



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 : Wallet on Testnet – Set Up and Transact.

Objective/Aim:

- To setup a MetaMask wallet.
- To connect it to the Sepolia Ethereum testnet.
- To receive Sepolia test ETH from a faucet.
- To prepare the wallet for test transactions and smart contract deployment.

Apparatus/Software Used:

- Laptop/PC
- PowerPoint/Word for documentation
- Internet for research

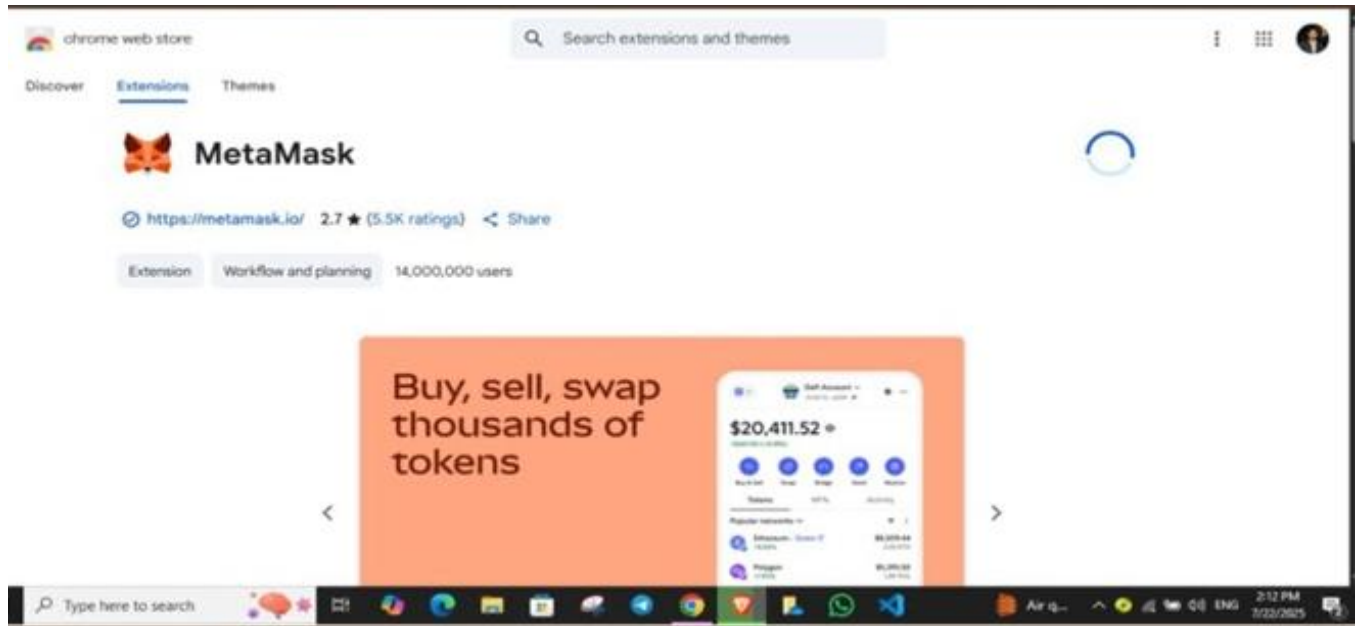
Theory/Concept:

- **MetaMask** is a crypto wallet and gateway to blockchain apps. It allows users to manage private keys and interact with decentralized applications (dApps).
- **Sepolia Testnet** is a public Ethereum test network used to test smart contracts and dApps without using real ETH.
- **Faucet** is a service that gives out free testnet ETH for development and testing purposes.
- **Testnet ETH** has no real-world value but mimics real ETH for safe experimentation.

Procedure:

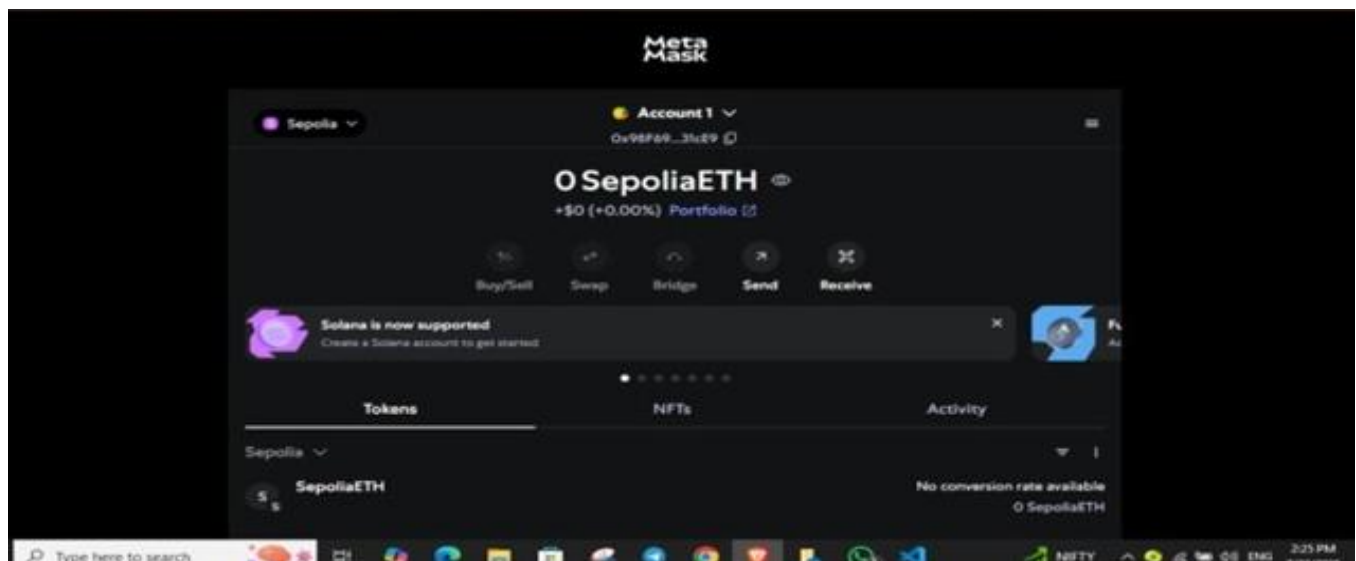
Step.1- Open [Chrome Web Store](https://chrome.google.com/webstore) and install MetaMask extension.

Step.2- Create a MetaMask wallet or import using a seed phrase.



Step.3- Enable **test networks** in MetaMask settings.

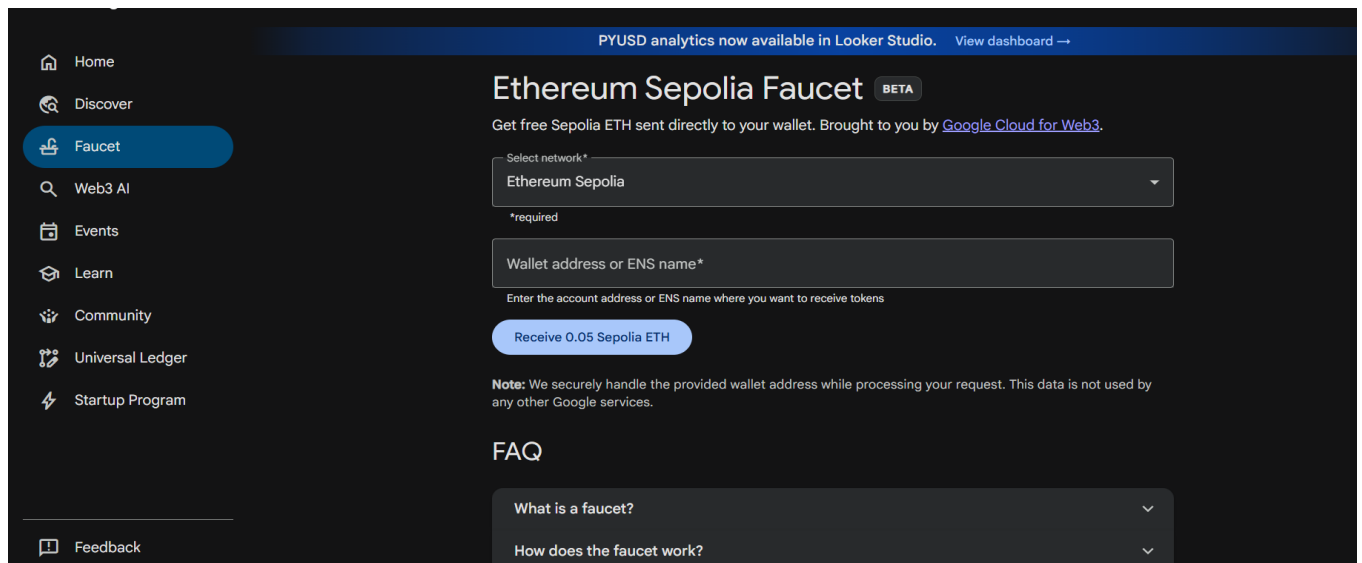
Step.4- Switch to the **Sepolia** network.



Step.5- Copy your MetaMask wallet address.

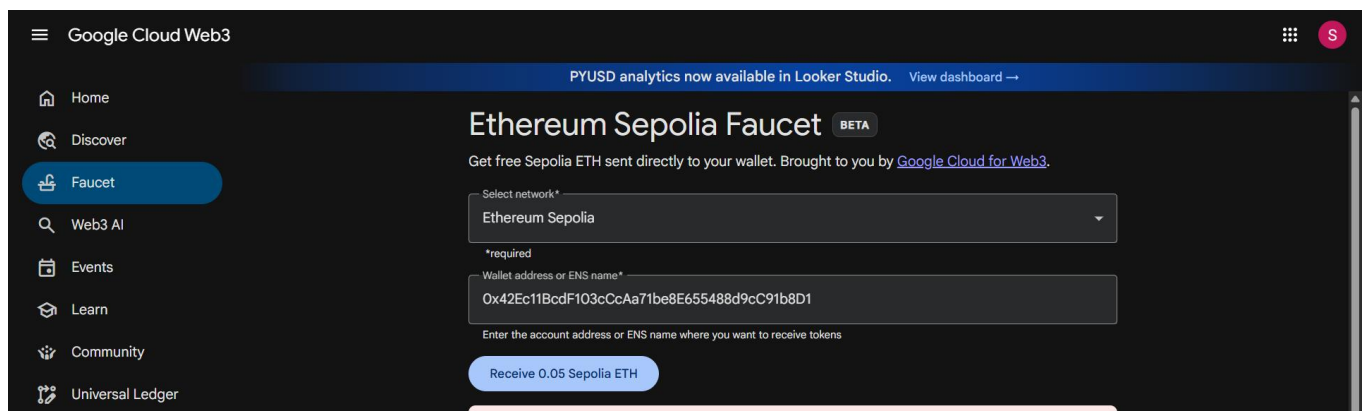
Step.6- Visit the [Google Sepolia Faucet](https://faucet.sepolia.dev).

Procedure:



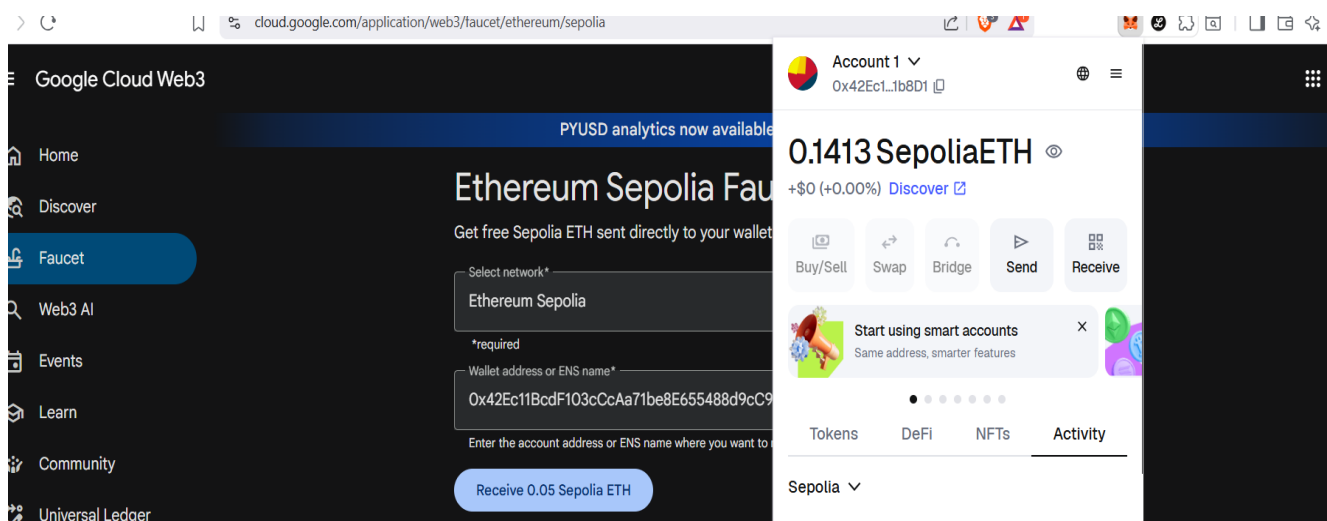
The screenshot shows the 'Ethereum Sepolia Faucet' page. On the left is a navigation menu with links: Home, Discover, Faucet (highlighted), Web3 AI, Events, Learn, Community, Universal Ledger, and Startup Program. At the top right, a banner reads 'PYUSD analytics now available in Looker Studio. View dashboard →'. The main heading is 'Ethereum Sepolia Faucet' with a 'BETA' tag. Below it, a sub-header says 'Get free Sepolia ETH sent directly to your wallet. Brought to you by Google Cloud for Web3.' The form includes a 'Select network*' dropdown set to 'Ethereum Sepolia', a '*required' label, and a 'Wallet address or ENS name*' input field. A note below the input field states: 'Enter the account address or ENS name where you want to receive tokens'. A blue button labeled 'Receive 0.05 Sepolia ETH' is positioned below the input field. A 'Note' section follows, stating: 'We securely handle the provided wallet address while processing your request. This data is not used by any other Google services.' At the bottom, there is an 'FAQ' section with two expandable items: 'What is a faucet?' and 'How does the faucet work?'.

Step.7- Paste your wallet address and click “Receive 0.05 Sepolia ETH”.



This screenshot shows the same 'Ethereum Sepolia Faucet' page, but the 'Wallet address or ENS name*' field is now populated with the address '0x42Ec11BcdF103cCcAa71be8E655488d9cC91b8D1'. The 'Receive 0.05 Sepolia ETH' button remains visible below the input field.

Step.8- Wait for confirmation. Your test ETH will appear in MetaMask.



Observation:

While doing the “Wallet on Testnet – Set Up and Transact” lab, I successfully created a wallet on a testnet network, received test tokens from a faucet, and performed a transaction. The transaction was confirmed on the blockchain explorer, verifying that the wallet setup and transfer process worked correctly.

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:

Signature of the Faculty:

Name :

Regn.No.