

The ultimate guide to cryptocurrency

(so even your grandma can understand, hopefully)

by <https://twitter.com/JustTechGuy>

Here you will learn everything you need to know about cryptocurrencies in simple terms, no fancy or technical words. What are cryptocurrencies, how to work with them, which one to take etc? Let's find out.

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Before we start, first I'll explain cryptocurrency in simple terms, everything about it and compare it with the banking system. Later on, I will actually show you how it works using real-life examples and graphical presentation.

1. What is a cryptocurrency?

In simple terms
digital money.

For sure you understand what are dollars or euros, or any other money in the world. You go to a bank, open an account, get a credit card and you get paid. You go to an ATM, put in your credit card and you see how much money you have. You can even withdraw it and get cash a.k.a. paper money.

Cryptocurrency is exactly that but without banks or credit cards and they don't come in cash. Cryptocurrency is a fancy word for digital money, imagine it like a digital dollar.

The very first cryptocurrency that was made back in 2009 was called **Bitcoin**.

1.1. What is Blockchain?

In simple terms
it's a system where cryptocurrencies live. Imagine it as a lake with fishes. Fishes are cryptocurrencies.

A term that is being mentioned a lot together with "cryptocurrency" is "blockchain". In simple terms imagine blockchain as a system without which cryptocurrency would not exist. Or even simpler, imagine blockchain as a lake and inside of that lake there are a bunch of fishes (cryptocurrencies).

The blockchain is a file that contains a list of every bitcoin transaction ever made. The blockchain tells you how many bitcoins each person owns. Transactions aren't added to the file individually. Instead, they are bunched together and added in blocks. Hence, blockchain.

1.2. Decentralization

In simple terms

it means there are no banks or any central system or a person who controls everything

The main buzzword in the blockchain and cryptocurrency world is “decentralization”. Simply put: there are no banks, there is not one single person or organization that controls everything. Instead, everyone who wants to be involved in the blockchain network is making sure it's all trustworthy.

In a decentralized blockchain network, no one has to know or trust anyone else. Each member in the network has a copy of the exact same data in the form of a distributed ledger. If a member's ledger is altered or corrupted in any way, it will be rejected by the majority of the members in the network.

Decentralized blockchains are immutable, which means that the data entered is irreversible, so: **no chargebacks.**

2. Types of cryptocurrencies

In simple terms

It is very important to differentiate between 2 types of cryptocurrencies:

1. Non-stable currency - price changes all the time
2. Stable currency (also called stablecoin) - price is always \$1
3. Fiat currency - USD, EURO and other everyday currencies

Also it is good to know the difference between:

1. Bitcoin
2. Altcoin - everything that is not Bitcoin

2.1. Bitcoin vs Altcoin

Bitcoin is the first cryptocurrency. Bitcoin started it all. It was made in 2009. Altcoins are **all other** cryptocurrencies that are not Bitcoin.

2.2. Non-stable currency

Have you ever heard of Bitcoin? Probably yes, this is the most popular non-stable cryptocurrency. That means its price changes almost all the time. This is how Bitcoin's price changed over a course of 1 year.



Nowadays Bitcoin is more like digital gold, people hold Bitcoin because they want to earn money by selling/buying.

2.3. Stable currency

Stable currencies are the ones whose price doesn't change that much. They are not volatile. They are always 1\$. The most popular one is called Tether.



As you can see its value is constant, always around \$1. It has spikes between 0.99 and 1.01 but it's not that volatile.

2.4. Fiat currency

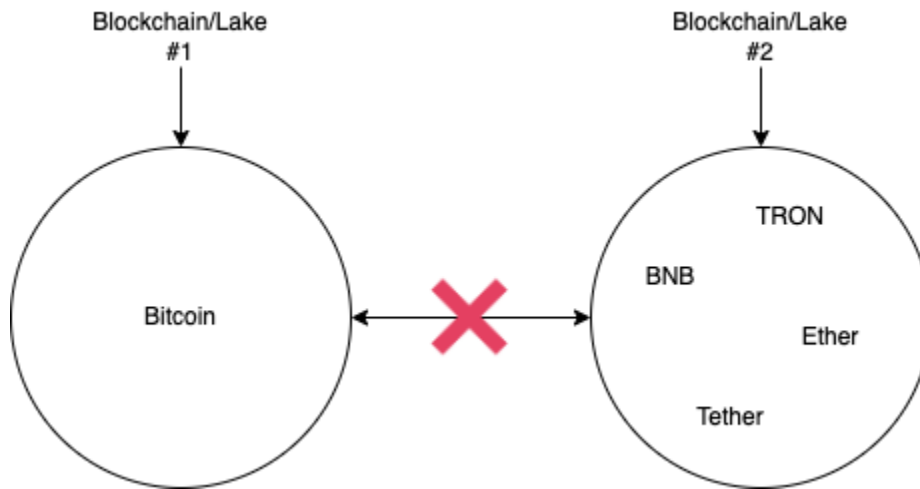
Fiat is a word for non-cryptocurrencies like USD, British pound, Euro and so on.

3. Comparison with traditional banking systems

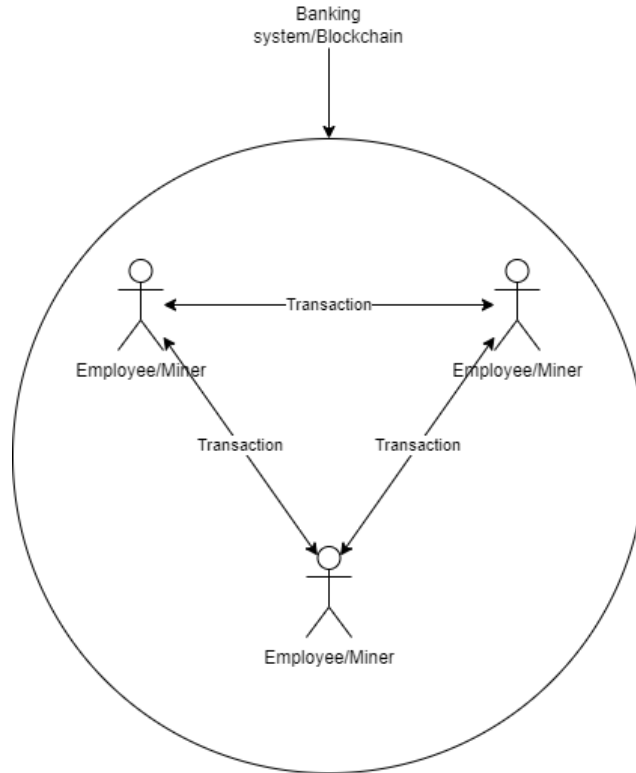
Ok let's use traditional banking system terminology to explain crypto, it will be easier to understand. I'll start from the bigger unit to the smallest one.

Traditional system	Crypto	Explanation
Banking system	Blockchain	We could compare a blockchain to the entire banking system. As the banking system tracks every transaction, blockchain contains a list of every transaction ever made. Imagine it like this, every cryptocurrency lives in a different system (blockchain) and it stays there. <u>It's like you have 2 lakes. Fishes A live in lake number 1 and fishes B live in lake number 2. They cannot cross to another lake, there is no bridge for that.</u>
Bank employees	Miners	Someone needs to check transactions, make or authorize transactions. Usually, people do that. Blockchain runs on various devices like laptops or servers, they automatically authorize and take care of transactions.
Bank account	Wallet	Your bank opens an account for you, you get an account number and you keep your money there. The same as a wallet, a wallet is basically an account, that account has an address (number) and you save your cryptocurrency there.
Password or PIN	Private key	You need to access your money somehow. In a traditional bank system, you use passwords or PINs to log in to your bank account. In the crypto world you use a "private key". The private key is just like a password, a randomly generated <u>number</u> .
Account number	Public address	You want to receive money? You give someone your

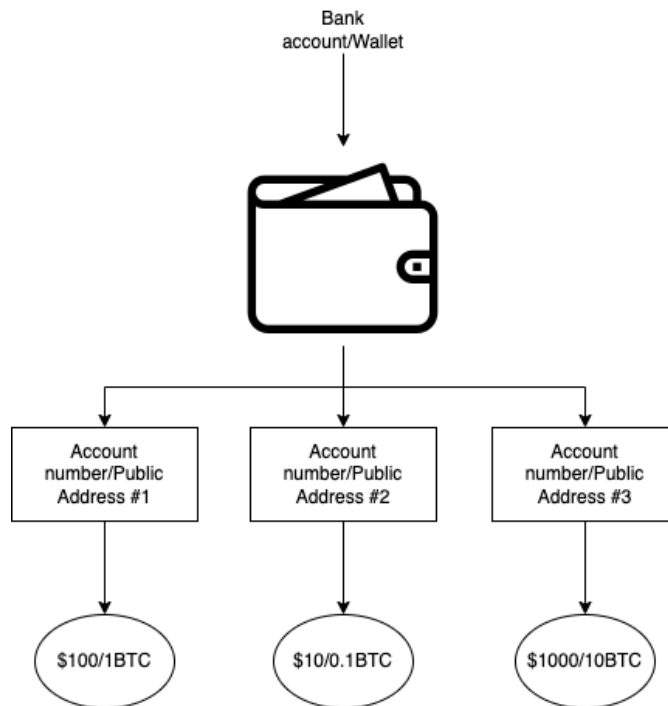
		account number. In the cryptocurrency world, it's called an address.
US dollar	Cryptocurrency	Well, it's the currency like every other in the world. Cryptocurrency is in digital form only. Just like we have US dollars, Canadian dollars, British pounds, Euros and so on, we have many different cryptocurrencies like Bitcoin, Ether, Tether, Monero and so on.



Presentation of different blockchains and their currencies
They cannot be converted from one to another without crypto exchanges
They live in their isolated systems



Blockchain compared to the banking system. Miners are like employees of a bank. They take care of transactions and make sure it's trusted



Bank account compared to the wallet. One wallet = one cryptocurrency. One wallet can hold multiple accounts a.k.a. addresses

4. Basics of cryptocurrencies

4.1. Creating an account (wallet)

In simple terms

Wallet is like your bank account, you keep your money there

Before you can receive or send cryptocurrency you need to have a wallet. Wallet is just a fancy word for an account. Like a bank account is used to hold your money, a wallet is used to hold your cryptocurrency.

More precisely, crypto wallets keep your private keys – the passwords that give you access to your cryptocurrencies – safe and accessible, allowing you to send and receive cryptocurrencies like Bitcoin and Ethereum. **DO NOT EVER EVER share your private key, it's like your password.**

Just like in the banking system your money does not live directly on your credit card (inside your real wallet), but instead, your money lives in the banking system (database). The same way with crypto wallet. Your money does not live in your wallet but in the system (blockchain). Wallet + private key gives you access to your money.

Bank account can be only one and it's usually a digital one nowadays. In the cryptocurrency world, there are 2 different types of wallets.

4.1.1. Hot wallets

In simple terms

Hot wallets are basically the wallets that connect to the internet and generally offer lesser security.

Hot wallets are basically the wallets that connect to the internet and generally offer lesser security. On the other hand, hot wallets offer better accessibility due to their connection with the internet. Even if hot wallets are vulnerable to fraudsters and hacker attacks, they are highly user-friendly.

4.1.1.1. Web

Keys are stored on the server of a website. This makes sending, receiving, and using your crypto as easy as using any online bank account or payment system. There is no picture of it since it is saved on the server somewhere.

4.1.1.2. Desktop

You install them on your laptop and use them as any other software on your laptop. Examples of such wallets are Electrum or Exodus

4.1.1.3. Mobile

Basically the same as Desktop, but instead it's on your phone.

4.1.2. Cold wallets

In simple terms

Cold wallets are the wallets that store your data in offline mode. So generally more secure but a little bit more complicated to work with.

4.1.2.1. Paper wallets

Keys are written on paper, like literally on a paper, you write down your private key a.k.a. password. This, of course, makes using your crypto harder, because digital money can only be used on the internet. It looks like this:



Yes, usually QR codes are used for this. Your private key/password is turned into QR code since it's easier to scan QR code than to type the entire password yourself.

4.1.2.2. Hardware wallets

Keys are stored in a device like USB (but more secure) and only connected to a computer when you want to use your crypto. The idea is to try to balance security and convenience. It looks like this:



4.2. Receiving cryptocurrency

Receiving cryptocurrency is extremely easy. Once you create your wallet you will get a **public address (NEVER GIVE AWAY YOUR PRIVATE KEY, IT IS YOUR PASSWORD)**. You can give your **public address** to whomever you want.

The other person will send you money to that public address a.k.a. account number. Just like when you give your bank account number so someone can send you money.

As mentioned in [3. Comparison with traditional banking systems](#) every currency lives in its own system (blockchain). If you want to receive Bitcoins you need to send a public address from your Bitcoin wallet. If you want to receive Ethers you need to send a public address from your Ethereum wallet.

4.3. Sending cryptocurrency

Sending cryptocurrency is a little bit more work than receiving it. Let's assume you will use an online wallet. In that case, you have to follow instructions on the site on how to send coins.

Usually, it's very simple:

1. Choose one of your cryptocurrencies
2. Enter the amount you want to send
3. Enter the public address (if you remember, this is basically the bank account number) you want to send to
4. Click send

Otherwise if you use a paper or hardware wallet then there are some extra steps you need to do. Like connect your wallet to your laptop, use appropriate software and such. In general, it works in the same way

4.4. Transactions

Like every other payment out there payment with cryptocurrencies also have transactions. In the banking system, you have banks that handle transactions. In the cryptocurrency world, you have a blockchain system. Basically all people in the world (if you remember, they are called miners) who want to be involved are making sure it's all legit, trustworthy and making sure transactions work.

It usually takes up to 10-15 minutes for transaction to be confirmed by miners. Yes, every transaction has to be confirmed, because of fraud.

Fee plays a major role in how fast transaction is confirmed.

4.5. Fee

Of course like any other system, this one takes fees too. Those are not fixed fees, they depend on the transaction. Some wallets allow you to set your own fee, while others do it automatically.

The fee goes to the miner (computer in the blockchain network) that confirmed the transaction. Basically, that computer/person earns cryptocurrency by confirming your transaction (making sure it's safe, not fraud)

5. Exchange crypto to fiat

In simple terms

There are online crypto exchanges where you can sell your cryptocurrency for real money

Nowadays you cannot do much with crypto, it's more like digital gold. You can't actually buy much in real life with crypto.

If you want to convert crypto to fiat you have to use crypto exchanges. Top crypto exchanges are: [Binance](#), [Coinbase](#) and [Kraken](#). You can see here top crypto exchanges: <https://coinmarketcap.com/rankings/exchanges/>

You probably don't want to receive payments directly on Coinbase, Binance or Kraken, they are exchanges, not wallet providers, so you risk getting banned. I explained wallets in [4.1. Creating an account \(wallet\)](#).

Steps you'll need to do in order to convert crypto to fiat:

1. Register on one of the exchanges
2. Go through KYC (Know Your Customer) process. Read more about it [under KYC](#)
3. Get verified
4. Fill in your bank account data. This is where you will get US dollars.
5. Create a wallet on a crypto exchange site for your cryptocurrency (Bitcoin or whatever you have in your main wallet)
6. Send your money (Bitcoins) from your main wallet to your temp wallet on the crypto exchange site
7. List your Bitcoins for sale. It means that you will sell your Bitcoins for dollars
8. Once someone buys your Bitcoins, either random people or crypto exchange site itself you will get money to your bank account

Next steps depend on you, in some countries dealing with crypto is a taxable event (meaning that you have to pay some extra taxes). The thing that the bank sees is that you traded cryptocurrency for dollars. As long as everything you do is legal it should be all good.

5.1. What is KYC

In simple terms

KYC means Know Your Customer. The objective of KYC is to prevent banks from being used, by criminal elements for money laundering activities.

KYC means Know Your Customer. Every crypto exchanges have to implement that. It means that they need to confirm your identity. You have to submit your ID so they can confirm your identity. The objective of KYC is to prevent banks from being used, by criminal elements for money laundering activities.

6. Pros and cons of cryptocurrencies

6.1. Why is crypto good?

- Banks are excluded (at some degree) — if you accept crypto, nobody knows what you received cryptocurrency for, except you and your buyer. As long as everything you do is legal it should be all good.
- Easy to work with — people are always saying how crypto is hard to understand and how the learning curve is big. Actually, it's not, it only takes good service and the right person to explain it simply
- Anonymity — as we all know this is a very big advantage. All parties stay anonymous, no names, no credit cards and no personal data
- No chargebacks — usually chargebacks are a big problem, in blockchain, there is no chargeback

6.2. Why is crypto bad?

- Hard to payout — this can be a little bit painful, not much actually. All you need to do is open an account on some crypto exchange, go through KYC (Know Your Customer) process and exchange bitcoins for USD. The painful part is how you are going to handle that payout in your country since it's a taxable event

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- You can't use crypto to buy things in real life — not many stores accept cryptocurrencies, so you can't buy food, pay rent or pay gas
- Not many people still use cryptocurrency — so your market might be a little bit lower

6.3. Not good nor bad

- Fees — fees might be a little bit higher
- Volatility — as we all know crypto is extremely volatile, but there are stable coins so let's not focus on that disadvantage

7. Final words

That's all folks, at least for now. Hopefully this was helpful enough and hopefully you learned something. Now it's on you to decide whether you want to use cryptocurrency or not.

Enjoy your day and if you will follow me on Twitter <https://twitter.com/JustTechGuy>

Regards.