

# Goerli Test Network and ERC-20 Tokens

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## ☞ TERMINOLOGIES:

### **What is Testnet?**

Testnet to put in simple terms is an instance of blockchain technology on which we can experiment and test out different aspects of our development without the risk of using real funds.

So for example:

1 Ether token at this time costs approximately PKR 300,000. Would you want to spend this much amount just to learn how does the Ethereum network or buying and spending of tokens work? NO

You would work in a test environment where there is no risk of losing actual money. Testnet is used specifically for testing and experimentation purposes.

### **What is Goerli ETH?**

Goerli is an Ethereum test network and GoerliETH are the tokens of Goerli testnet that allows for blockchain development testing before deployment the main Ethereum network. In our tasks we will be using Goerli ETH tokens and its network as a way to test, learn and experiment with blockchain.

### **What is testnet Faucet?**

Testnet Faucets distribute test coin/tokens rather than real coins/tokens. We will be using three different Testnet faucets to get ourselves free GoerliETH tokens in our Metamask wallet.

### **What is gas fee?**

Gas fee is a blockchain transaction fee that is paid to network validators for their service to blockchain. This is almost similar to when we transfer cash using Jazz cash services we have to pay a certain amount of fee for the transaction to complete.

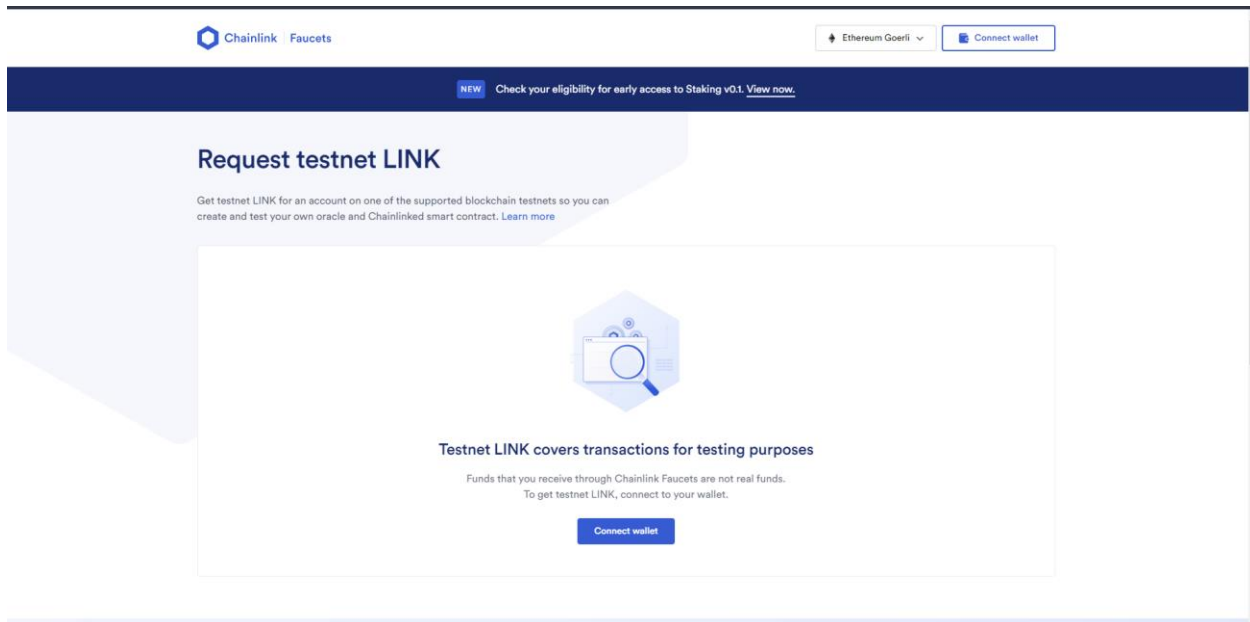
## What are ERC-20 Tokens?

ERC-20 is a standard – a set of rules to develop fungible tokens and for them to interact with smart contracts. With ERC-20 we developers can create our own tokens on top of the Ethereum network. ERC-20 Tokens have the following properties:

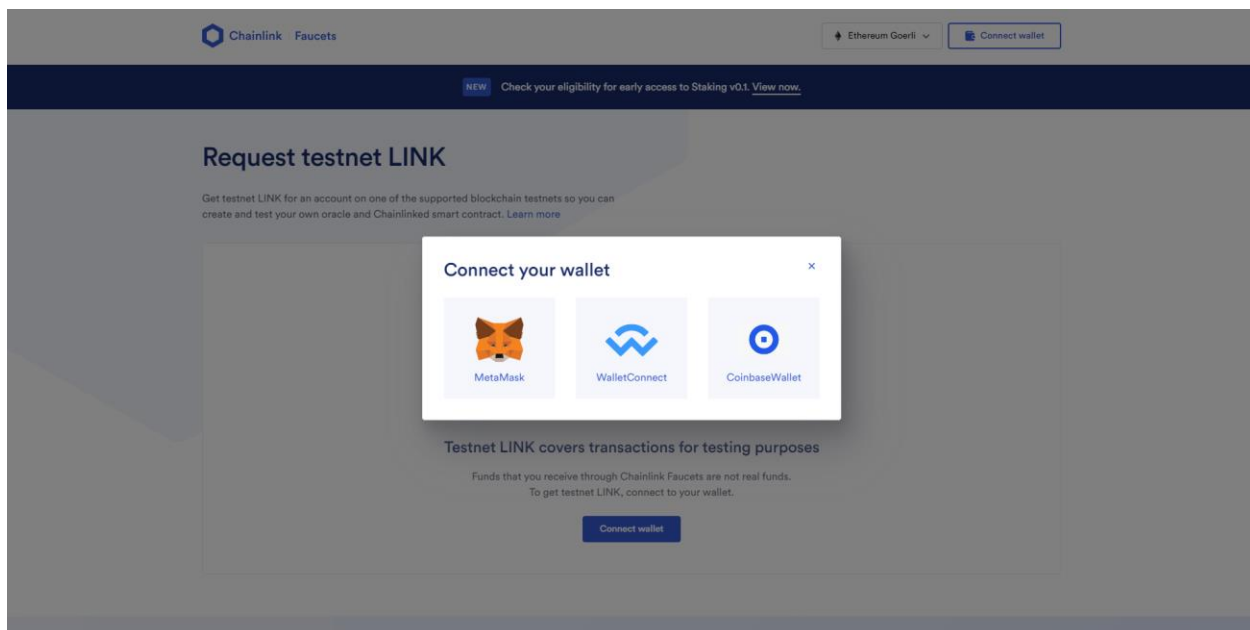
1. Fungible – The code of each individual token is the same as any other, though transaction histories can be used to identify and separate out the tokens involved.
2. Transferable – They can be sent from one address to another.
3. Fixed supply – A fixed number of tokens must be created so that developers cannot issue more tokens and raise the supply.

## Get free GoerliETH tokens from testnet faucets:

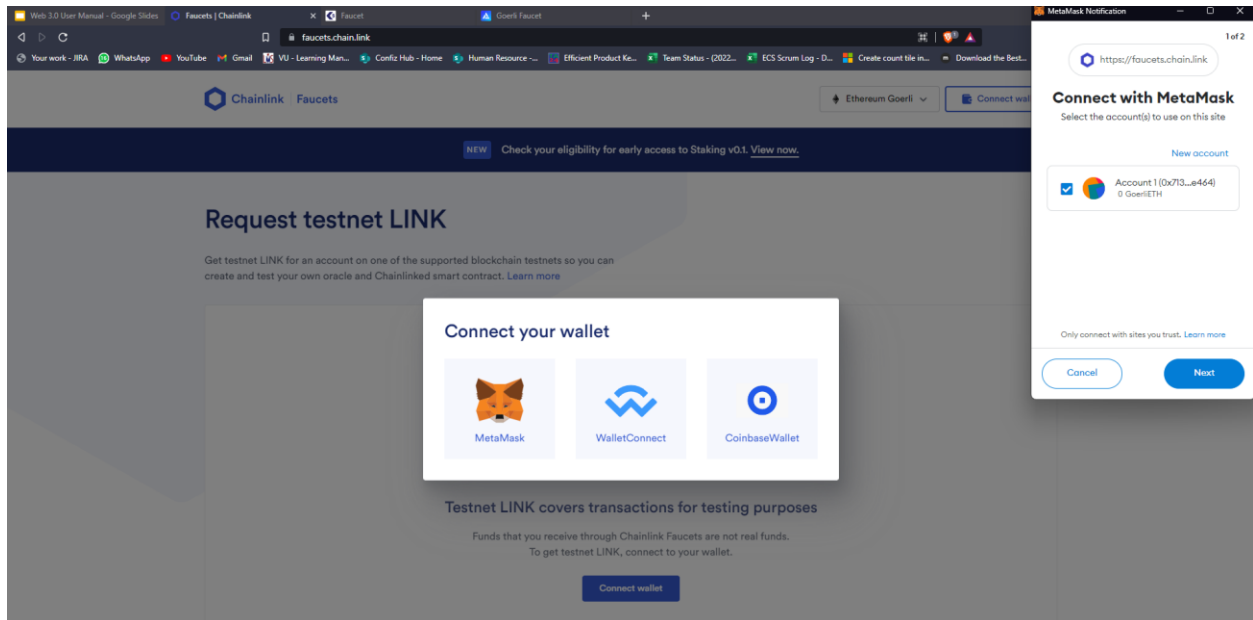
1. Go to [faucets.chain.link](https://faucets.chain.link)
  - a. Click Connect wallet



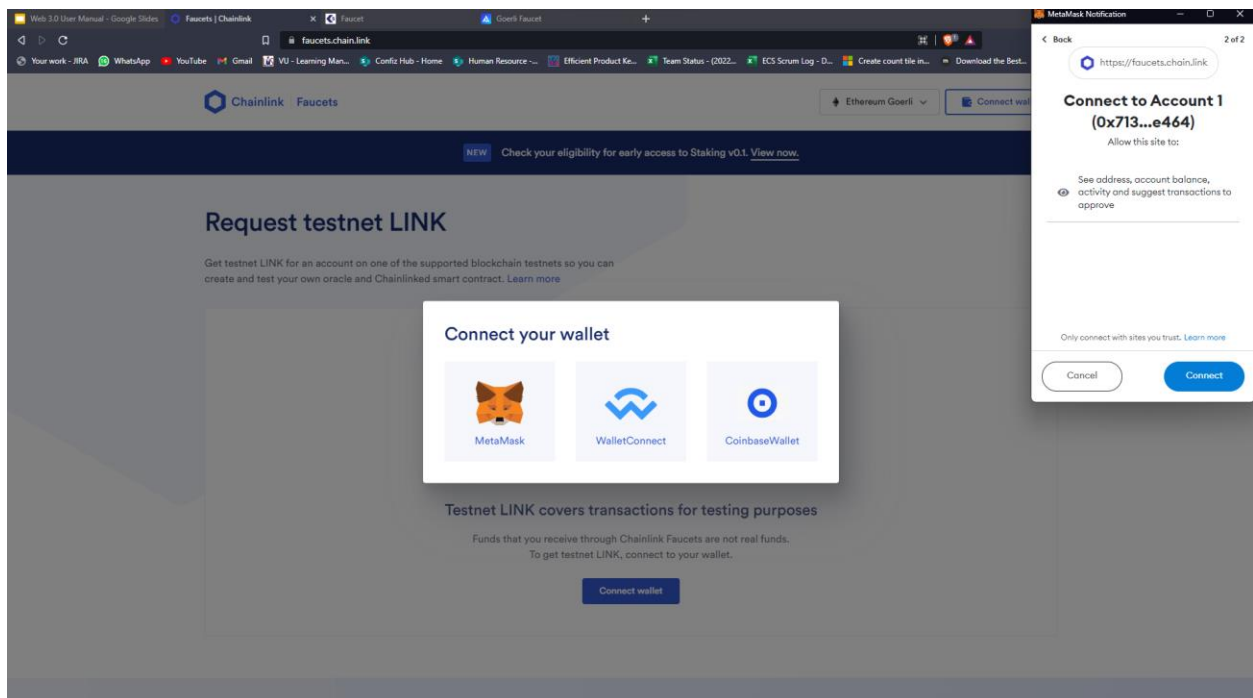
- b. Select Metamask



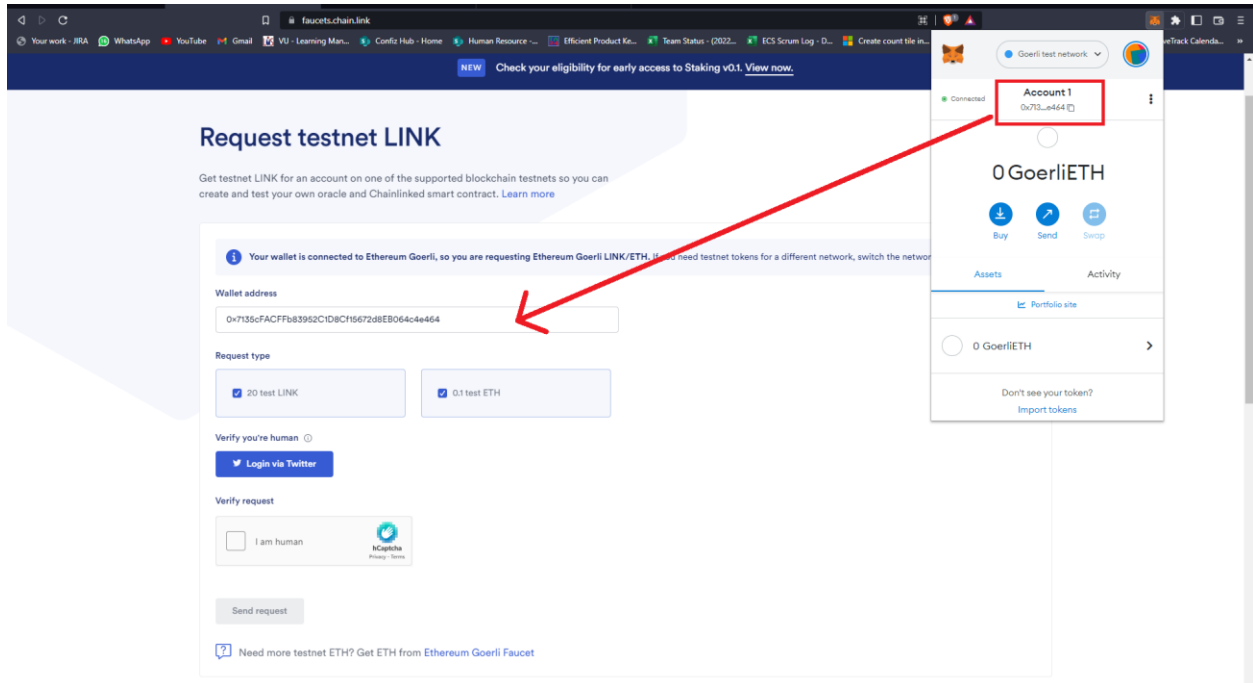
- c. This selection will trigger your Metamask wallet to open and ask for permission to allow to connect to this faucet. Click on next to proceed.



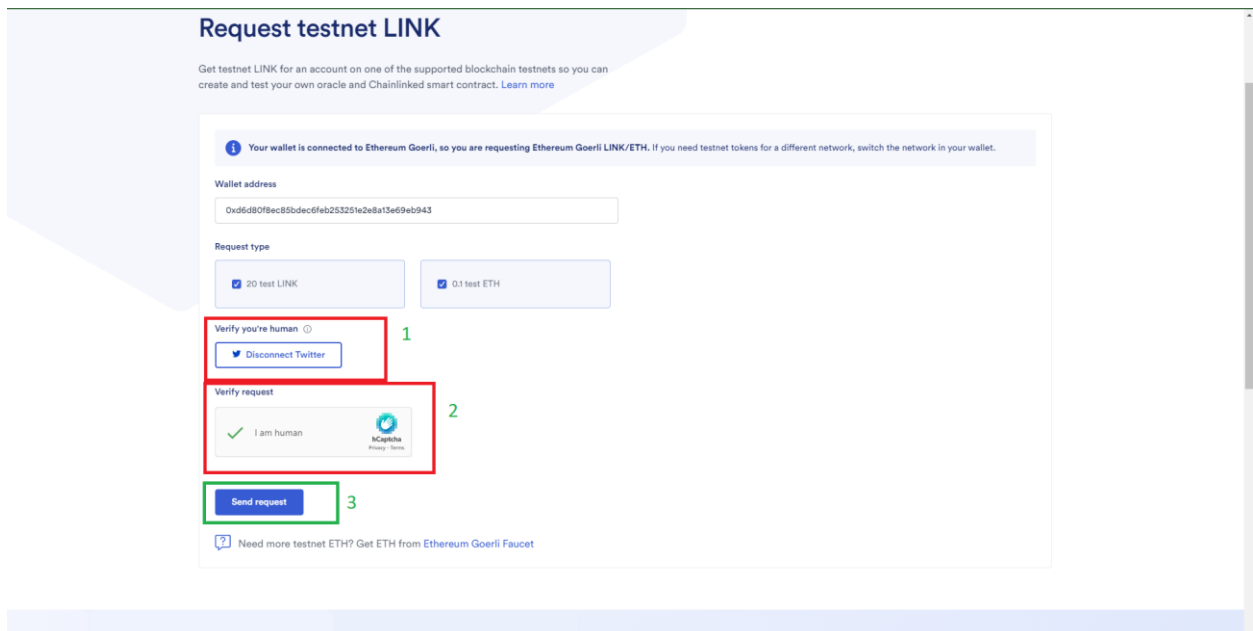
- d. Then click on Connect to finalize connection to the faucet.



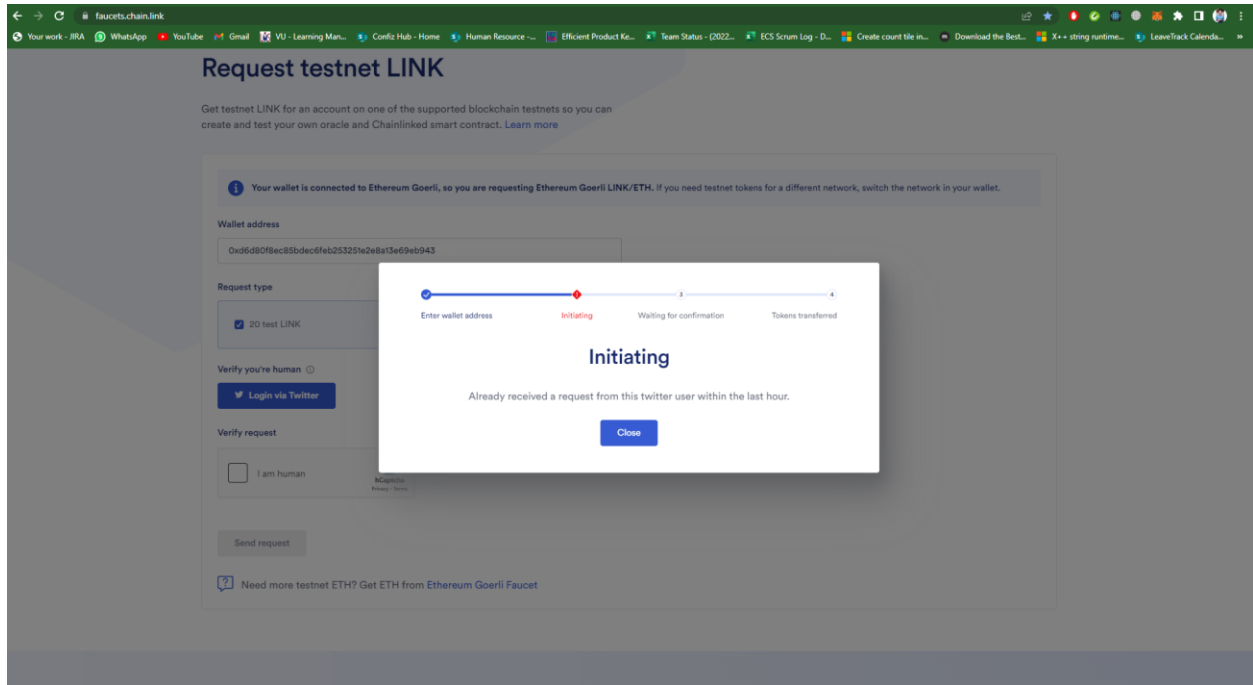
e. Copy your wallet address and paste in wallet address field.



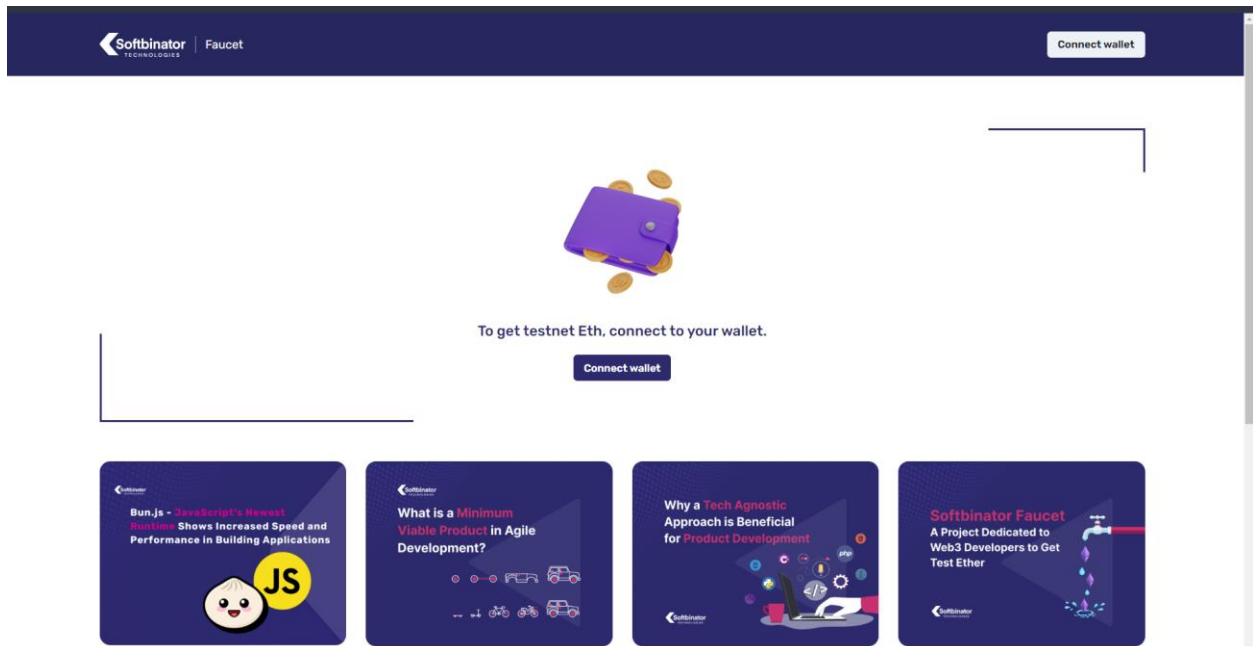
f. Connect your twitter account, complete the captcha and click on Send Request.



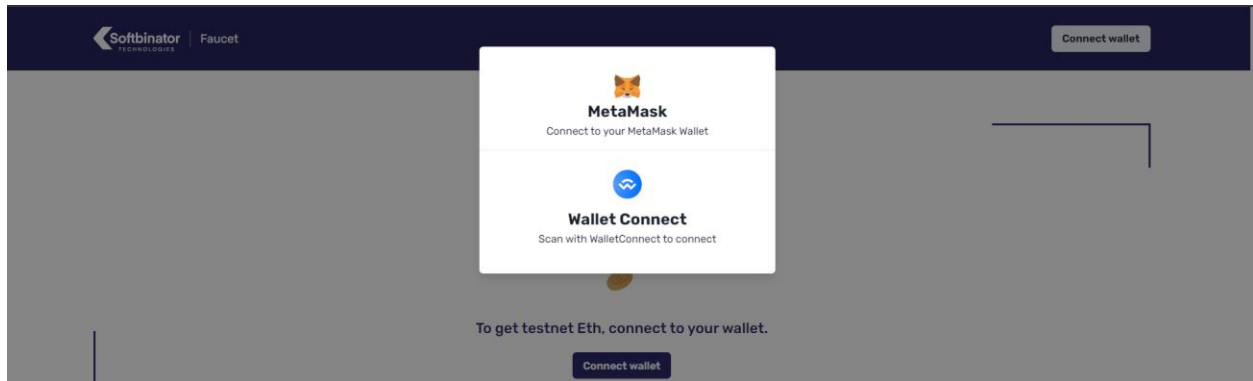
- g. Wait for the request to complete and in a short while the GoerliETH tokens will be transferred to your wallet.



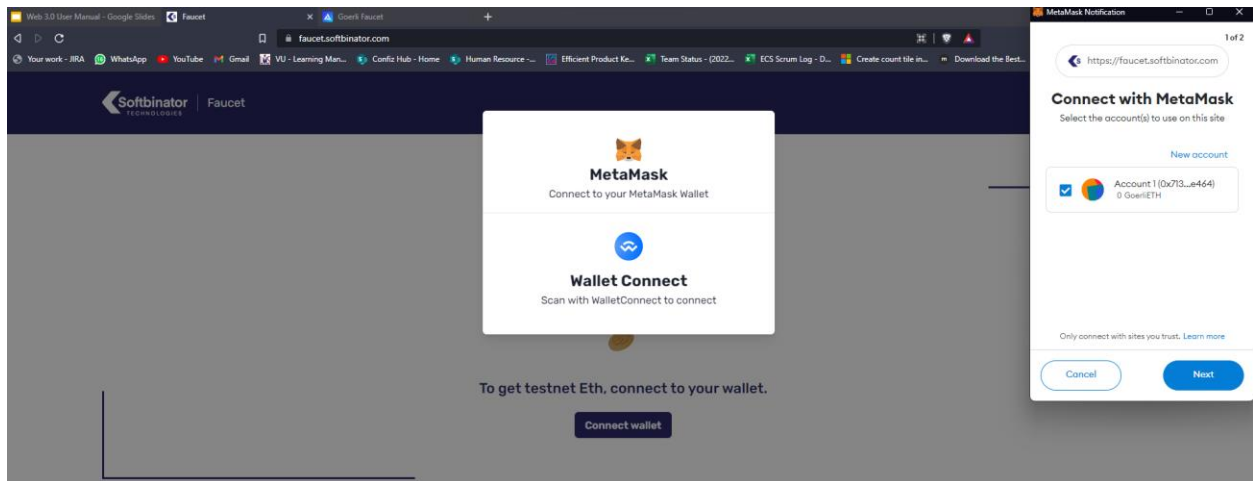
2. Now go to [faucet.softbinator.com](https://faucet.softbinator.com)
- a. Click on Connect wallet



## b. Select Metamask

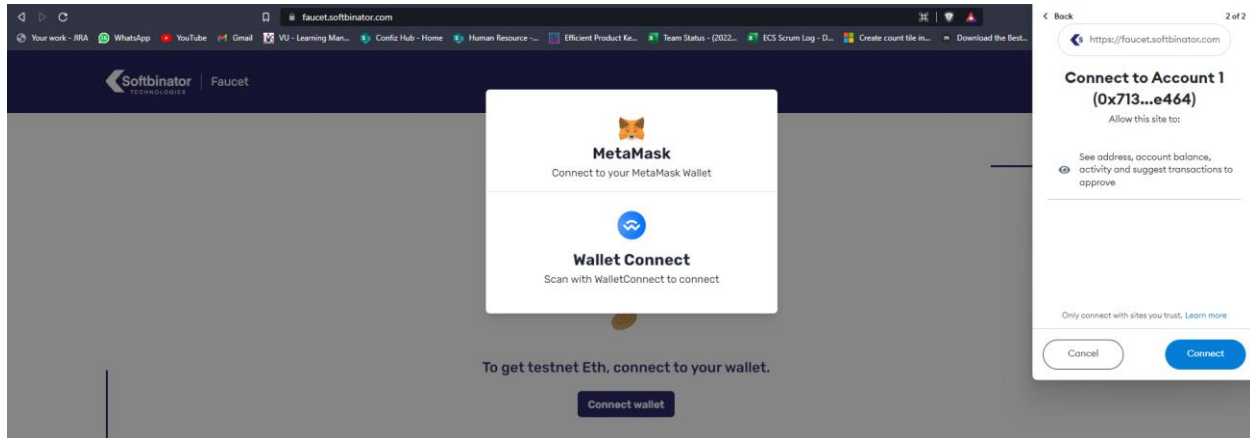


## c. Click on next to proceed in the Metamask app to proceed.

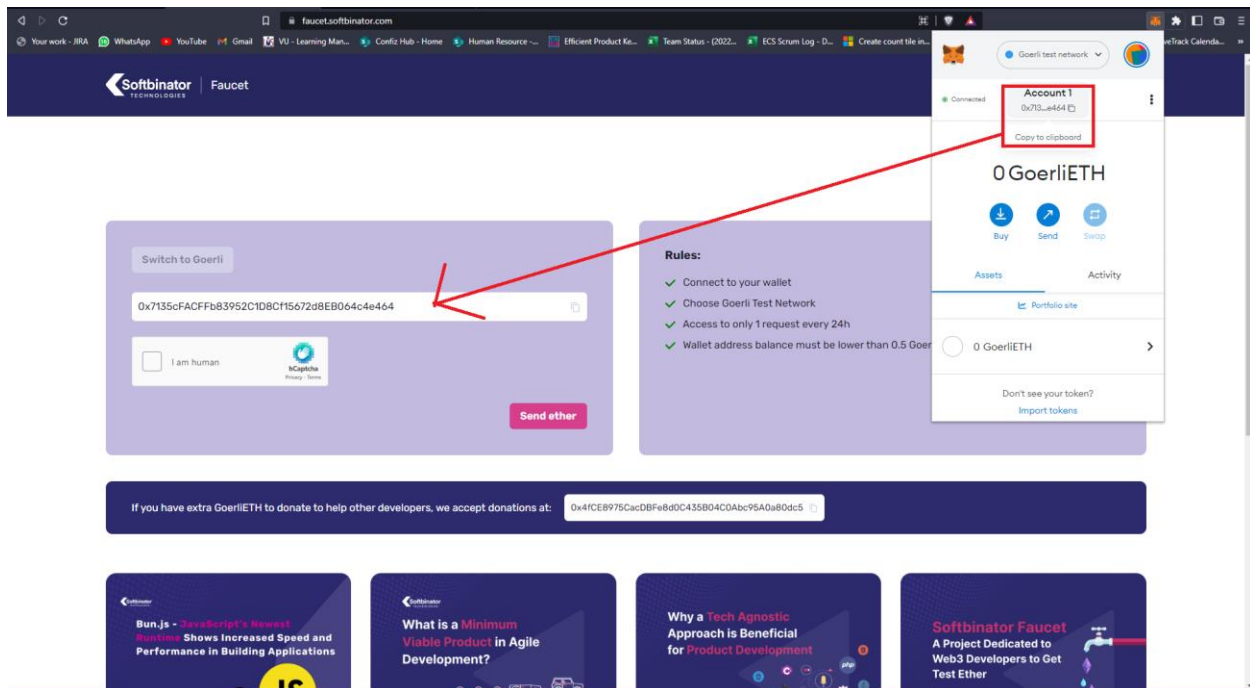




d. Click on Connect to connect your wallet to this testnet site



e. Copy your wallet address and paste in wallet address field



f. Complete the captcha check and click on Send ether to proceed.

Softbinator Technologies | Faucet

Goerli Disconnect

Your transaction is in progress! 0xcdcd63bd34d0c4d1dbedebcd151daa6aaf49fde083b7e9cae85ff63bf5d09fc8

Switch to Goerli

0x7135cFACFFb83952C1D8Cf15672d8EB064c4e464

☐ I am human

Send ether

**Rules:**

- ✓ Connect to your wallet
- ✓ Choose Goerli Test Network
- ✓ Access to only 1 request every 24h
- ✓ Wallet address balance must be lower than 0.5 GoerliETH

If you have extra GoerliETH to donate to help other developers, we accept donations at: 0x4fCE8975CacDBF8d0C435B04C0A8c95A0a90dc5

Bun.js - JavaScript's Reborn  
Shows Increased Speed and Performance in Building Applications

What is a Minimum Viable Product in Agile Development?

Why a Tech Agnostic Approach is Beneficial for Product Development

Softbinator Faucet  
A Project Dedicated to Web3 Developers to Get Test Ether

3. Go to [goerlifaucet.com](https://goerlifaucet.com)

a. Here you need to sign up on Alchemy to proceed and get GoerliETH tokens.

Powered by Alchemy

Goerli Mumbai Alchemy Login

# GOERLI FAUCET

Fast and reliable. 0.1 Goerli ETH/day.

To stop spam attacks draining the faucet, Alchemy accounts are temporarily required. Signup for free here.

Enter Your Wallet Address (0x...) or ENS Domain

Send Me ETH

Please signup or login with Alchemy to request ETH. It's free!

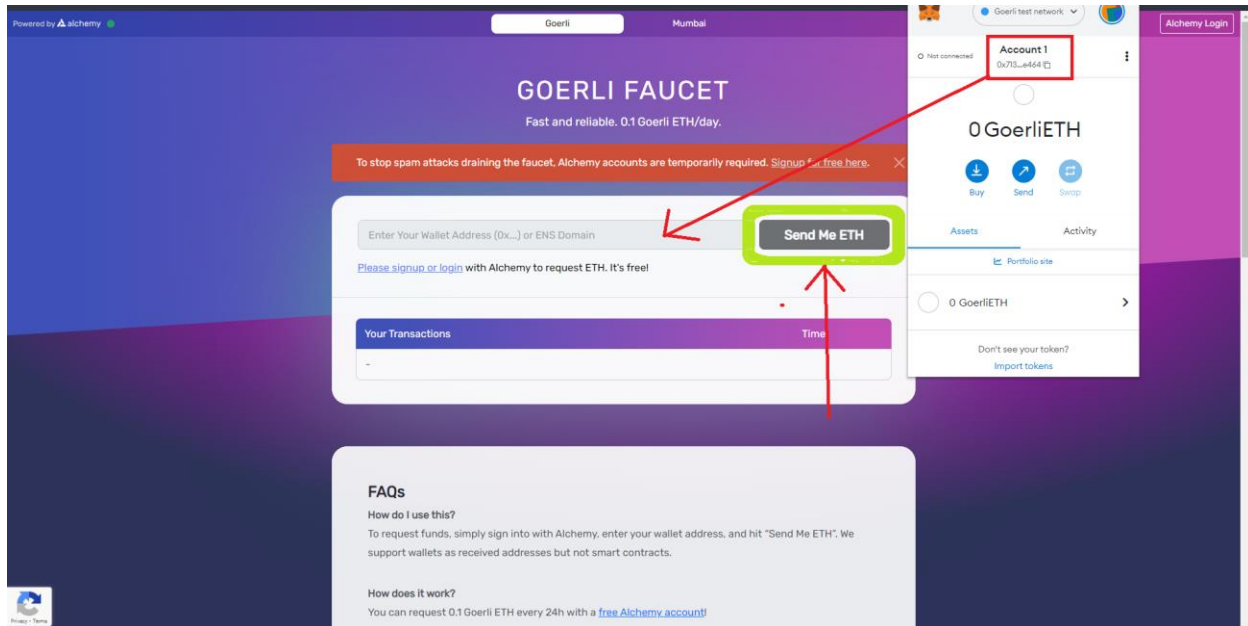
Your Transactions	Time

### FAQs

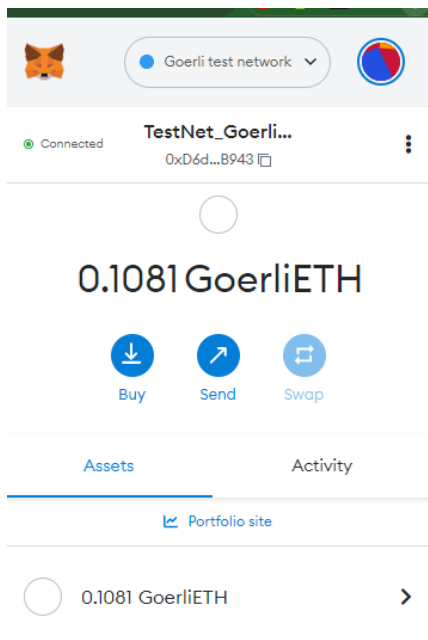
**How do I use this?**  
To request funds, simply sign into with Alchemy, enter your wallet address, and hit "Send Me ETH". We support wallets as received addresses but not smart contracts.

**How does it work?**  
You can request 0.1 Goerli ETH every 24h with a [free Alchemy account!](#)

- b. Finish signing up on Alchemy, copy your wallet address and paste in wallet address field and click on Send Me ETH to proceed.

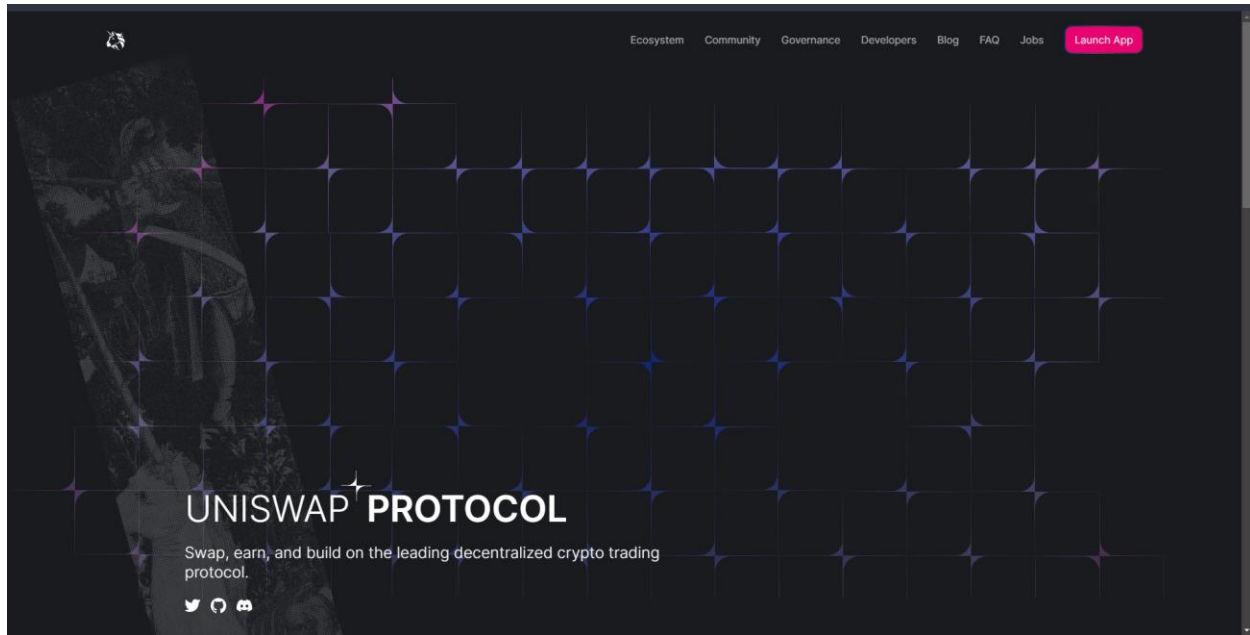


Now your wallet balance should look something like this

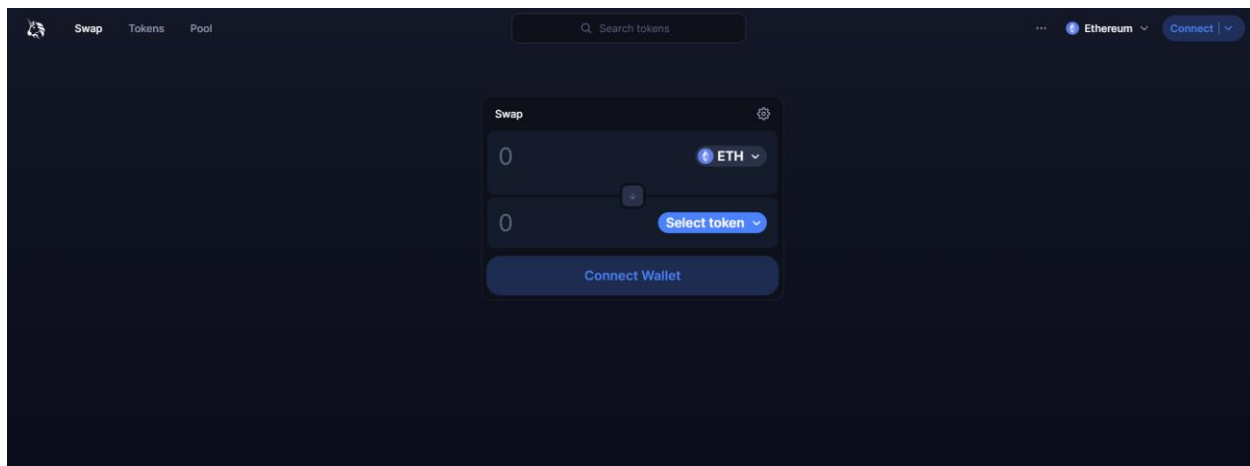


Now we head over to Uniswap to try and swap some of our GoerliETH tokens for Uniswap tokens.

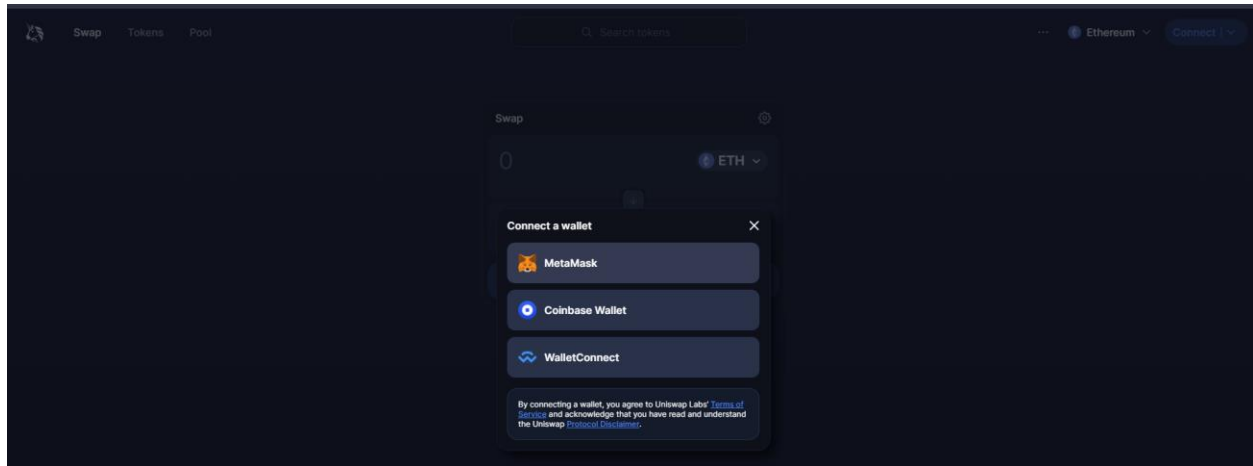
4. Go to [Uniswap.org](https://Uniswap.org).
  - a. Click launch app at top right corner



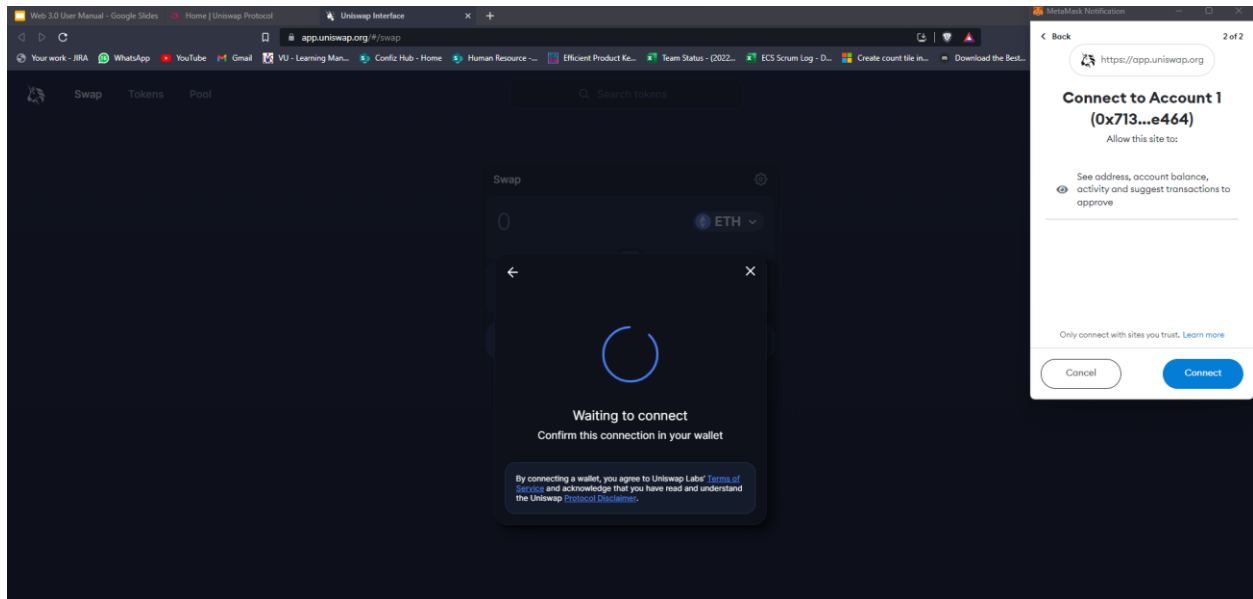
- b. Click Connect Wallet



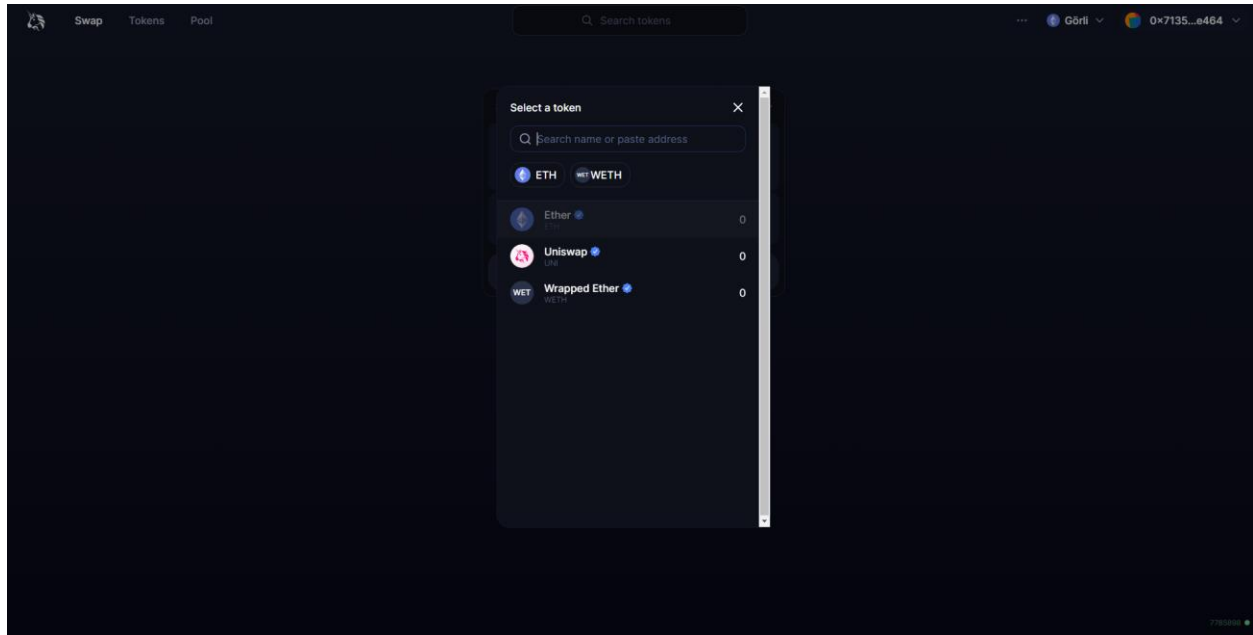
### c. Select Metamask



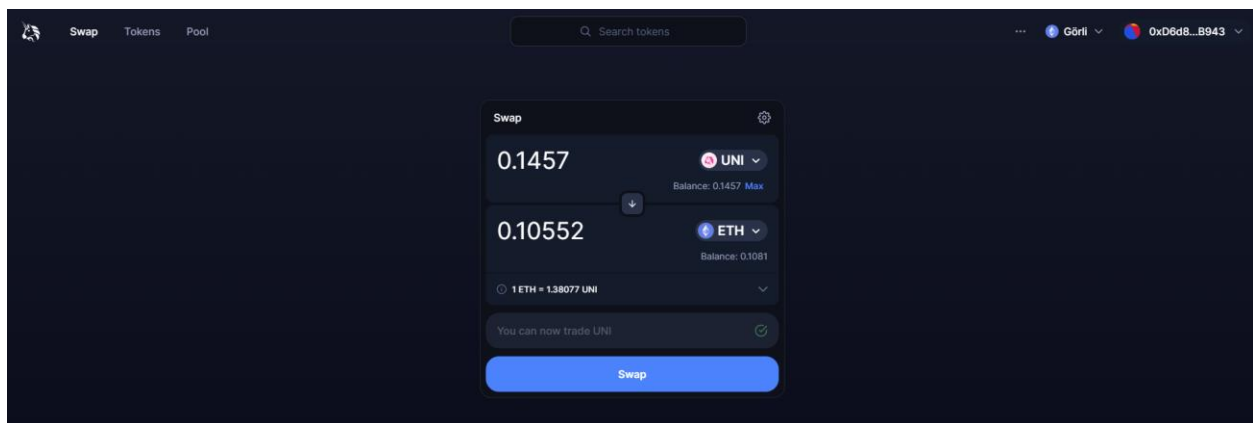
### d. Click Next and click connect to proceed.



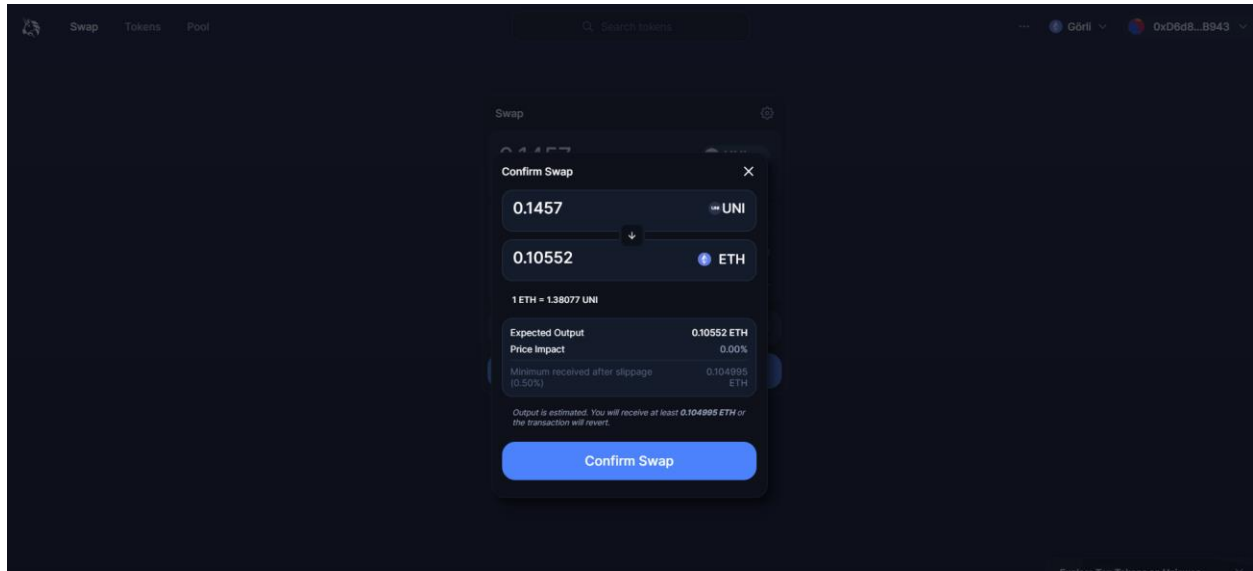
e. Select the desired token you would like to swap with



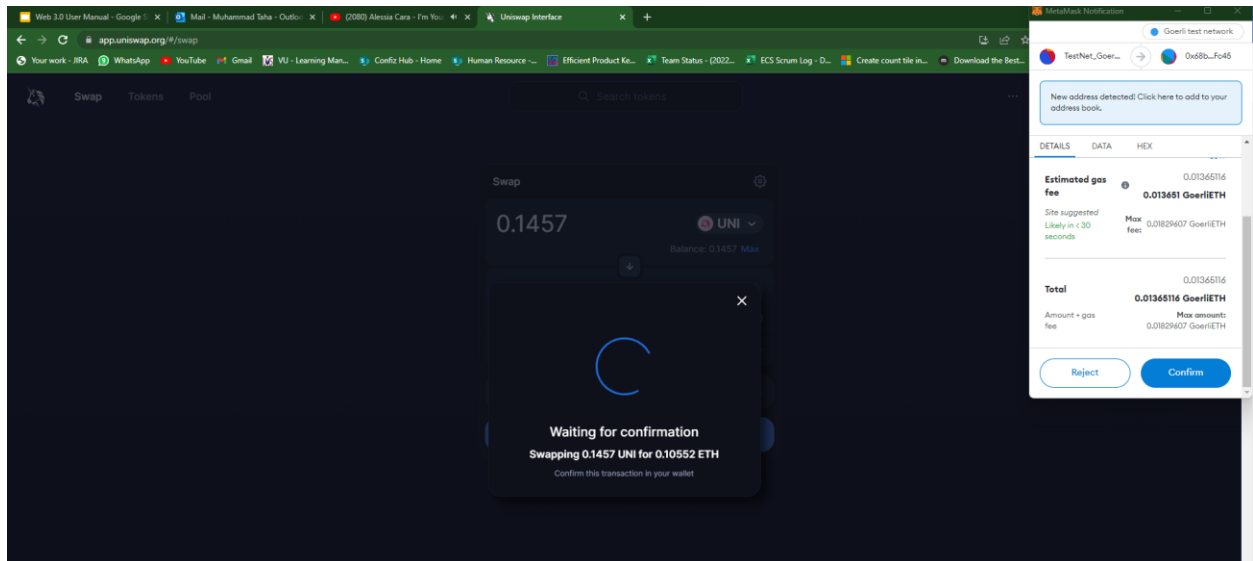
f. Input how much you would like to exchange with the Uniswap token and click on swap to proceed. In my case I had already swapped my GoerliETH for the Uniswap tokens and needed to swap back to GoerliETH



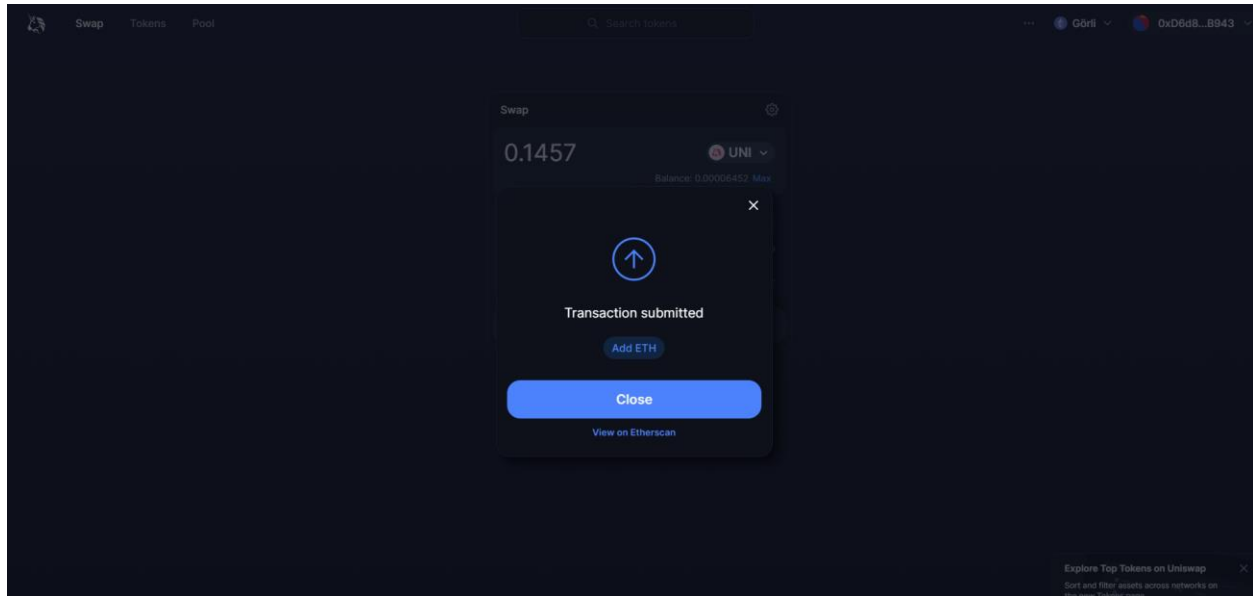
g. Now click on Confirm Swap



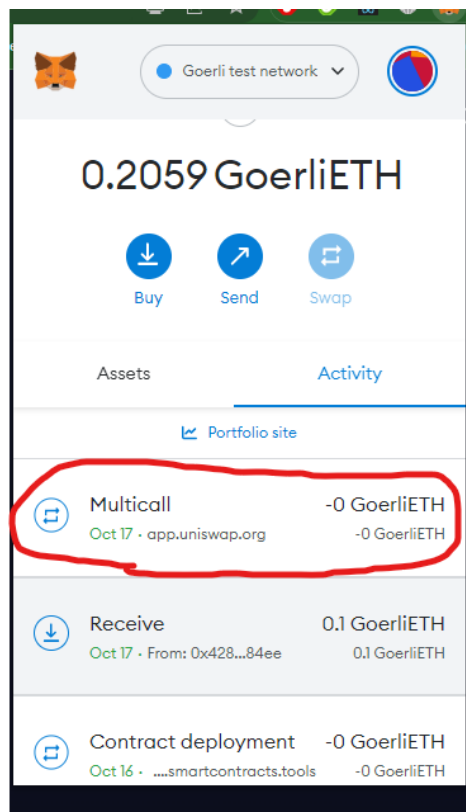
h. Click on confirm in Metamask wallet and wait for transaction to complete. You can see the mentioned Estimated Gas fee. Check out my terminology explanation at the top to get an idea what is gas fee?



i. Now wait for the transaction to complete.



Once your transactions are processed you can see the activity in your Metamask wallet





## Making our own ERC-20 Tokens:

1. Go to <https://www.smartcontracts.tools/token-generator/create/ethereum/>

SmartContracts Tools Token Generator Token Watcher Utilities

Ethereum - Mainnet

### Create your ERC20 Token

Easily deploy Smart Contract for a Standard, Capped, Mintable, Burnable, Payable ERC20 Token on Ethereum Network.  
No login. No setup. No coding required.

**Token Details**  
Enter token details and choose your network

Token Name \*  
Your token name  
Choose a name for your token.

Supply Type  
Fixed  
10k, Fixed, Unlimited, Capped

Token Type \*  
SimpleERC20  
Choose your Token Type.

Token Symbol \*  
Access Type  
Network \*

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Accept

2. Set the following highlighted properties of your own ERC-20 token, pick any name you like, the initial supply then click on agree to terms and conditions and click Next

SmartContracts Tools Token Generator Token Watcher Utilities

**Token Details**  
Enter token details and choose your network

Token Name \*  
TestToken  
Choose a name for your token.

Token Symbol \*  
TEST  
Choose a symbol for your token (max 3-5 chars)

Token decimals \*  
18  
Insert the decimal precision of your token. If you don't know what to insert, use 18.

Initial Supply \*  
10000000000  
Insert the initial number of tokens available. Will be put in your account.

Total Supply \*  
10000000000  
Insert the maximum number of tokens available.

Supply Type  
Fixed  
10k, Fixed, Unlimited, Capped

Access Type  
None  
None, Ownable, Role Based

Transfer Type  
Unstoppable  
Unstoppable, Pausable

Token Type \*  
SimpleERC20  
Choose your Token Type.

Network \*  
Goerli - Testnet  
Choose your Network.

You selected a TEST Network.

Price  
0 ETH

☒ I have read, understood and agreed to Token Generator's [Terms of Use](#)

NEXT

Make sure that you select Goerli - Testnet to proceed.

### 3. Click on skip on next step

**Billing Information**  
Enter your billing information

**Note**  
Billing information are required only for Main Network. On TEST Network no real payment will be made so you can skip this step.

SKIP

[BACK TO TOKEN DETAILS](#)

### 4. Now review the information before proceeding and then click on Create Token once you're done

**Checkout**  
Double check your information and start your transaction

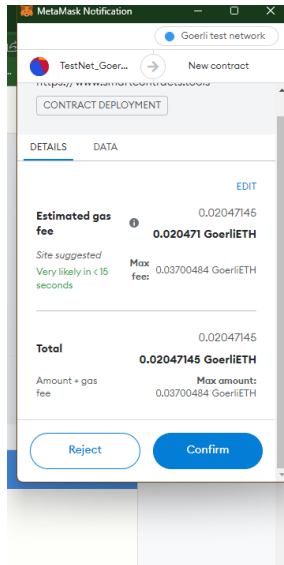
Summary
0xd6d80f8ec85bdec6feb253251e2e8a13e69eb943 Tokens will be sent to this address
<b>SimpleERC20</b> Token Type
TestToken Name
TEST Symbol
18 Decimals
10000000000 Initial Supply
10000000000 Max Supply

Transaction Cost
① Gas Fee
① Token Deployment
① Total

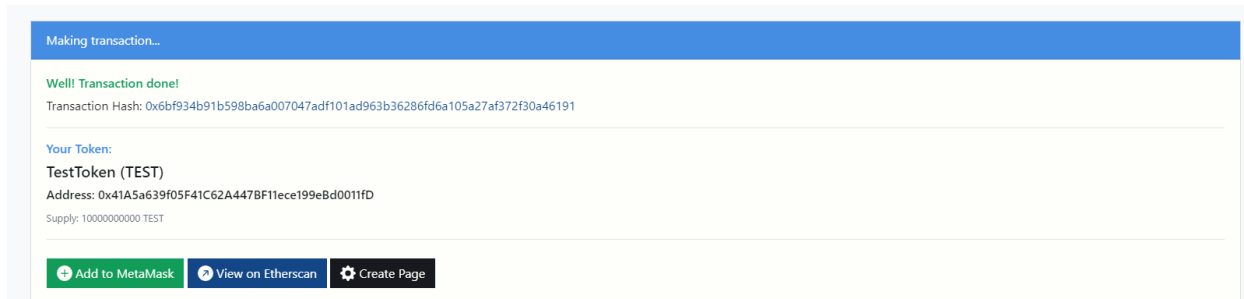
CREATE TOKEN

[BACK TO BILLING INFORMATION](#)

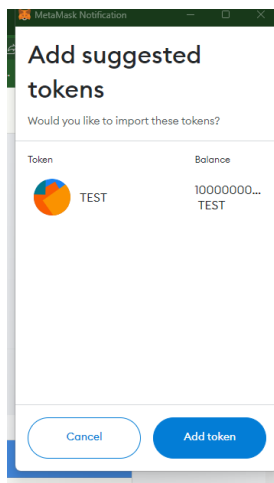
## 5. Click **confirm** to finish the transaction



## 6. Wait for the transaction to complete and then click on Add to Metamask



## 7. Click Add token to import your new ERC-20 token to your Metamask wallet



8. Now inside your wallet you can see your newly created ERC-20 tokens

