



# Web3 - Client side

Pre-requisite - Basic Javascript/Node.js

#### General

easy	med	hard
Intro to blockchains, decentralization, BTC, ETH and SOL		
	Basic cryptography, hashing, encryption, sha256, keccak256,	
	Gas, txns, public and private keys, edd25119, pneumonics	
	RPCs, common RPC methods on SOL and ETH	
Gas, Native tokens, Transactions, Programs, Instructions, Airdropping, Block explorers, Creating wallets, pvt keys		

### Eth

Easy	Medium	Hard
	What is eth, proof of stake	
		EVM Architecture, State, Bytecode, Opcodes, ABIs, transaction processing and gas, EOAs vs Contract accounts
	Wallet adapters in ETH	
	ETH on the server, etherjs	
	ETH with React and Next.js	

## Solana

easy	med	hard
	Creating a token, atas, attaching metadata	
Create NFTs, attaching metadata, metaplex	Basics of a DEX, AMMs, liquidity pools	
	Creating a token	
	Creating a swap pool, funding it.	
	Wallet adapters on Solana,	
	Solana on the backend, @solana/web3.js	
	Solana with Next.js	

#### **Projects**

- Create a client side wallet in JS, supporting transfers, txns and swaps
- 2. Create a token launch and transfer program on solana
- 3. Create a cloud wallet in Node.js
- 4. Creating BonkBot on SOL

