Blockchain Bootcamp Day 1

* Each lab has it’s own pdf document
* Use smart contracts using openzepplin
* Don’t have to be a cryptology expert to work with crypto currency.

Benefits of Blockchain Technology

* Transactions

-🡪 someone past stapler to another person, therefore giving ownership

🡪How to track this?

* Use a ledger -> Ali – 1, Tom – 0 (Send 1 to Tom) Ali – 0, Tom – 1
* This can introduce malicious actors
* **Double Spending Problem 🡪** When same transaction is initiated twice, with the second transaction having money that doesn’t exist being sent to another user. Therefore, the ledger would have Ali – 0, and Tom –2. Tom only got transactions from Ali, and Ali only had one stapler. How does tom have 2?(The double spending problem occurred.)
* Possession = Ownership, not middleman in transaction.
* Tracked in simple ledger ->Ownership != Possession -> Ownership and possession is decoupled. Who keeps track of the record. Someone can manipulate records, who keeps track of a person who keeps track of person who keeps the record?
* Hello Blockchain -> Solves the Double Spending Problem.
* Ownership can be tracked in ledger
* Blockchain solved double spending problem
* Smart contracts on top of the blockchain, will be digital secured via cryptography.
* Blockchain cuts out middleman in process and secured using cryptography.
* Removed individuals such as lawyers when buying a house using blockchain.
* Remove the middleman
* Makes process more secure
* Transactions get completed more quicker.
* Can streamline time consuming tasks.
* Far more increased capacity
* Due to peer to peer technology can increase capacity of network
* How the bitcoin blockchain work?
* Blockchain is the public ledger of all bitcoin transaction that ever taken place.
* Blockchain is constantly growing as new blocks are added.
* Transactions in blockchain are processed by nodes(computers) in network.
* Each block added to chain added in chronological order.
* Ethereum added with decentralized apps, while bitcoin alternative currency.
* Blockchain is considered the evolution to web 3.0
* Connecting intelligence, connecting data, concepts applications, is part of web 3.0
* Traditional way of sharing docs, to another recipient and ask them to make changes. Must get return copy when another person is done with it.
* Two owners can’t mess with same record at once.
* Google docs is like a shared ledger.
* Blockchain is designed for durability
* Each node in network is part of community, therefore no single point of failure.