash without intermediaries.

2009 – Bitcoin Launch

Bitcoin went live, marking the start of blockchain-based digital currency. The first block, known as the *Genesis Block*, was mined by Satoshi himself.

2011–2013 – Rise of Altcoins

Cryptocurrencies like *Litecoin* (2011) and *Ripple* (2012) introduced faster transactions and new consensus models, diversifying the crypto ecosystem.

2015 – Ethereum and Smart Contracts

Ethereum, created by Vitalik Buterin, introduced programmable smart contracts, enabling decentralized applications (DApps) and new blockchain use cases.

2017 – ICO Boom

The crypto market saw a surge of *Initial Coin Offerings (ICOs)*, where startups raised funds using their own tokens — both innovation and scams increased.

2020 – Rise of DeFi (Decentralized Finance)

DeFi platforms like *Uniswap* and *Compound* enabled users to lend, borrow, and trade without banks, creating a fully decentralized financial system.

2021 – NFT and Institutional Adoption

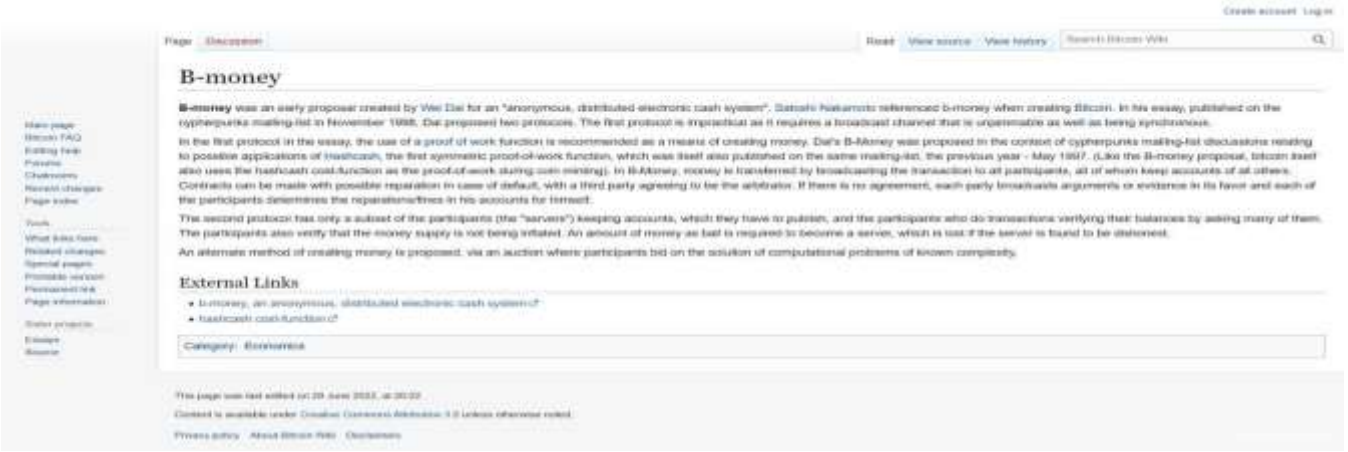
Non-Fungible Tokens (NFTs) revolutionized digital ownership, while institutions like Tesla and PayPal began adopting crypto, pushing it mainstream.

2023 and Beyond – Web3 and Regulation

Focus shifted toward *Web3*, blending blockchain with the internet, while governments worldwide began exploring crypto regulations and central bank digital currencies (CBDCs).

* Implementation Phase: Final Output (no error)

- 2022 – Terra/LUNA Crash & FTX Collapse (Risk/Regulation Focus)
- Explanation: Huge failures hit crypto—Terra's stablecoin imploded and FTX went bankrupt—fueling major debates on risk, trust, and regulation.
- 2024 – Bitcoin Halving & Spot BTC ETFs (Institutional Adoption)
- Explanation: The Bitcoin halving cut supply again; spot Bitcoin ETFs launched in top markets, showing strong institutional demand and adoption.



* Observations

1. Digital currencies have progressed from early ideas such as eCash and Bit Gold to modern blockchains like Ethereum with smart contracts.
2. Milestones like Bitcoin Pizza Day, the ICO boom, and the NFT surge highlight rising adoption, innovation, and global interest in crypto.
3. The timeline also reflects challenges, including crashes like Terra/LUNA and FTX, along with the growing influence of regulation and institutional adoption.

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty:

**As applicable according to the experiment. Two sheets per experiment (10-20) to be used.*