Process in which you receive ether:

Whenever you enter your address into a website that sends Ether…

Your address is sent to a backend server

For developers, in order to create such a server, we could use the Web3.js library which is used to interact with any Ethereum network

The library then creates a transaction object.

What is a transaction?

* A record that describes accounts sending money to other accounts

A transaction is made up of:

|  |  |
| --- | --- |
| Nonce (Short for nonsense) | How many times a sender has sent a transaction |
| to | Where money goes to |
| value | How much ether |
| gasPrice | Amount sender will pay in order to send in order for transaction to be processed |
| startGas/ gasLimit | Max units of gas a transaction can use |
| **v** | Cryptographic pieces of data that can be used to generate the sender’s account address. Generated from the sender’s private key. |
| **r** | Same as v |
| **s** | Same s |

Why do transactions take so long?

The blockchain is complicated because it has to solve a problem. How to represent millions and billions of transactions quickly and reliably between people.

When you create a transaction, your data is sent to one particular node, this nide has an entire copy of the blockchain within it.

But, the node that we’re communicating with will also accept data from other nodes and with that data create a “block”.

The block gets validated through logical algorithm

This is where mining happens