



Centurion
UNIVERSITY
*Shaping Lives...
Empowering Communities...*

School: Campus:

Academic Year: Subject Name: Subject Code:

Semester: Program: Branch: Specialization:

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiment :Token Launch – Deploying a Token Locally

Objective/Aim:

To create and deploy a custom ERC-20 fungible token smart contract locally using Remix IDE and test its basic functionalities such as transferring, and checking balances.

Apparatus/Software Used:

- Brave
- Remix IDE (Web-based Solidity IDE)
- MetaMask wallet (connected to a local or test network)

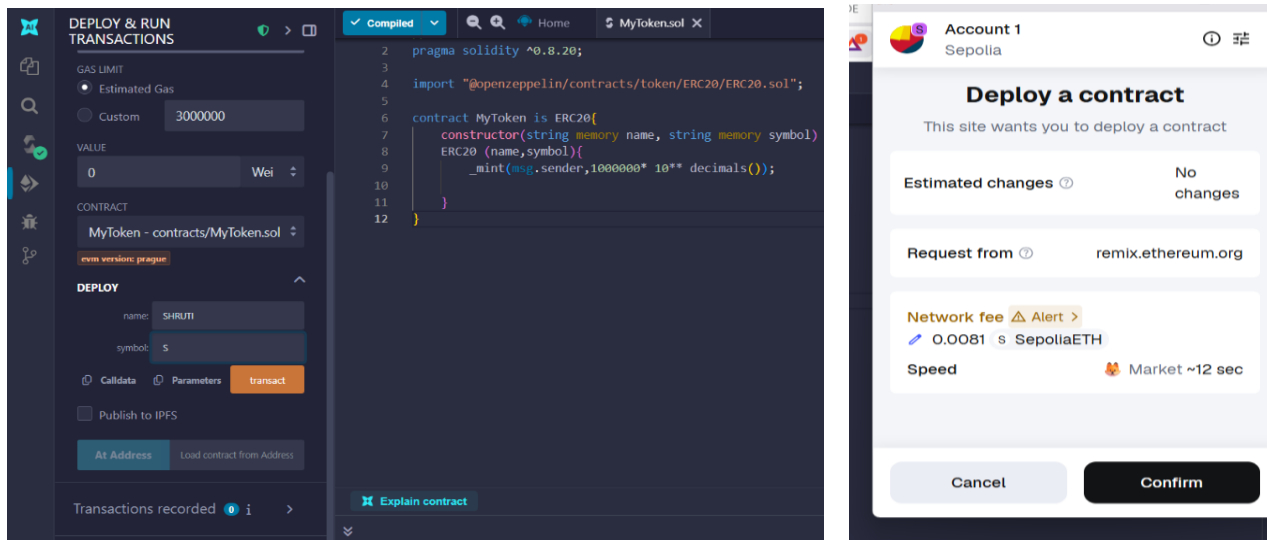
Procedure:

1. Open Remix IDE then create a New File in the contract folder named as MyToken.sol, Then write smart contract .

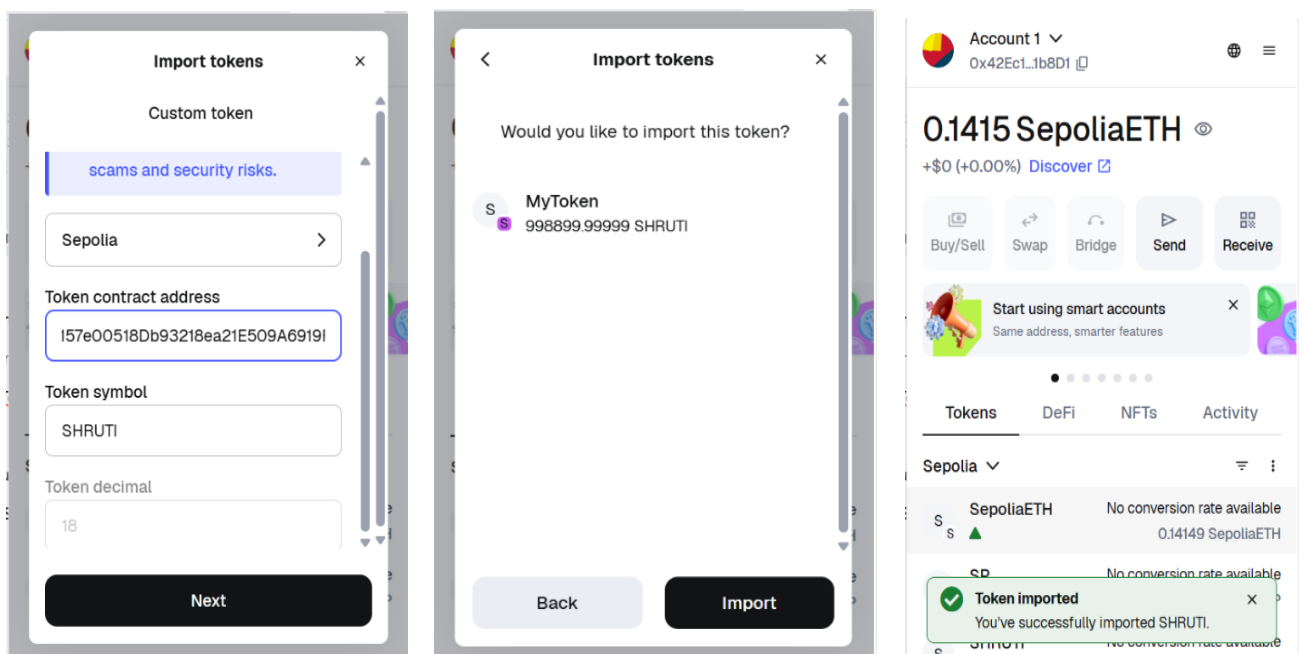
```
1 //SPDX-License-Identifier:MIT
2 pragma solidity ^0.8.20;
3
4 import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
5
6 contract MyToken is ERC20{
7     constructor(string memory name, string memory symbol) infinite gas 710800 gas
8     ERC20 (name,symbol){
9         _mint(msg.sender,1000000* 10** decimals());
10    }
11 }
12 }
```

Procedure:

2. After writing smart contract compile the smart contract .
3. After compilation go to the deploy section then give token name and symbol then click on transact option and confirm the transaction on MetaMask.



4. Now our Token is created we can add our token in MetaMask by copy the token address and paste it on the import token section and choose sepolia testnet network then import .



Observation :

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- A custom ERC-20 token was successfully created and deployed locally using Remix IDE.
- Token functions such as minting, transferring, and balance checks worked as expected.

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	50		

Signature of the student :

Name :

Regn.No. :

Signature of the Faculty: **Page No.....**