

#4.1 Solana, Jargon, Programming models, Tokens

Context

2014 → decentralised money.

creating on your own Token

DOGE, TRUMP

Solana → sol

ETH/sol ≠ solv. for more than just currencies
They let users program anything

Tokens

Token Program

Token program on solana

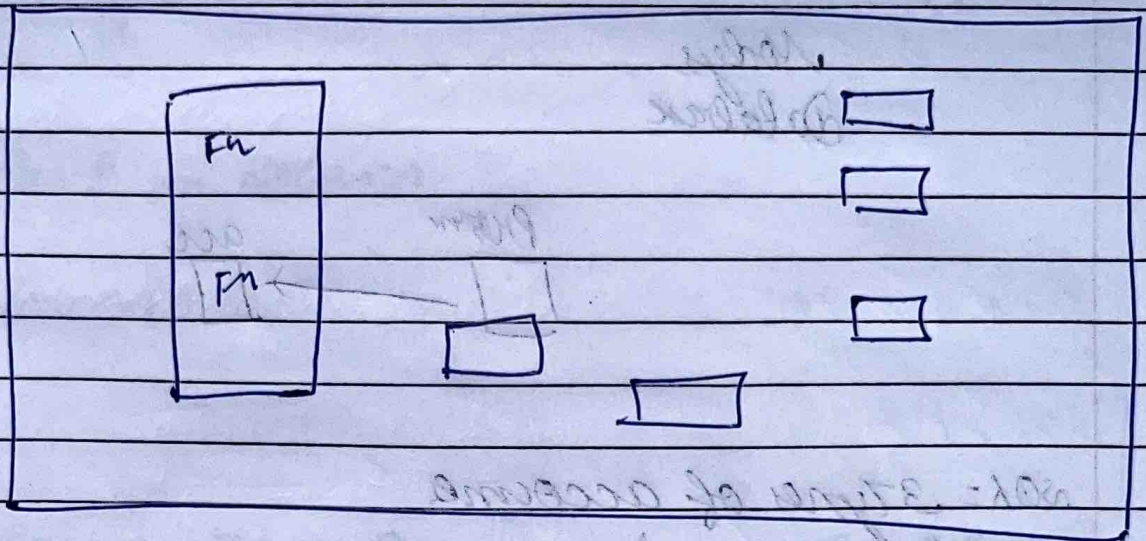
ERC-20 on ETH

coinmarket cap



ETH Blockchain

Smart contract/ Program



Minor in Blockchain

- 1) Deploy a smart contract
- 2) call

Tensor Trade

Accounts on Solana

explorer.solana

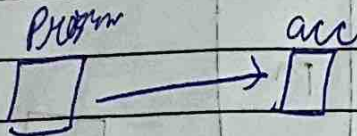
Lamports

$1000 = 10^9$ lamports

Data storage

Smart contract == client backends but
deployed on blockchain

Nodes
Database



sol: 3 types of accounts

Solana

account

0 Bytes
1.50h
not Executable

program account

increment() &
}
decrement() &
}

200 Bytes
2.80h
Executable

account

20

2 Bytes

0.01

Executable / Stake



Install solana cli

Deploy a calculator on solana - Youtube

Rent on solana

Tornado cash

#4.2 Solana Jargon, Programming model, Tokens

Why Sol / ETH better than Bitcoin
→ Smart Contracts

Bitcoin only solves one use-case
decentralised currency

Handing Protocol

cold start problem

ETH → Smart contract

first to introduce smart contracts
concept of decentralised
state.

accounts on Solana

Account

cold 25519 \Rightarrow public, private.

Data storage

Imports

Programs

Rent on Solana

Rent exemption amount-

Solanacli - Install

solana-token

solana address

solana-keygen new

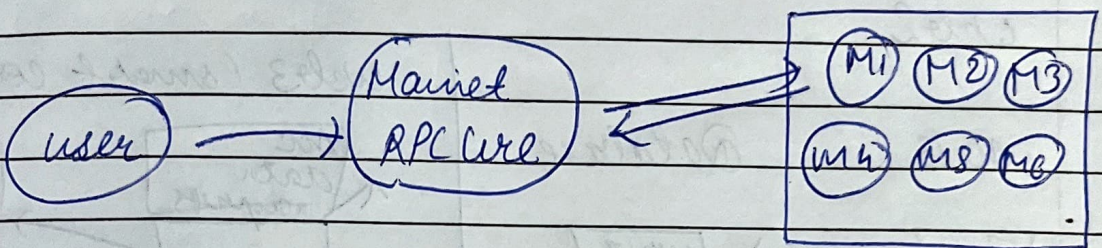
keypair in wallet



Mainnet
devnet
Testnet

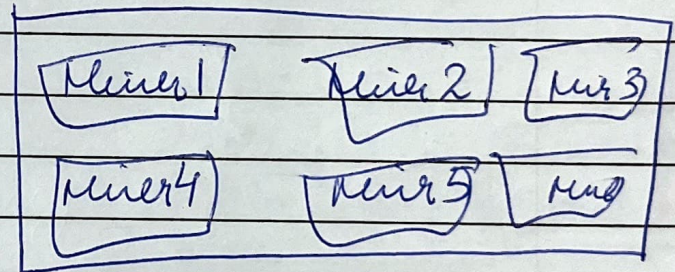
RPC URL

Blockchain

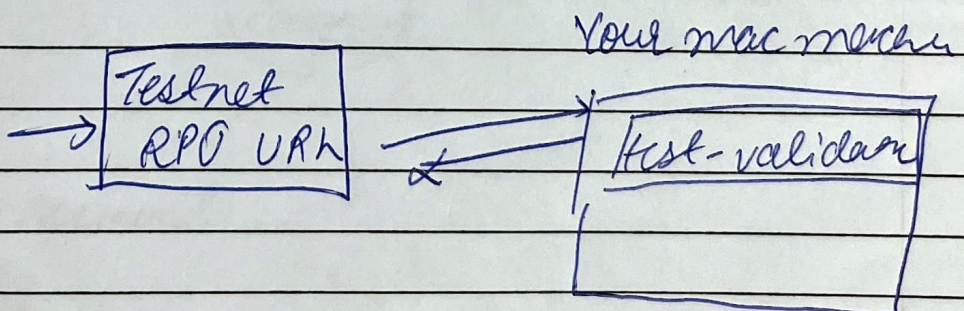


Devnet → address

Devnet
RPC URL



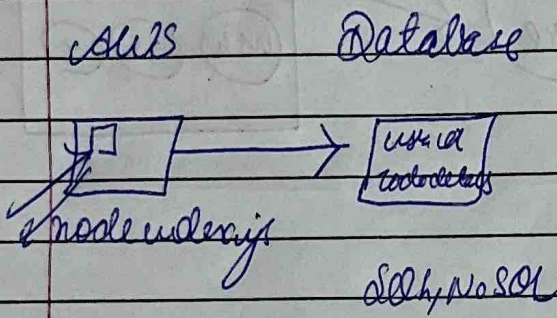
Testnet



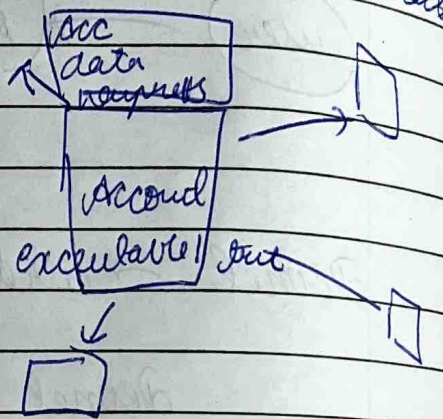
Web 2 Data Model

Smart contracts are backend applications deployed on blockchain

Web 2



Web 3 (Smart contracts)



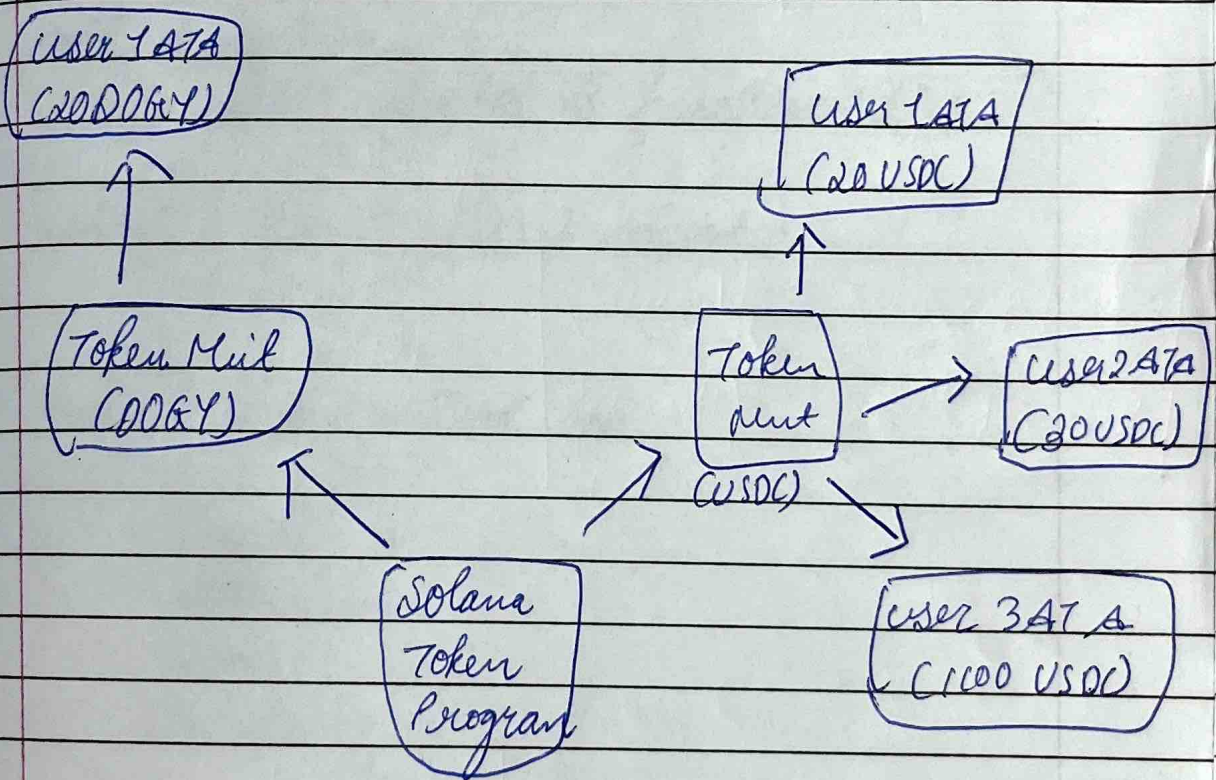
YT → Programming on solana / Program Derived addresses and Cross-program Invocation

Token Program

Token
USDC, USDT

Coin Market Cap

ETH (ERC-20)



Mint Account.

spl token



NFT \rightarrow cannot be divided

Token-22 Program