

Getting started you should first install these two things if you don't have them already. I recommend installing Node-js first.

Node-js

Python

Next we need to install brownie and ganache with the following commands.

```
python3 -m pip install --user pipx
python3 -m pipx ensurepath

pipx install eth-brownie
```

These are the command lines from the video. If you don't have pipx installed it's easy to install or you can just use:

```
py pip -m install eth-brownie
```

If it's giving you errors, might help to install cython and cytoolz manually and then retry.

```
py pip -m install cython
py pip -m install cytoolz
```

Next is ganache with the following command.

```
npm install -g ganache-cli
```

At this point, if everything went well you should be able to run `brownie compile` in our project and your output should look something like this.

```
PS C:\Users\Tenkawa PC\Documents\GitHub\NiFTy-Smart-Contract> brownie compile
INFO: Could not find files for the given pattern(s).
Brownie v1.16.4 - Python development framework for Ethereum

Project has been compiled. Build artifacts saved at C:\Users\Tenkawa PC\Documents\GitHub\NiFTy-Smart-Contract\build\contracts
PS C:\Users\Tenkawa PC\Documents\GitHub\NiFTy-Smart-Contract> |
```

If it works great! If not then you most likely need to add brownie to your PATHs. That is OS dependent so google is your friend.

Now you need to sign up for a few accounts before you can try any of the scripts. First up is Infura.

Infura

<https://infura.io/>

Once you sign up you will be given a project key which can be accessed via Dashboard > Settings



You will also need a crypto wallet.

MetaMask

<https://metamask.io/>

Sign up for an account and install the add-on. After setting up your wallet you need to put some fake money in it. To do that you need a faucet. I used <https://rinkeby-faucet.com/> because it's the least hassle but you can also use <https://faucet.rinkeby.io/> but it requires a twitter or facebook account.

Either way you will need to know your wallet address which can be found by clicking the MetaMask icon and then Account 1 (default name). That should automatically copy your wallet address and you can paste it wherever you need to.

Finally, after you have funded your wallet you will need to find your private key which is different from your wallet address. To access click MetaMask > Three dots > Account Details > Export Private key

Now that you have your infura key, wallet private key and some money you can test if everything is working. To do so, go to the root folder and create a file named .env

Use the template below and paste your keys in the appropriate fields.

```
export PRIVATE_KEY=your private wallet key here
export WEB3_INFURA_PROJECT_ID=your project ID here
```

Once you're done you can run this line to check if everything is working.

```
brownie run scripts/advanced_collectible/deploy_advanced.py --network rinkeby
```

If everything works well then you should get something that looks like this:

```
PS C:\Users\Tenkawa PC\Documents\GitHub\NiFTy-Smart-Contract> brownie run scripts/advanced_collectible/deploy_advanced.py --network rinkeby
INFO: Could not find files for the given pattern(s).
Brownie v1.16.4 - Python development framework for Ethereum

NiftySmartContractProject is the active project.

Running 'scripts\advanced_collectible\deploy_advanced.py::main'...
rinkeby
Transaction sent: 0xb2ac1b789dc49fcc0177f4c0b53811b15a4bd353416bfeb90810ee9be9f417a0
Gas price: 1.000000009 gwei Gas limit: 2546712 Nonce: 3
AdvancedCollectible.constructor confirmed Block: 9666468 Gas used: 2315193 (90.91%)
AdvancedCollectible deployed at: 0xcEF053617Aae4730F21AeB908B49104155B4aead

Transaction sent: 0x0a7e09cd27e3e67603addb78706f7285b2361cbf2ea151bba2c76b3d6756f4b8
Gas price: 1.000000009 gwei Gas limit: 56992 Nonce: 4
LinkTokenInterface.transfer confirmed Block: 9666469 Gas used: 51811 (90.91%)

Funded 0xcEF053617Aae4730F21AeB908B49104155B4aead
PS C:\Users\Tenkawa PC\Documents\GitHub\NiFTy-Smart-Contract> █
```

You will also need to download and install IPFS Commandline and IPFS Desktop:

<https://docs.ipfs.io/install/command-line/#system-requirements>  
<https://docs.ipfs.io/install/ipfs-desktop/>