



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

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

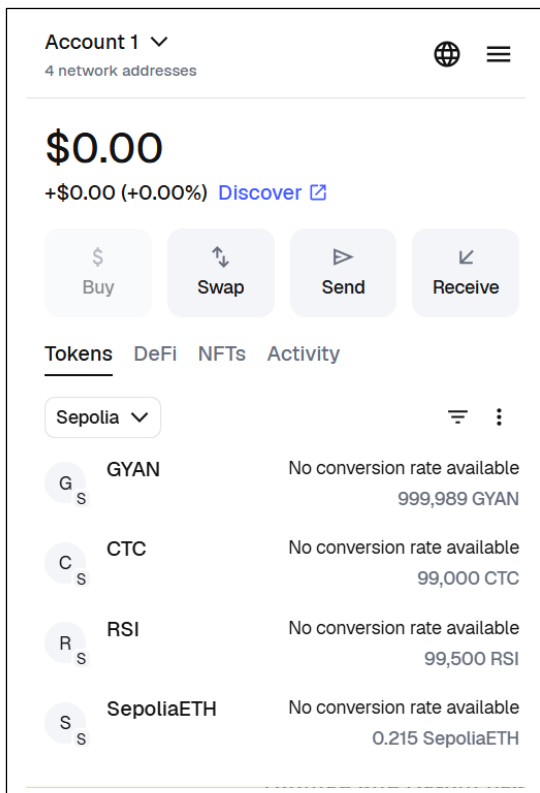
1. **Set up Environment**
 - Open Remix IDE and ensure Solidity is selected.
2. **Write Contract**
 - Use OpenZeppelin's standard ERC-20 contract and name it accordingly (e.g., MyToken, DAIClone).
3. **Compile the Contract**
 - Compile the .sol file using the compiler tab (select Solidity 0.8.x or compatible version).
4. **Connect MetaMask**
 - Ensure MetaMask is set to Sepolia testnet (or your desired testnet).
5. **Deploy Contract**
 - In Remix, choose "Injected Web3" under the Deploy tab and click "Deploy."
 - Approve the transaction in MetaMask.
6. **Get Contract Address**
 - Copy the deployed contract address from Remix's "Deployed Contracts" panel.
7. **Add Token in MetaMask**
 - In MetaMask, click "Import Tokens," paste the contract address, and add the token manually.
8. **Mint / Transfer Tokens**
 - Use Remix to interact with contract functions like mint, transfer, or balanceOf.
9. **Use in DeFi (Swap)**
 - Go to a DeFi platform (e.g., Uniswap on Sepolia), connect wallet, and swap ETH to the custom DAI token.
10. **Verify Transactions**
 - Check the activity section in MetaMask or on Sepolia Etherscan for verification.

Software used

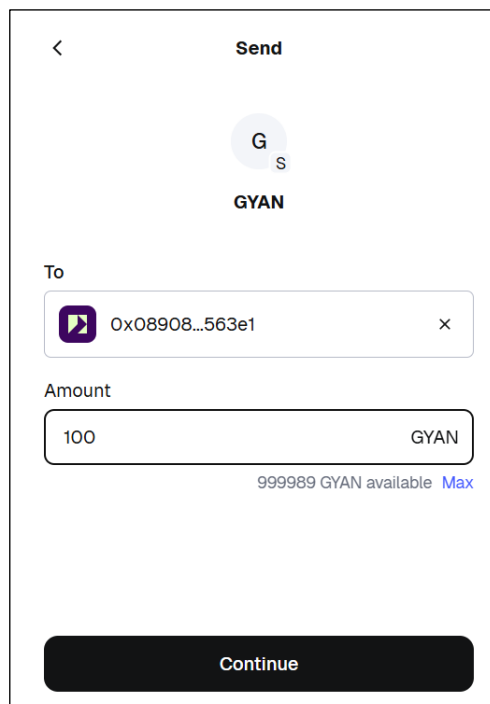
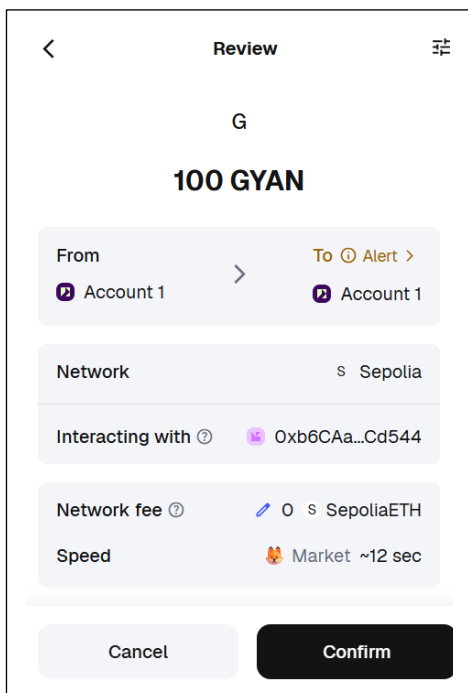
1. MetaMask Wallet
2. Remix IDE.
3. MS Word.
4. Brave for researching.

* Implementation Phase: Final Output (no error)

1. Firstly go to home page of MetaMask, then go to where you stored DAI tokens;



2. Then go to name of your token, tap on send option and add another one's wallet address;



* Implementation Phase: Final Output (no error)

3. Then transaction will complete within 12 sec;



* Observations:

- ☐ The deployed token only appears in MetaMask if manually added using the correct contract address.
- ☐ DeFi platforms can detect the token if it's listed or has standard ERC-20 functions.
- ☐ Swapping ETH to a custom token works only if there's enough liquidity in the pool.
- ☐ MetaMask records each transaction, including gas fee and token balance updates.
- ☐ Contract interaction via Remix is faster on testnets, and changes reflect instantly on MetaMask.

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: