Glossary- Blockchain terms

	Term	Meaning
1	Blockchain	A digital ledger that stores information in blocks that are linked to one another.
2	Block	A data structure that permanently stores records -once written, cannot be altered or removed. Linkage of blocks
3	Node	Primary job is to validate the transactions stored in the block.
4	Coin	Act as a form of money, operates on its own blockchain and can be mined. Example: Bitcoin
5	Token	Similar to a coin except that it doesn't operate on its own blockchain and uses other blockchains. Tokens can be exchanged freely among peers. Example: Tether USD(USDT) ,Binance USD(BUSD)
6	Non fungible tokens(NFT)	Tokens created to represent digital assets such as images-unique to each other. Each token consists of a Metadata(usually a link) to the image. This metadata is stored in the data section. This Metadata is stored on the blockchain and can be traded P2P.
7	Gas fees	Fee required to perform a transaction or execute a contract. Paid via native coin of the blockchain where the transaction is executed. Fees are collected regardless of successful or failed transactions. Eg: To interact with a smart contract deployed on Ethereum blockchain, we will have to pay gas fees in Ethereum.
8	Smart Contracts	Self-executing contracts Contents of the buyer-seller agreement are inscribed directly into lines of code.
9	Web3 wallet	Capable of storing digital assets such as coins,tokens and NFTs . Enables transfer between peers via the two wallets and

	Term	Meaning
		interaction with dApps.
10	dApps	Digital applications or programs that exist and run on a blockchain or peer-to-peer (P2P) network of computers instead of a single computer.
11	Mining	Process where coins are given as a reward for authenticating and completing blocks of verified transactions on the blockchain.
12	TPS	Transactions per second

Permissionless vs Permissioned Blockchain

Parameter	Permissioned	Permissionless
Type	Blockchain networks that require access to be part of the network	Networks that are public and where anyone can be a part of the network and access it.
Speed	Can be scaled to 20000 TPS. Avg transactions ~ 3000 TPS	Depends on the blockchain network chosen. For Eg Solana and polygon can be scaled to 65000 TPS Avg transactions currently happening ~ 1800 TPS
Security	Less Secure	More Secure due to the decentralized nature.
Ownership	Managed by a group of nodes pre-defined by the network admin. New members(nodes) can only be added by network admin	Public ownership, anyone can join and act as a node
Decentralized	Partially	Fully

Comparison of Various Blockchain platforms :

	IBM	AWS	Oracle
Framework	**Hyperledger Fabric**	**Ethereum, Hyperledger Fabric**	**Hyperledger Fabric**
Smart Contract Languages	**Node.js, Go, Java, Solidity**	**Node.js, Go, Solidity**	**Node.js, Go, Java**
Getting started to use	**https://www.ibm.com/blogs/blockchain/2020/04/how-to-get-started-with-ibm-blockchain-now/**	**https://aws.amazon.com/getting-started/**	**https://docs.oracle.com/en-us/iaas/blockchain-platform/doc/getting-started.html**