Define The Problem Statement

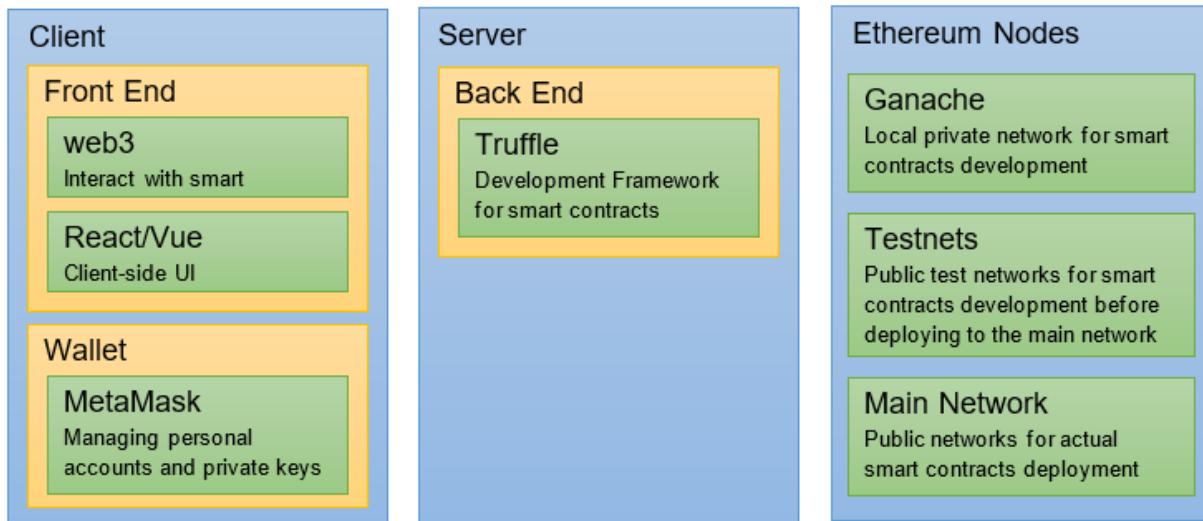| Team ID	NM2023TMID04387
Project Name	Project – Ethereum Decentralised Smart Contract

Ethereum blockchain: Scalability:

Ethereum's scalability is one of its significant challenges. The current architecture limits the number of transactions the network can process per second.

Ethereum's challenges

- Scalability. ...
- Increasing Transaction Costs. ...
- Centralization Fears. ...
- Privacy. ...
- MEV. ...
- Ethereum competitors that aim for scalability (Solana, Polkadot, Near) ...
- Ethereum competitors aiming for interoperability (Cosmos, Cardano) ...
- Ethereum competitors aiming for security (MEV Mitigation) (Solana & Osmosis)

The Biggest Problem With Ethereum

The Most Pressing Issue on Ethereum is Validator Size Growth.

Ethereum Decentralized Application (Dapp) Architecture and Frameworks

- **Truffle** - (**Truffle** is a "world-class development environment, testing framework, and asset pipeline for **blockchains** using the Ethereum Virtual Machine (EVM))

- **Ganache** - (Quickly fire up a personal Ethereum blockchain which you can use to run tests, execute commands, and inspect state while controlling how the chain operates)

- **Solidity** - (Solidity is an object-oriented, high-level language for implementing smart contracts)

- **Web3Js** - (web3.js is a collection of libraries that allow you to interact with a local or remote ethereum node using HTTP, IPC, or WebSocket)

- **ReactJs** - (A JavaScript library for building user interfaces)