

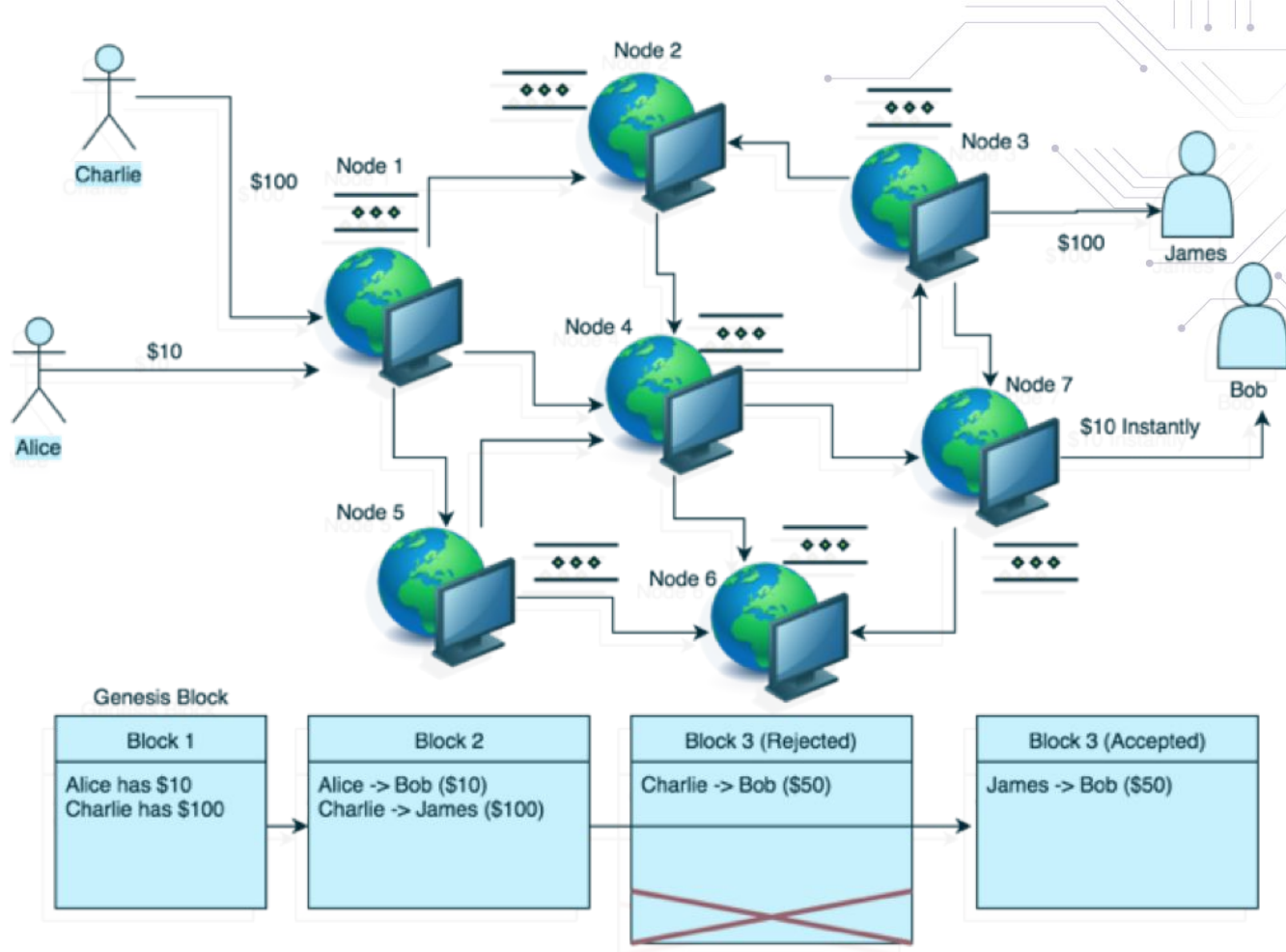
Certified Blockchain Architect

Translate Requirement into Functions

Transactions



- A Transaction can be defined as a record in Blockchain which is just like a store record in MySQL database.
- If you think of blockchain as a ledger book, then each block is a page in the ledger, and each transaction is an individual asset transfer on a ledger page.



What are Blocks ?

- A Block is a container data structure. All blocks in the Blockchain composed of a header and a long list of transactions. The structure of a block is as follows:
 1. Block Header
 2. Block identifiers
 3. Merkle Trees

Block Example

An Example of Block in Blockchain Ecosystem

Field	Description	Size
Magic No	value always 0xD9B4BEF9	4 bytes
Blocksize	number of bytes following up to end of block	4 bytes
Blockheader	consists of 6 items	80 bytes
Transaction Counter	positive integer VI = VarInt	1 - 9 bytes
Transactions	The (non empty) list of transactions	<Transaction counter>-many transactions

Data Privileges

- In Blockchain, Data Privileges can be defined as a right to access a ledger, blocks or transactions.
- Data Privileges differs from blockchain to blockchain such as in Public a node has complete access over the ledger, whereas in private only few might have access to read the transactions, few might have to write the transactions and few have access to read and write the data.
- Data Privileges are set according to the following Privileges
 - System Privileges: These types of privileges are implemented on Private Blockchain and are given to the admin of the blockchain, they can revoke, grant privileges to the other node inside the blockchain.
 - View Privileges: The View Privileges are given to the clients who only have the access to the read the data inside the blockchain.
 - Procedure Privileges: These privilege is given to the nodes who needs to needs to execute or compile data inside a blockchain. For eg. Miners

Data Processor



In general the data processor refers to the process of manipulating and gathering the data to get resourceful information.

In a Public Blockchain anyone can add personal data in a block and anyone who enters the data becomes a data controller and nodes that mirrors the ledger becomes the data processor.

In Private Blockchain the data processor and data controller, depends on the specification of the implementation.

There are various techniques of data processing in blockchain such as manual, automatic and electronic.



THANK YOU!

Any questions?
You can mail us at
hello@blockchain-council.org