Task-2

Blockchain Name	Type	Consensus Mechanism	Permission	Smart Contract	Typical Usecase	Technical feature
Ethereum	Public	Proof of Stake	Open	yes-Solidity	dAPPS	modular-fabric
Hyperledger Fabric	Private	PBFT-based modular Consensus	Permissioned	yes-chaincode	asset tracking	channels & private data Collection
Quorum	Consortium	Crash/BFT	Permissioned	yes-Solidity	Trade finance	Private Transaction.

Short Technical Report :-

Ethereum, Hyperledger Fabric, and Quorum each shine in distinct scenarios due to their architectural differences. Ethereum's public, permissionless, Proschain enables robust dAPPs, decentralized finance, and NFT ecosystems with native ETH and ERC-20 token support. However, its throughput (~15-30 TPS average) and gas fees limit scalability, although sharing and layer-2 upgrades aim to improve capacity.

Hyperledger Fabric, designed for Private environments, delivers high performance (~3500 TPS)

Quorum, a Consortium blockchain forked from ethereum, targets enterprise financial use cases. It retains solidity smart contracts and ERC-20 token while adding permissioning & transaction privacy using constellation

Platform recommendations:

1. Decentralised apps → Choose Ethereum
2. Supply chain → Hyperledger Fabric
3. Interbank → Quorum