HYPERLEDGER BESU (Enterprise blockchain) :-

What is Hyperledger BESU?
Ans . Private Permissioned Blockchain (use with a company).

Why Hyperledger Besu use ?
Ans.
1. **Public Blockchain is slow**
2. **Public Blockchain is not scalable**
3. **No confidential**

Private Blockchain : -

1. **Decentralize Ledger**
2. **Immutable**
3. **Smart Contract**

Hyperledger Fabric : -
Hyperledger is an **umbrella project of opensource blockchains and related tools,** started in December 2015 by the **Linux Foundation.**

Modular
Scalable
Secure

Features of Hyperledger Fabric

ChainCode (chaincode is hyperledger program),
MSP (Member service Provider) ,
channel

Channel : - A channel is a private communication pathway between two or more members of hyperledger .
MSP(Member service provider) : MSP is a **modular component that is used to manage identifies on the blockchain network.** This provider is used to automatic clients who want to join the blockchain network.

Access Control List : -
- An access control list (ACL) is a **list of the rules that specifies which users or systems are granted or denied access to a particular object or system resource.**
- Full access of transaction can be restricted with this.

Different Types of Nodes:

Committing Nodes: Nodes that have all the copies of the ledger.
Endorsing Nodes: Nodes that can execute the chian code (execute the smart contract .
Ordering Nodes: Nodes that maintain the sequence of transactions.

ChainCode :

* Chiancode is a program, written in Go, nodeJs or Java that implements a prescribed interface.

Hyperledger Transaction Flow : -

1. **Client initiating a transection :**
    Client is read the transaction blockchain . Blockchian is verify the the client is MSP and ACL.
2. **Validation of Transaction :** Transaction Proposal send to Endorsing node.
3. **Simulating the transaction :** After Execute the endorsing node send the output to client .