Performance & Final Submission Phase

Project Demonstration

Team ID	NM2023TMID04427
Project Name	Project – Tracking Public Infrastructure And Toll Payment Using Blockchain

Five Steps To Implement Blockchain Technology :

1. Identify the use case, and if a blockchain is necessary or if a centralized platform makes more sense.
2. Create a proof of concept.
3. Choose a blockchain platform and along with this, the right consensus protocol and overall architecture.
4. Develop smart contracts.

Steps To Develop A Blockchain Solution From Scratch :

1. Step 1: Identify a Problem to Solve. …
2. Step 2: Draft Your Business Requirements. …
3. Step 3: Identify a Consensus Mechanism. …
4. Step 4: Choose the Best Blockchain Platform. …
5. Step 5: Design Your Blockchain Nodes. …
6. Step 6: Plan Your Blockchain Configuration. …
7. Step 7: Build Your APIs.

Blockchain Infrastructure Protocol :

Protocols serve as the guiding principles that regulate the operation of a blockchain. Given that blockchains are decentralized networks of interconnected computers, protocols play a critical role in determining how data is transmitted between these computers within the network.

Blockchain Infrastructure Platform :

Blockchain infrastructure can refer to the underlying system that enables the functioning of a blockchain network, including hardware, software, and network components that work together to ensure the smooth operation of the blockchain.

What On Earth Is Blockchain :

1. Step 1 — Transaction data. ...
2. Step 2 — Chaining the blocks (with a hash) ...
3. Step 3 — How the signature (hash) is created. ...
4. Step 4 — When does the signature qualify, and who signs a block? ...
5. Step 5 — How does this make the blockchain immutable? ...
6. Step 6 — How is the blockchain governed?

**4 Types Of Blockchain Networks :**
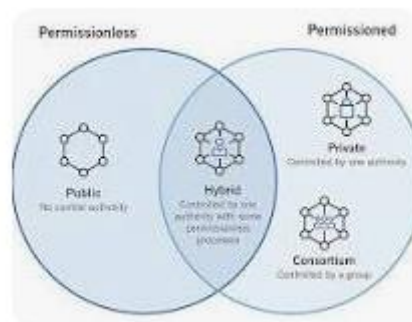
- Public Blockchain. It is a permissionless distributed ledger on which anybody can join and conduct transactions. ...
- Private Blockchain. A blockchain network operates in a private context, such as a restricted network, or is controlled by a single identity. ...
- Hybrid Blockchain. ...
- Consortium Blockchain.

Blockchain Is A Combination Of Three Leading Technologies:

- Cryptographic keys.
- A peer-to-peer network containing a shared ledger.
- A means of computing, to store the transactions and records of the network.

Top 5 Blockchain Technologies :
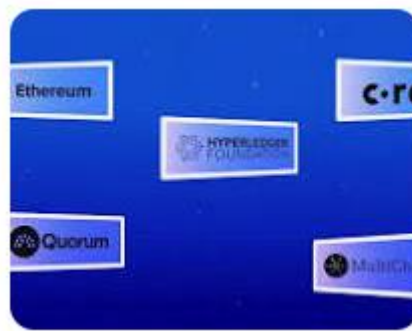
- Hyperledger.
- Multichain.
- Ethereum.
- Quorum.
- Corda.

Latest Trends In Blockchain Technology :

- Growth in Blockchain Market.
- NFT.
- Central Bank Digital Currencies (CBDC)
- Blockchain-as-a-Service.
- Metaverse.
- DeFi.
- Green Blockchain.
- Ricardian Contracts.