What is Blockchain?

Blockchain is a way to record/store data, such as financial transactions, inventory control, etc. that makes it virtually impossible for the data to be changed, hacked, or manipulated. (It is NOT cryptocurrency. Cryptocurrency USES Blockchain.) These transactions are stored in blocks which hold a certain amount of data. Once a block is "filled," new blocks are created and chained together becoming a "digital ledger." All transactions are authorized and authenticated which safeguards them from any sort of tampering.

Blockchains are considered "distributed ledgers." This means that transactions are duplicated and distributed across a network of computers known as "nodes" that participate in a particular blockchain. Nodes verify, approve, and store data within the ledger, unlike traditional record-keeping which stores data in a central place like a computer server. The duplication process means that anyone who wants to hack into the system and change/steal/remove a transaction would need to change/steal/remove that transaction in every computer (node) in that network of computers. What's really cool, is that anybody can see the data, but they can't corrupt it.

Each block has its own unique name, a cryptographic "hash," which protects the data within the block from anyone without the required code and protects the block's place along the chain by identifying the block that came before it.

How does Blockchain Work?

There are several types of Blockchains, but the ones we would be concerned with are "Public Blockchains." They're open to everyone, and all transactions on the network can be traced. Anyone with internet access can become an authorized "node," participate in a network, and be responsible for creating transactions.
You and the person you have a transaction with will each need a "digital signature," also known as a "secure digital identity" used for authorizing and controlling transactions. This consist of two "cryptography" keys—a Private key and Public key. These keys help to perform transactions between two parties. Each party has both keys, which you both will use to produce a secure digital identity reference.
Hopefully, you can see just how safe and secure blockchain technology is! In fact, far more secure than traditional banking transactions, such as sending money to friends and family.
In my next article I will talk about cryptocurrency and how it plays into Blockchain technology.

Resources:

https://www.simplilearn.com/tutorials/blockchain-tutorial/blockchain-technology#GoTop

https://time.com/nextadvisor/investing/cryptocurrency/what-is-blockchain/

https://money.com/what-is-blockchain/

The Blockchain Process