

# **Build your token on ethereum**

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## Step 0: What is Ethereum ?

- Understand the [Bitcoin and Blockchain basics](#)
- Understand the infrastructure [blockchains with Ethereum](#)
- Now, you should have the basis to understand what you are going to do.

## Step 1: Understand what is a token

- [Understand smart contracts](#)
- [Understand ERC20](#)
- Go check what [OpenZeppelin](#) is and does
- Search for token examples ([stablecoins](#), [NFTs](#)...)

## Step 2: Build & deploy your own token

- Start writing a new smart contract on [Remix](#) IDE. It will be your first token.
  - Remix is a browser-based & all-in-one IDE so you don't need to install anything on your computer. Nice !
- Import the [OpenZeppelin](#) ERC20 smart contracts & use it to create your token.
- Install and setup the [Metamask](#) wallet extension. Be aware: if you plan on using this wallets with REAL tokens, store your seedphrase in a really safe place. This seed allows anyone having it to regenerate the entirety of your wallets, with the funds in it.
- Connect your Metamask to your Remix by choosing the environment 'Injected Web3' on the 'Deploy & run transaction' section and validating the connection on the Metamask popup.
- Once you are there, Remix allows you to deploy your smart contracts on the network which your web3 wallet (in this case, Metamask) is connected

to. You could deploy them on the real Ethereum network, but it is really expensive.

- Connect your wallet to the testnet you want. Find online a faucet that drops ether on this testnet, and once you have enough ether to cover the transaction fees, deploy your token on the test network, and have fun sending it to your friends !

## Step 3 : try building other smart contracts

- You now have the basis to write smart contracts !
- Get help in solidity with [the docs](#).
- Write your own smart contract that can retrieve a token when a certain amount of Eth is sent to it.
- You can implement a large amount of functions that would send Eth or do other things, like a whitelist or a blacklist of users

## Step 4: to go further...

- If you know ReactJS, try to build a basic webapp frontend to interact with your smart contracts ! For that you'll need libraries to interact with the blockchain like [ethers](#) or [web3.js](#).

- You will then have a complete dapp (decentralized application) !
- If you want to deploy it for real, go search and learn about [IPFS](#) and how to host your webapp in a distributed network to make it more persistent and maybe cost less !
- You can also code smart contracts and interact with the blockchain with Python ! You can check [this video](#) for example to learn more about the web3.py library.

Have fun !

You can really do amazing stuff with the Ethereum network and the EVM compatibles networks, possibilities are almost endless