

Permissioned & Public Blockchains’ applications

READING TASK | 4

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# Permissioned & Public Blockchains’ applications

## Public Blockchains

* Introduction to Public Blockchains
* Consensus Algorithms
  + Types of Consensus Algorithms

Bitcoin white paper: <https://bitcoin.org/bitcoin.pdf>

Intro to Ethereum developer Docs: ​​<https://ethereum.org/en/developers/docs/intro-to-ethereum/>

* Intro to Ethereum
* Intro to Ether
* Dapps
* Web2 vs Web3
* Accounts
* Transactions
* Blocks
* Ethereum virtual machine (EVM)
* Opcodes
* Gas
* Nodes and clients
* Run a node
* Nodes as a service
* Networks
* Consensus mechanisms
  + Proof-of-work
  + Proof-of-stake

Ethereum Whitepaper: <https://ethereum.org/en/whitepaper/>

Ethereum consensus mechanism: <https://ethereum.org/en/developers/docs/consensus-mechanisms/#what-is-consensus>

## Permissioned Blockchains

* Introduction to Permissioned Blockchain and Fabric
  + <https://www.investopedia.com/news/public-private-permissioned-blockchains-compared/>
  + <https://hyperledger-fabric.readthedocs.io/en/release-2.2/whatis.html>
    - Introduction
    - Hyperledger Fabric
    - Modularity
    - Permissioned vs Permissionless Blockchains
    - Smart Contracts
    - Privacy and Confidentiality
  + HyperLedger Fabric Paper: ​​<https://dl.acm.org/doi/10.1145/3190508.3190538>
* Channels in Fabric: <https://hyperledger-fabric.readthedocs.io/en/release-2.2/channels.html>
* Components of Hyperledger Fabric
* Hyperledger Fabric Architecture
  + Membership Service Provider(MSP)
  + Client
  + Peers
  + Orderer
  + <https://blog.clairvoyantsoft.com/hyperledger-fabric-components-and-architecture-b874b36c4af5>
  + ​​<https://blog.clairvoyantsoft.com/hyperledger-fabric-transaction-flow-c6bcc2142b5a>
* Comparison of Fabric and other Blockchains
  + <https://medium.com/blockchainspace/3-comparison-of-bitcoin-ethereum-and-hyperledger-fabric-cd48810e590c>