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:

This lab aims to create a timeline that illustrates the key events in the history of digital currencies. The timeline will cover the early concepts of electronic money through to modern cryptocurrencies, highlighting important milestones, technological advancements, and significant developments. By doing so, it provides a clear understanding of how cryptocurrencies originated, evolved, and are applied in today's world.

* Softwares used

1.Chrome Web browser

**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 :

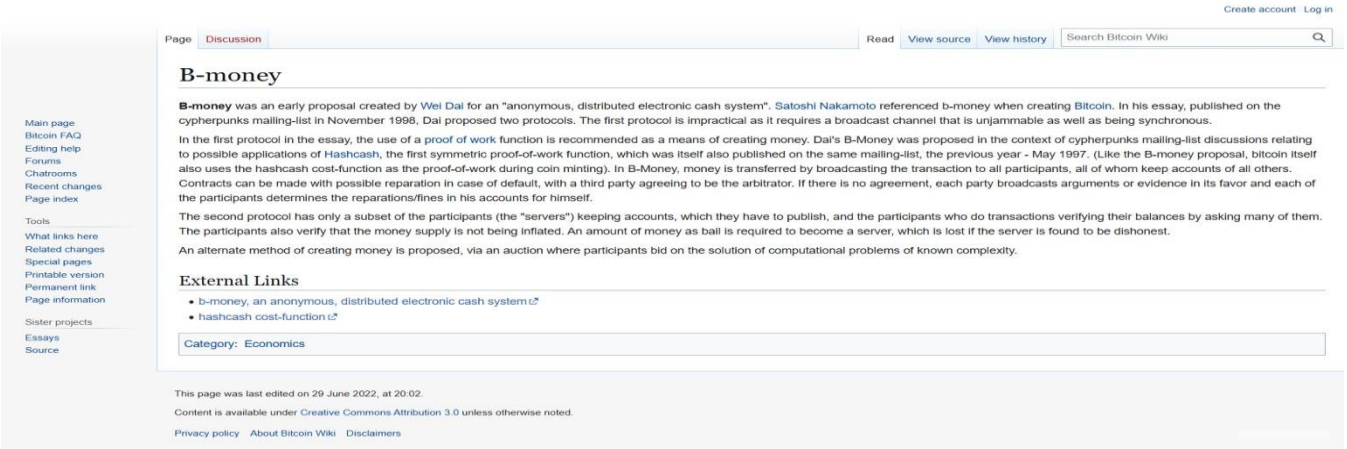
1. 1983 – David Chaum's eCash Concept
David Chaum introduced the idea of digital cash, enabling private, encrypted, and untraceable transactions through blind signatures. This concept laid the groundwork for anonymous electronic payments.
2. 1998 – b-money & Bit Gold Proposals

- b-money (Wei Dai): Proposed a decentralized, anonymous digital currency system using collective bookkeeping and proof-of-work.
- Bit Gold (Nick Szabo): Suggested a series of proof-of-work puzzles connected with timestamps and recorded in a public registry, serving as an early precursor to blockchain technology.

3. 2008 – Bitcoin Whitepaper Published
Explanation: Satoshi Nakamoto released *"Bitcoin: A Peer-to-Peer Electronic Cash System"*, presenting the first decentralized cryptocurrency.
4. 2009 – Bitcoin Genesis Block Mined
Explanation: The very first Bitcoin block (Block 0) was mined, launching the Bitcoin blockchain and marking the birth of crypto.
5. 2010 – Bitcoin Pizza Day
Explanation: The first real-world Bitcoin purchase took place when 10,000 BTC bought two pizzas—showing BTC as usable money.
6. 2011 – Litecoin Launches (Scrypt, Faster Blocks)
Explanation: Created by Charlie Lee, Litecoin used the Scrypt algorithm and shorter block times, enabling faster transactions.
7. 2013 – First Major Bitcoin Price Surge / Mt. Gox Era
Explanation: Bitcoin saw its first big price surge, gaining mainstream attention; Mt. Gox dominated as the main exchange before its collapse.
8. 2015 – Ethereum Mainnet Launch (Smart Contracts)
Explanation: Ethereum launched with programmable contracts, opening the way for DeFi, DAOs, and NFTs on blockchain.
9. 2017 – ICO Boom & Scaling Debates (SegWit)
Explanation: Numerous projects raised funds via ICOs; Bitcoin scaling debates led to SegWit adoption for faster and cheaper transactions.
10. 2020 – DeFi Summer (AMMs, Yield Farming)
Explanation: A massive rise in DeFi—users provided liquidity on platforms like Uniswap and Compound, earning yields; TVL grew $700M→$15B.

* Implementation Phase: Final Output (no error)

11. 2021 – NFT Boom (Mainstream Awareness)
Explanation: NFTs entered mainstream culture; billions in sales and iconic events like Beeple's *"Everydays"* drew massive global attention.
12. 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.
13. 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.