# Professional Blockchain Course

Types of Blockchain



#### **Public Blockchain**

- A public blockchain as its name suggests is the blockchain which is available to all, in other words it is a kind of blockchain which is-' for the people, by the people, and of the people.'
- No one is in charge of the network, and anyone can participate in reading/writing/auditing the blockchain.
- More complex rules are present for safeguarding it from malicious actors.
- All the decisions are made using the complex consensus algorithm
- Computationally these blockchains expensive to mine & commit a Block over the network.
- Example: Bitcoin Blockchain, Ethereum Blockchain, etc



#### **Private Blockchain**

- An individual or an organization privately operate private blockchain as its name suggests.
- Unlike public blockchain in private blockchains, there is an administrator/anchor who looks after essential things such as permissions and identities.
- The consensus is achieved on the whims of the central in-charge who can provide mining rights to anyone or not give at all.
- Compared to public blockchain it is much faster and cheaper because one doesn't have to spend an
  enormous amount of energy, time and money to reach a consensus.
- It is less secure compared to the Public Blockchain.
- Examples: Bankchain, Medichain, etc.



## **Consortium Blockchain**

- This type of blockchain removes the individual autonomy which gets vested in just one entity by using private blockchains.
- Here instead of one in charge, we have more than one in charge. A group of companies or representatives coming together can make decisions for the benefit of the whole network.
- As a way of achieving things much faster and also have more than one single point of failures which protects the whole ecosystem.
- In simple words, it's the best of both Private and Public Blockchains.
- Gives options for rights and access management while leveraging the same blockchain technology and reaping its benefits.
- Examples: R3, EWF, etc.



### **Difference**

Property	Public	Consortium	Private
Consensus Determination	All miners	Selected few miners	Organisations participating.
Permissions	Read permissions to all	Could be restricted	Could be restricted
Immutability	Nearly impossible to tamper	Could be tampered	Could be tampered
Centralised	No	Partial	Yes
Efficiency	Low	High	High
Consensus providers	Permissionless	Permissioned	Permissioned

# **THANK YOU**

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