



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:

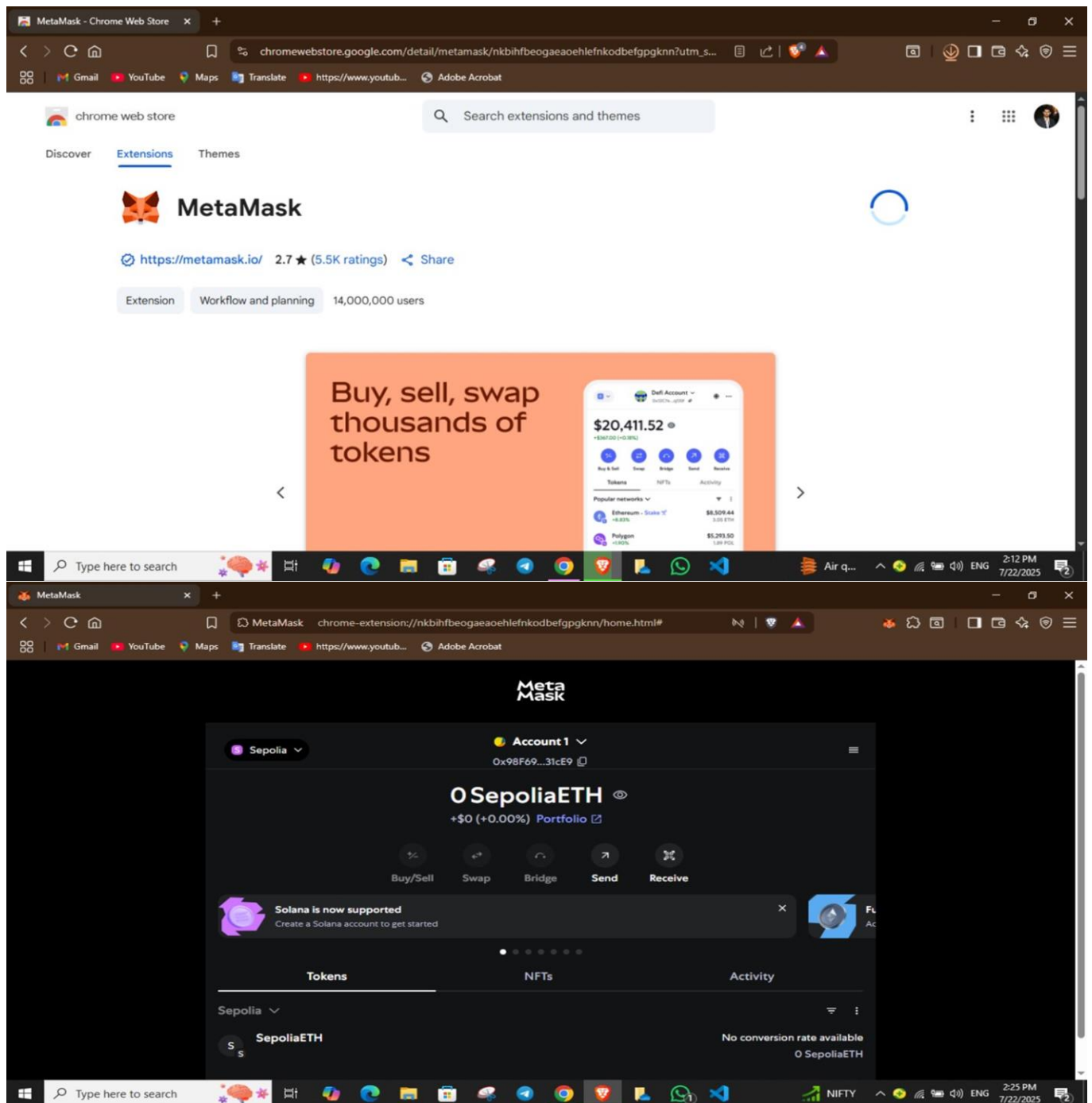
- Laptop/PC
- PowerPoint/Word for documentation
- Internet for research

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/detail/metamask/nkbihfbeogaeahlefnkodbefgpgknn?utm_s...) 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://sepolia.faucet.com/).
- Step.7-** Paste your wallet address and click **“Receive 0.05 Sepolia ETH”**.
- Step.8-** Wait for confirmation. Your test ETH will appear in MetaMask.



Procedure:

The image is a composite of three screenshots from a Windows desktop environment, illustrating the process of obtaining Sepolia ETH.

Top Screenshot: Shows the MetaMask browser extension interface. A "Select a network" modal is open, displaying a list of networks. "Sepolia" is highlighted in the list. Other visible networks include Polygon Mainnet, zkSync Era Mainnet, Linea Sepolia, Mega Testnet, and Monad Testnet. The background shows the MetaMask dashboard with the Sepolia network selected.

Middle Screenshot: Shows the "Ethereum Sepolia Faucet" web application on Google Cloud Web3. The form includes a "Select network" dropdown set to "Ethereum Sepolia" and a "Wallet address or ENS name" field containing "0x98F6963d482f2392B8F550805452ea010aB31cE9". A "Receive 0.05 Sepolia ETH" button is visible. A note states: "We securely handle the provided wallet address while processing your request. This data is not used by any other Google services."

Bottom Screenshot: Shows the same faucet application after a successful request. A "Drip in queue" message is displayed: "Your testnet tokens are on the way! This may take a few moments." Below this, details are shown: Network (Ethereum Sepolia), Recipient (0x98F6963d482f2392B8F550805452ea010aB31cE9), and Transaction hash (pending) (0xb9f9b109a9e8a30472a7bc84d9228690876dde41abcba6a2df63452dd276f44d). A blue button at the bottom says "Build on Blockchain RPC and get up to 100".

Observation Table

Observation Point	Details
MetaMask Installation	Successfully added via Chrome Web Store
Wallet Address	0x98F6...31cE9
Selected Network	Sepolia (test network enabled)
Test ETH Request	Submitted successfully via Google Sepolia Faucet
Faucet Transaction Status	Pending (awaiting confirmation on Sepolia testnet)
SepoliaETH Balance	Initially 0 ETH, will update once faucet TX is complete

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.