**CPSC 480 Presentation**

Each student is to do an oral presentation on a blockchain project. You can either do an individual presentation or team up with another student.

**Topics**

Here is a list of popular blockchain projects you can choose from. If you want to pick another topic, get my approval first.

1. Polkadot – A multi-chain platform connecting multiple blockchains, Polkadot enables interoperability among chains, allowing secure communication and data transfer across networks. It’s scalable due to its parachain structure, making it ideal for projects requiring cross-chain functionality.

2. Cardano – Built on a peer-reviewed research model, Cardano prioritizes scalability, sustainability, and interoperability. Its PoS protocol, Ouroboros, ensures energy efficiency and allows upgrades without hard forks, supporting various decentralized applications and smart contracts.

3. Solana – Known for high transaction throughput, Solana combines PoS with Proof of History (PoH), achieving low latency and low fees. Its unique consensus model makes it popular for DeFi, gaming, and other high-frequency applications.

4. Avalanche – Avalanche supports customizable subnets, enabling developers to create tailored blockchain environments. It provides high throughput, low latency, and sub-second finality, making it suitable for DeFi and enterprise solutions.

5. Chainlink – Chainlink is a decentralized oracle network, allowing smart contracts to access off-chain data securely. It enhances blockchain utility by bridging the gap between on-chain and real-world data, used widely in DeFi for price feeds and more.

6. Stellar – Stellar focuses on cross-border payments and asset transfers, aiming to make financial systems more inclusive. Its consensus protocol enables low-cost, fast transactions, and it’s widely used by remittance companies and financial institutions.

7. Algorand – Algorand’s pure PoS model is highly energy-efficient and designed for speed, with transactions finalized in seconds. It’s optimized for decentralized finance (DeFi) applications, enabling scalable and secure financial solutions.

8. Cosmos – Cosmos provides an “Internet of Blockchains” through its Inter-Blockchain Communication (IBC) protocol. It allows separate blockchains to interact, enabling interoperability and scalable applications through its Tendermint consensus.

9. Tezos – Tezos is a self-amending blockchain, enabling upgrades without hard forks. Its on-chain governance model allows stakeholders to vote on protocol changes, making it adaptable and resistant to fragmentation.

10. Flow – Developed specifically for games and NFTs, Flow uses a multi-node architecture to optimize transaction speed and scalability. It powers popular NFT marketplaces and supports high-performance decentralized applications.

11. Filecoin – Filecoin is a decentralized storage network that incentivizes users to store data, forming a global storage marketplace. It enables secure, efficient, and affordable storage solutions using blockchain technology.

12. Hedera Hashgraph – Hedera uses a unique Hashgraph consensus algorithm, which is fast and energy-efficient, making it suitable for enterprise-grade applications. With high throughput and low latency, Hedera is known for security and performance in decentralized applications.

**Presentation Guideline**

You can talk about the following (if applicable) in your presentation:

* Overview: Brief background, including its launch, founders, and core mission or problem it solves.
* Consensus Mechanism: Explanation of the consensus algorithm used (e.g., Proof of Stake, Delegated Proof of Stake, Hashgraph).
* Key Features: Unique technological innovations like sharding, scalability solutions, interoperability, or environmental efficiency.
* Primary Use Cases: How the blockchain is used (e.g., DeFi, NFTs, cross-border payments, enterprise applications).
* Ecosystem and Community: Development activity, partnerships, and community engagement.
* Challenges and Future Roadmap: Known limitations or technical challenges and upcoming upgrades or milestones.

**Grading Rubrics**

* (10 points) The length of the presentation (12-15 minutes)
  + Don’t make it too short (< 10 minutes) or too long (> 15 minutes)
* (55 points) Content understanding
  + demonstrates a clear understanding of the project’s purpose, consensus mechanism, features, and use cases.
* (15 points) Clarity and structure
  + Organized and logical flow; clear, concise explanations suitable for the audience
  + Effective use of visuals (charts, images, diagrams) to enhance understanding
* (10 points) Q & A handling
  + Ability to answer questions accurately and thoughtfully
* (10 points) Participation
  + Ask at least one question per class period.

**Dates**

Here are the available presentation dates:

* Nov 21 (Thursday) up to 4 presentations
* Nov 26 (Tuesday) up to 4 presentations
* Dec 3 (Tuesday) up to 4 presentations

Email me your presentation topic, and the first and second choices of the presentation date. I will schedule your presentation on a first-come first-serve basis.