



DEFI
SUMMER

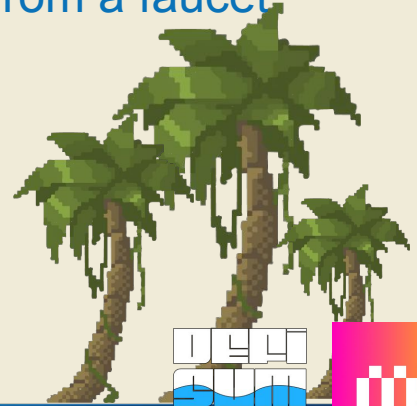
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Deploying NFTs to Testnet

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What is a testnet?

- A testnet is a network meant for testing contracts and their functionalities on.
- Testnets for Ethereum include:
 - Ropsten
 - Rinkeby
 - Kovan
 - Goerli
- To use a testnet, you need test ethers, generally obtained from a faucet



Why use testnets?

- Test Ethereum software
- Experiment with software before mainnet launch
- Test how the contract interacts with other decentralized applications (other smart contracts on the testnet, MetaMask, etc.)



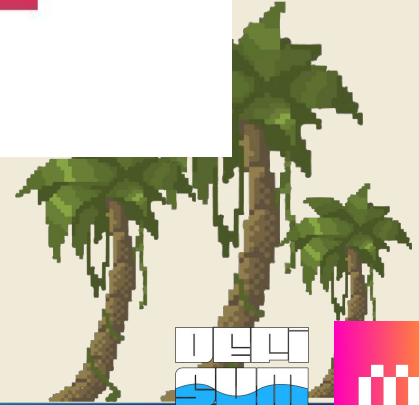
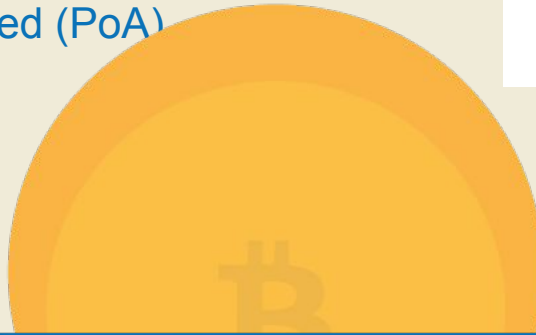
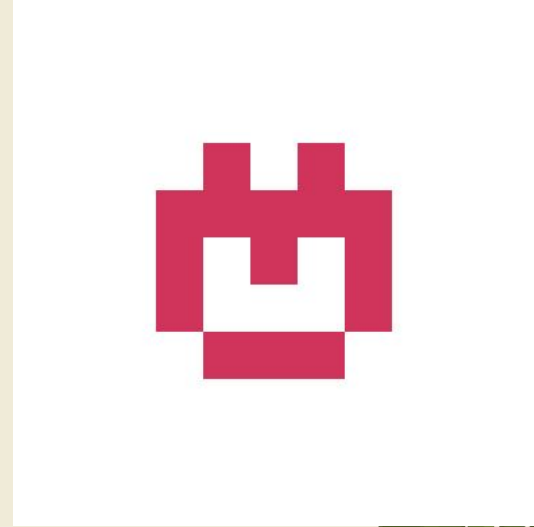
Ropsten

- Pros:
 - Best reproduces ETH mainnet environment (also PoW)
 - Can be used with all clients
 - Can be mined or obtained from a faucet
- Cons:
 - Not immune to spam attacks



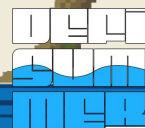
Kovan

- Pros:
 - Immune to spam attacks
- Cons:
 - Not supported in Geth
 - Ether can't be mined (PoA)



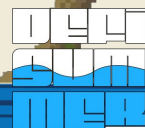
Rinkeby

- Pros:
 - Immune to spam attacks
- Cons:
 - Only supported in Geth
 - Ether can't be mined (PoA)



Goerli

- Pros:
 - Supported by multiple clients
- Cons:
 - Ether can't be mined (PoA)



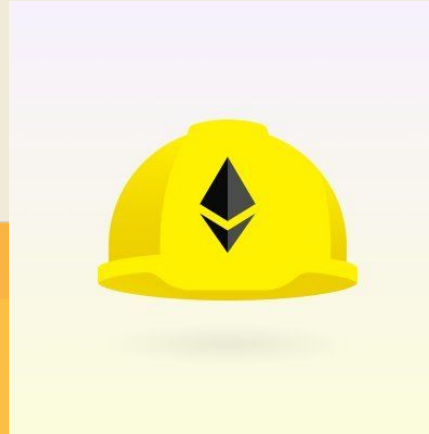
Faucets

- Websites that allow you to give an address that will then dispense test ethers for use
- Kovan requires Github Account
- Rinkeby requires you make a social media post



EVM Frameworks

- Truffle
- Remix
- Hardhat
- Brownie
- Waffle
- ...And many more!



Ganache



Ganache

ACCOUNTS

BLOCKS

TRANSACTIONS

CONTRACTS

EVENTS

LOGS

SEARCH FOR BLOCK NUMBERS OR TX HASHES

CURRENT BLOCK
6

GAS PRICE
20000000000

GAS LIMIT
6721975

HARDFORK
MUIRGLACIER

NETWORK ID
5777

RPC SERVER
HTTP://127.0.0.1:7545

MINING STATUS
AUTOMINING

WORKSPACE
TRUFFLE-SHUFFLE

SWITCH

MNEMONIC ?
candy maple cake sugar pudding cream honey rich smooth crumble sweet treat

HD PATH
m/44'/60'/0'/0/account_index

ADDRESS	BALANCE	TX COUNT	INDEX	
0x627306090abaB3A6e1400e9345bC60c78a8BEf57	99.46 ETH	32	0	
0xf17f52151EbEF6C7334FAD080c5704D77216b732	100.00 ETH	0	1	
0xC5fdf4076b8F3A5357c5E395ab970B5B54098Fef	100.00 ETH	0	2	
0x821aEa9a577a9b44299B9c15c88cf3087F3b5544	100.00 ETH	0	3	
ADDRESS	BALANCE	TX COUNT	INDEX	



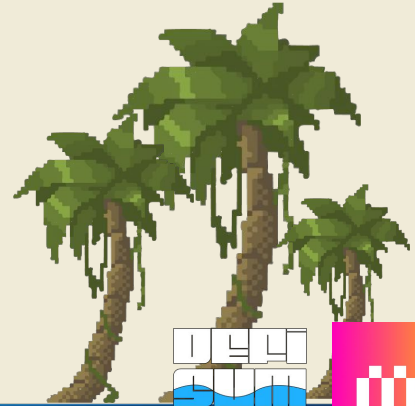
Infura

- Provides tools for deploying on Ethereum blockchain
- Provides API that will be used in this tutorial



Metamask

- Cryptocurrency wallet browser extension
- Allows for interaction with decentralized applications on the blockchain

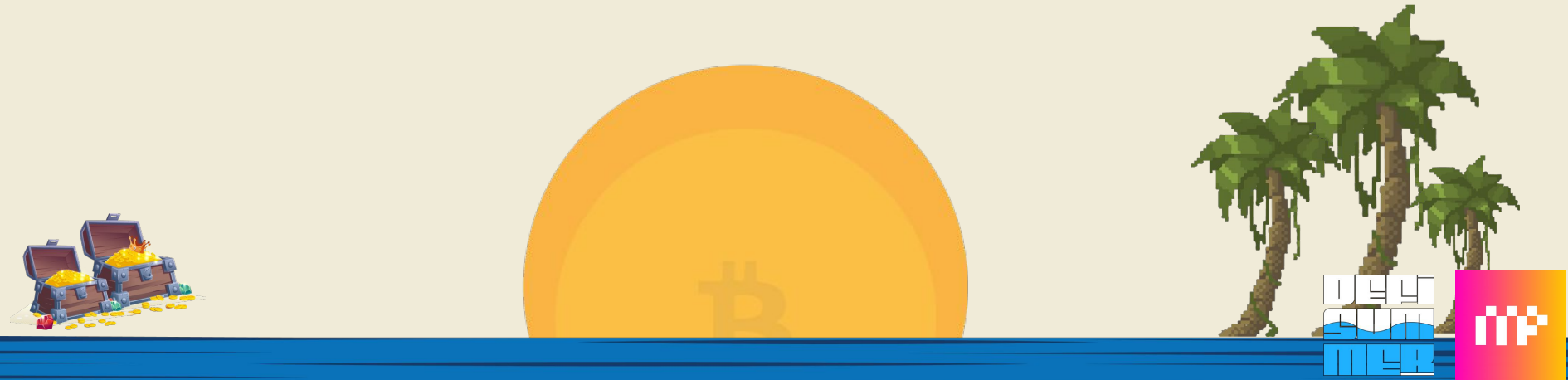


What is in an NFT?

- Minted to a blockchain via tokenURI
- Usually an IPFS file link, containing an image or a .json with information on the collectible



Now to deploy our test NFT...



Resources

- [METAMASK](#)
- [Infura](#)
- [Truffle Suite](#)
- [Github Repository](#)



Questions!

