Lesson 1 – What is a Cryptocurrency?

#1 - A Cryptocurrency is a computer program.

The first Computer Program written to “BE” a Cryptocurrency was Bitcoin. It is a Computer Program written by a pseudonymous (false name) “Satoshi Nakamoto.” He created a program that would keep a record of who owns what amount of currency is issued how it is issued and who owns each currency unit. As transactions happen at a certain interval programmed into the cryptocurrency computer program (called “blocktime”), computers account for every transaction and resolve the chain of transactions during that time (called a “block”) and then add resolve what changed to the all the previous blocks (the “blockchain”) and then it is solved, so that everyone's currency unit, coin, is accounted for. Which brings us to point #2.

#2 - A Cryptocurrency is a computer program that runs on Computers.

Which computers run this program is a very very big deal.
How many computers do this calculation is a very very big deal.

Your currency depends on it.

- More than one computer needs to run the cryptocurrency. (This is called running a “Node.”) For example, there are just over 6,000 computers running the main cryptocurrency, Bitcoin.

  Why? If the program is only run on one computer, the person whose computer it is running on could write into the chain of transactions that they own a billion of these coins. They could then sell them on the market until someone figured out what was going on and walk away with millions in fraud. Just recently, in May 2017, several altcoins (coins other than the main one, Bitcoin) were found to have a flaw allowing someone to do just that!Even today someone who owns a computer running the Bitcoin program or any other cryptocurrency, and providing the service of resolving every transaction that happens could

try to do this. *The reason it wouldn't be successful is because all of the other computers disagree and would have a different record. This record of the chain of transactions would be discarded from the other group that all agree and would not be allowed to continue with the chain of transactions.* Which brings us to our 3rd and final point about what makes a Cryptocurrency.

#3 – The Relationship between these Computers running the Program is "Trustless"

The reason a Cryptocurrency has value is because it is built on the idea of "trustlessness."

You don't just "trust" that someone won't write in a program or try to steal your "coins" which are accounted in the program. You want a system in place – multiple computers running the same program, resolving the chain of transactions so your coins are always accounted for.

POINT OF ALERT:
Believe it or not, there are investors investing today in Cryptocurrencies that are NOT on multiple unrelated and unaffiliated to each other computers. These currencies are often put up by companies or groups running a "Blockchain" Program, but running it on THEIR computers (or theirs and their friends computers).

These currencies are traded as Cryptocurrencies, are called Cryptocurrencies, but they are <u>not</u> a Cryptocurrency.

A Currency must be immutable. That is what makes it a trusted store of value. That is why the trustless system of multiple independent computers

running the same program resolving the chain of transactions continuously must be in place.

In conclusion: A Cryptocurrency is a Computer Program that is run on Multiple Computers in a Trustless System where your currency is continuously accounted for.