Unit 13 - Week 12

Course outline

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Week 12

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- Comparing Ecosystems – Ethereum development tools and Quorum
- Comparing Ecosystems – Corda Part 1
- Comparing Ecosystems – Corda Part 2
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Assignment 12

The due date for submitting this assignment has passed. **Due on 2019-10-23, 23:59 IST.**
As per our records you have not submitted this assignment.

1) What are the different consensus mechanisms supported by Ethereum Virtual Machine? *1 point*

- Proof of Work
- Proof of Stake
- Practical Byzantine Fault Tolerance
- Proof of Elapsed of Time

No, the answer is incorrect.
Score: 0
Accepted Answers:
Proof of Work
Proof of Stake

2) Which of the following is not a true statement about the Ethereum architecture? *1 point*

- Every node runs the Ethereum execution environment (EVM)
- When a node receives a block, the EVM runs some but not all transactions specified in the block.
- Mining is based on PoW, PoS.
- Sharding helps improve scalability by having nodes hold a subset of the state and validate only a subset of transactions

No, the answer is incorrect.
Score: 0
Accepted Answers:
When a node receives a block, the EVM runs some but not all transactions specified in the block.

3) Which of these are Ethereum clients? *1 point*

- Geth
- Trinity
- Parity
- Mocha

No, the answer is incorrect.
Score: 0
Accepted Answers:
Geth
Trinity
Parity

4) What are the components needed to build an Ethereum DApp? *1 point*

- Smart Contract
- Wallet
- Ethereum Client
- Virtual Machines for Mining

No, the answer is incorrect.
Score: 0
Accepted Answers:
Smart Contract
Wallet
Ethereum Client

5) Quorum supports transactions with: *1 point*

- Only private state
- Only public state
- Both private and public state at the same time
- Either private or public state for a transaction

No, the answer is incorrect.
Score: 0
Accepted Answers:
Either private or public state for a transaction

6) Which of the following statements are true regarding Quorum chain consensus? *1 point*

- Leverages smart contract called “Consensus Contract”
- It can be replaced with other BFT consensus implementations in Quorum
- Maker, Voter, Miner are the 3 roles defined for the nodes
- Most recent block with maximum number of votes is the canonical head

No, the answer is incorrect.
Score: 0
Accepted Answers:
It can be replaced with other BFT consensus implementations in Quorum
Most recent block with maximum number of votes is the canonical head

7) Which of the blockchain implementations are mapped to the correct state machine model - *1 point*

- Corda – UTXO
- Corda – Account/Balance Model
- Ethereum – Account/Balance Model
- Bitcoin - UTXO

No, the answer is incorrect.
Score: 0
Accepted Answers:
Corda – UTXO
Ethereum – Account/Balance Model
Bitcoin - UTXO

8) What are implementation differences between Corda and Ethereum? *1 point*

- State machine model
- Support for native currency
- Support for smart contracts
- Consensus mechanism used

No, the answer is incorrect.
Score: 0
Accepted Answers:
State machine model
Support for native currency
Consensus mechanism used

9) In Corda, the transaction flow consists of the following steps (not necessarily in the listed order): *1 point*

- Signatures are created with the hash of the transaction
- Walking the chain is not required if multiple notaries sign the transaction
- Update the ledger by marking zero or more existing ledger states as historic (the inputs)
- Transaction finality is reached when the specified notary service signs the transaction

No, the answer is incorrect.
Score: 0
Accepted Answers:
Signatures are created with the hash of the transaction
Update the ledger by marking zero or more existing ledger states as historic (the inputs)
Transaction finality is reached when the specified notary service signs the transaction

10)Which of the following are true about the notary in a CORDA network? *1 point*

- Notary maintains a map of transaction IDs used as input.
- Notary performs the mining of PoW consensus.
- Many notaries can exist in a network.
- Notary is the required signer of the transaction.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Notary maintains a map of transaction IDs used as input.
Many notaries can exist in a network.