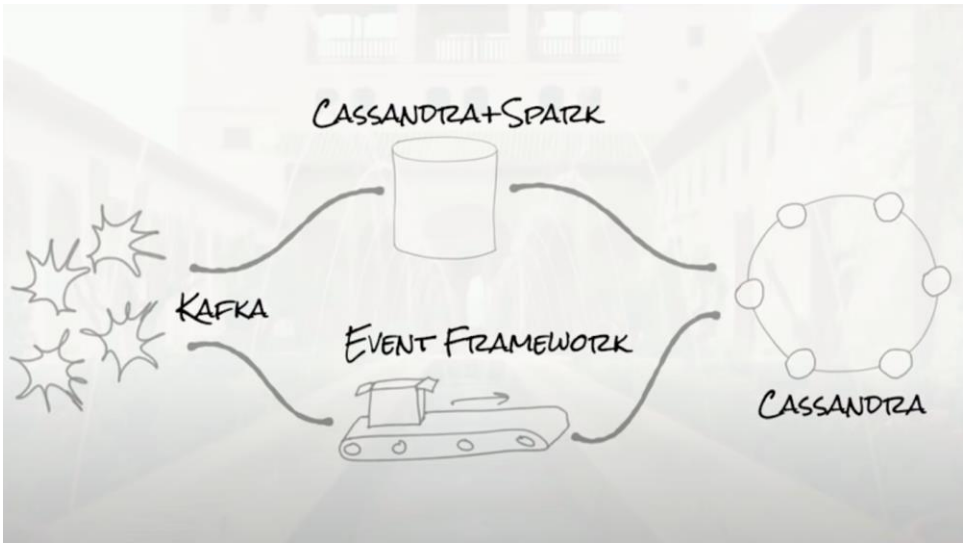
Application Server Architectures

1.Streaming (Real time) System:

- Deals with real time streaming data (events).
- The data is divided into two categories bounded and unbounded data.
- Streaming data is unbounded and needs a processing software to get our query.
- Bounded data are the stored synopsis part of the streaming data for the analysis part.

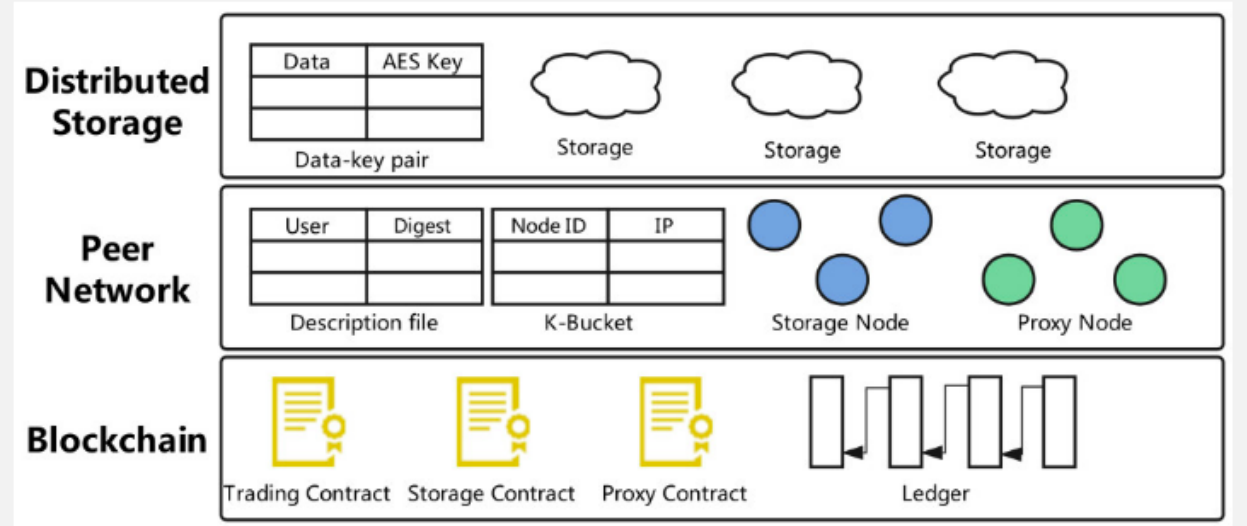
Eg, Kafka, Amazon Kinesis, Rabbit MQ, Apache Spark



2.Blockchain based distributed architecture:

- Peer to peer decentralized system
- Less bandwidth and traffic is generated on a single route due to its nature.
- Smart contracts and Governance algorithms are used.
- Information is immutable.

Egs: Etherium, Corda, Ripple, Hyperledger fabric

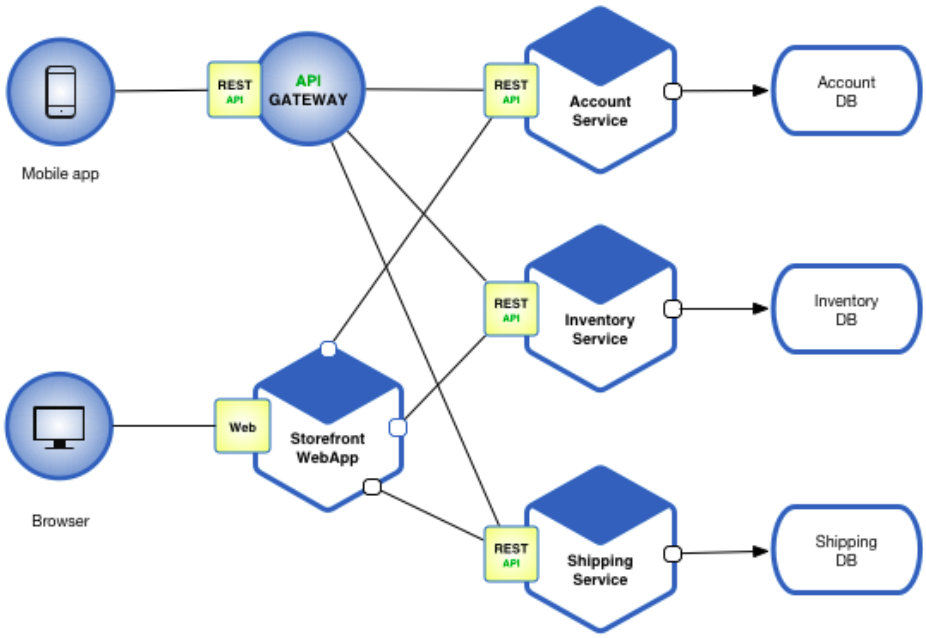


Etherium Structure

3.Microservices

- Variant of Services Oriented Architecture
- Structures the Application as set of loosely coupled, collaborating services.
- Each service is small to make it simple to understand and code.
- Easy to handle large scale development.

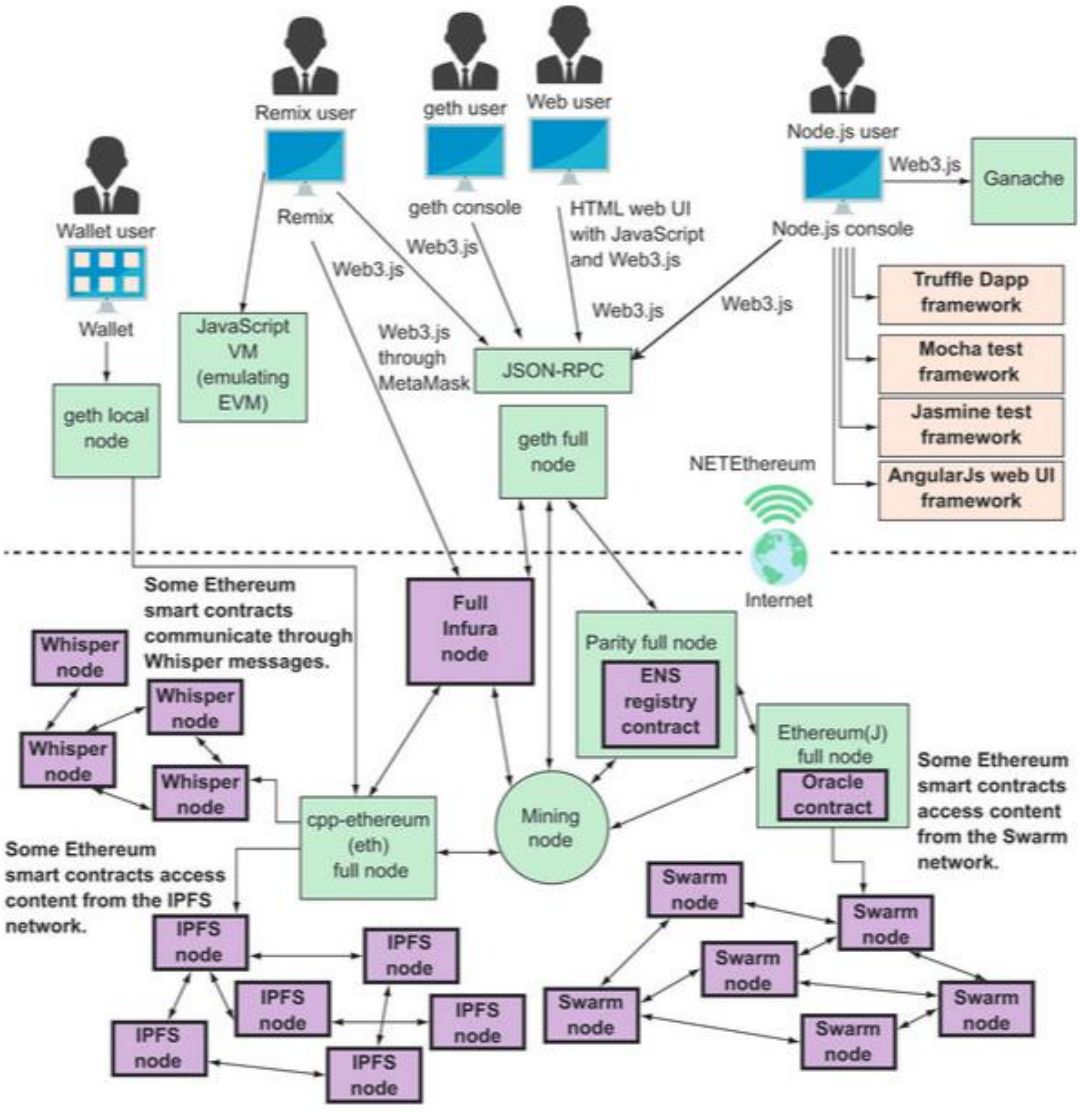
Eg: Docker, Kubernetes, DC/OS, Amazon



Part2

Cryptocurrency (Ether/Bitcoin)

It can be built on blockchain based system. All the peers take part in maintaining this architecture/system.

Proof Of Work is the governing algorithm used for validation of any work which is 50% of the votes in favour would allow a work.

This system can be used to develop any kind of decentralized app or **Dapp**.