



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:

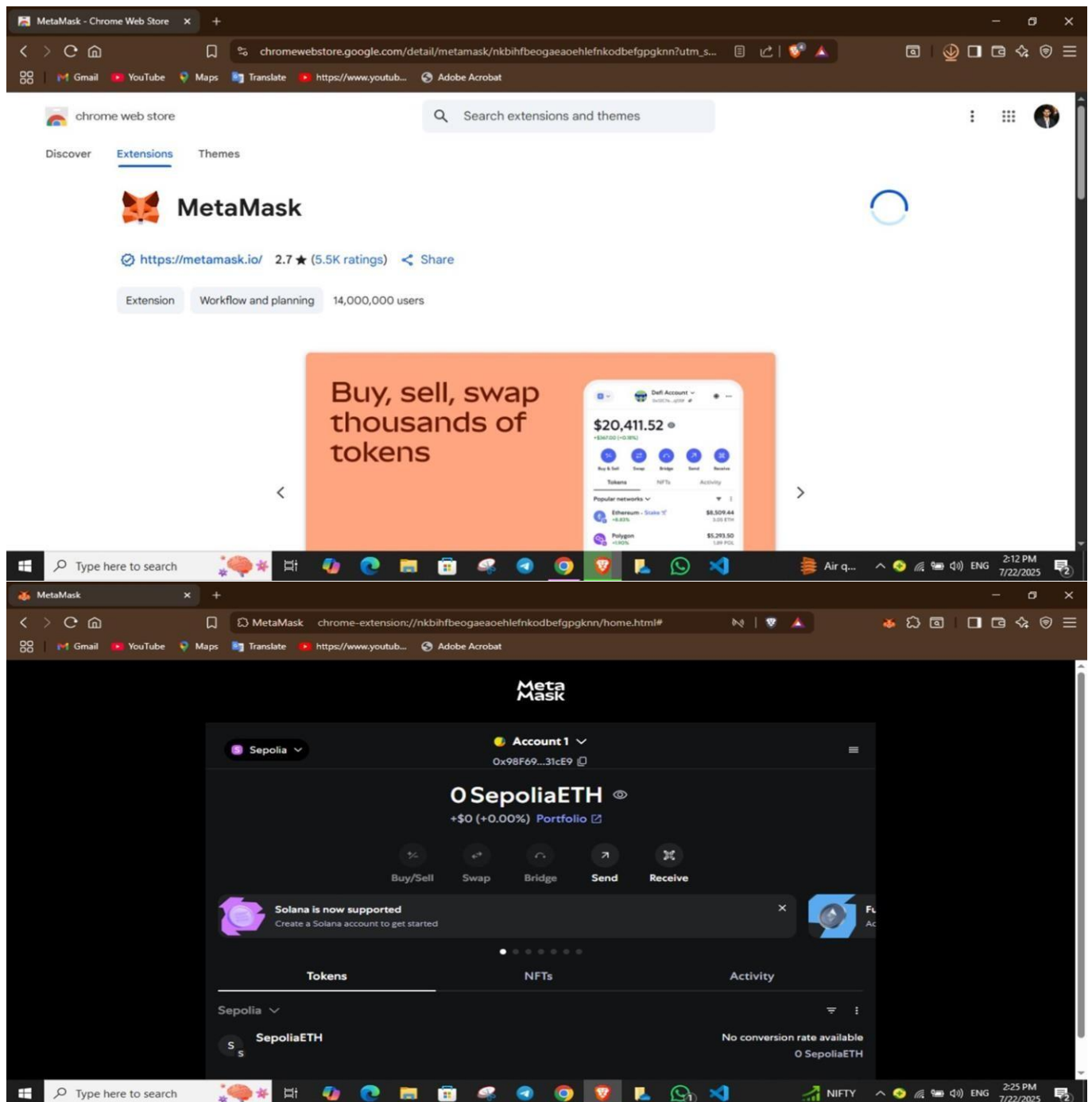
- ☐ Laptop/PC
- ☐ PowerPoint/Word for documentation
- ☐ Internet for research

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](#) 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](#).
- 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 procedure consists of three steps:

- MetaMask Network Selection:** A screenshot of the MetaMask interface showing the 'Select a network' dialog. The 'Sepolia' network is selected from the list, which also includes Polygon Mainnet, zkSync Era Mainnet, Linea Sepolia, Mega Testnet, and Monad Testnet. The 'Add a custom network' button is visible at the bottom.
- Faucet Form Submission:** A screenshot of the 'Ethereum Sepolia Faucet' page on Google Cloud Web3. The 'Select network' dropdown is set to 'Ethereum Sepolia'. The 'Wallet address or ENS name' field contains the address '0x98F6963d482f2392B8F550805452ea010aB31cE9'. The 'Receive 0.05 Sepolia ETH' button is highlighted.
- Faucet Confirmation:** A screenshot of the same faucet page showing a 'Drip in queue' confirmation. A message states: 'Your testnet tokens are on the way! This may take a few moments.' Below this, the details are listed: Network: Ethereum Sepolia, Recipient: 0x98F6963d482f2392B8F550805452ea010aB31cE9, and Transaction hash (pending): 0xb9f9b109a9e8a30472a7bc84d9228690876d4e41abcba6a2df63452dd27ef44d.

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		
	10		
		Signature of the Student:	
		Name :	
		Regn.No.	

Signature of the Faculty: