Blockseblock_Task2

Comparison Table

Blockchain Name	Type	Consensus Mechanism Used	Permission Model	Speed / Throughput (TPS)	Smart Contract Support	Token Support	Typical Use Case	Notable Technical Feature
Solana	Public	Proof of History (PoH) + PoS	Open	~65,000 TPS (theoretical)	Yes (Rust, C, C++, Move soon)	Native (SOL)	High-performance dApps, DeFi, gaming, NFTs	Extremely high throughput via Proof of History
Hyperledger Fabric	Private	Pluggable (Raft, Kafka, etc.)	Permissioned	~3,000+ TPS (realistic)	Yes (Chaincode in Go, JavaScript)	No native token	Supply chain, healthcare, finance consortiums	Modular architecture, private data channels
Quorum	Consortium	Istanbul BFT / Raft	Permissioned	~2,000 TPS	Yes (Solidity via EVM)	Optional (ERC-20-like)	Enterprise collaboration, interbank transfers	Privacy-preserving smart contracts and EVM

Short Report

Solana is a high-performance public blockchain known for its hybrid consensus of Proof of History and Proof of Stake. With theoretical throughput up to 65,000 TPS, it is tailored for scalable dApps, particularly in DeFi, gaming, and NFTs. Solana offers smart contract support using Rust and C, though it's more complex than EVM-based chains.

Hyperledger Fabric is a permissioned, modular private blockchain ideal for enterprise use. Its pluggable consensus and support for private data channels make it highly customizable and secure for internal operations. However, it lacks native token support and public accessibility, making it unsuitable for public-facing dApps.

Quorum blends Ethereum's open-source tools with enterprise needs. It uses permissioned consensus (e.g., IBFT, Raft), supports Solidity smart contracts, and allows privacy-focused transaction layers. It's optimized for consortium environments like banking or inter-enterprise agreements.

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Best platform for a decentralized app (dApp): Solana — due to its open nature, high throughput, and native token support, Solana offers the scalability and decentralization required for modern public-facing dApps.