	School: .... Campus: ....
Centurion UNIVERSITY *Shaping Lives. Empowering Communities...*	Academic Year: .... Subject Name: .... Subject Code: ....
	Semester: .... Program: .... Branch: .... Specialization: ....
	Date: ....

Applied and Action Learning
(Learning by Doing and Discovery)

Name of the Experiement :

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

Crypto Wallet: MetaMask

- Public blockchains like Ethereum represent the next stage in internet-based databases, and MetaMask acts as the bridge — the next evolution of the browser.
- MetaMask is both a browser extension and a mobile application that lets users manage Ethereum and Solana private keys.
- It functions as a digital wallet for Ether and other tokens, while also enabling interaction with decentralized applications (dApps).
- Importantly, MetaMask does not collect personal data such as email, passwords, or secret recovery phrases. Users have full control over their crypto identity and assets.

Installation and Setup of MetaMask :

1. Download and Install MetaMask

- Visit the official MetaMask website: Always use the official site to avoid counterfeit or phishing versions.
- Download for your browser: Choose the compatible extension for your browser (e.g., Chrome, Firefox, Edge).
- Add the extension: Follow on-screen instructions to install and pin the MetaMask icon to your browser toolbar.

2. Create a New MetaMask Wallet

- Launch the extension: Click the MetaMask icon and select "Get Started."
- Create a new wallet: Choose "Create a Wallet" when prompted.
- Set a password: Enter a strong, unique password and confirm it.
- Backup your recovery phrase: MetaMask will provide a 12-word Secret Recovery Phrase—write it down and store it safely offline.
- Confirm the phrase: Re-enter the words in the correct order to verify backup.
- Setup complete: Your MetaMask wallet is now ready to use.

3. Accessing Your Wallet

- Open MetaMask: Click the fox icon in your browser toolbar.
- View your wallet address: Under "Account 1," you'll find your public wallet address, which you can share to receive cryptocurrency.

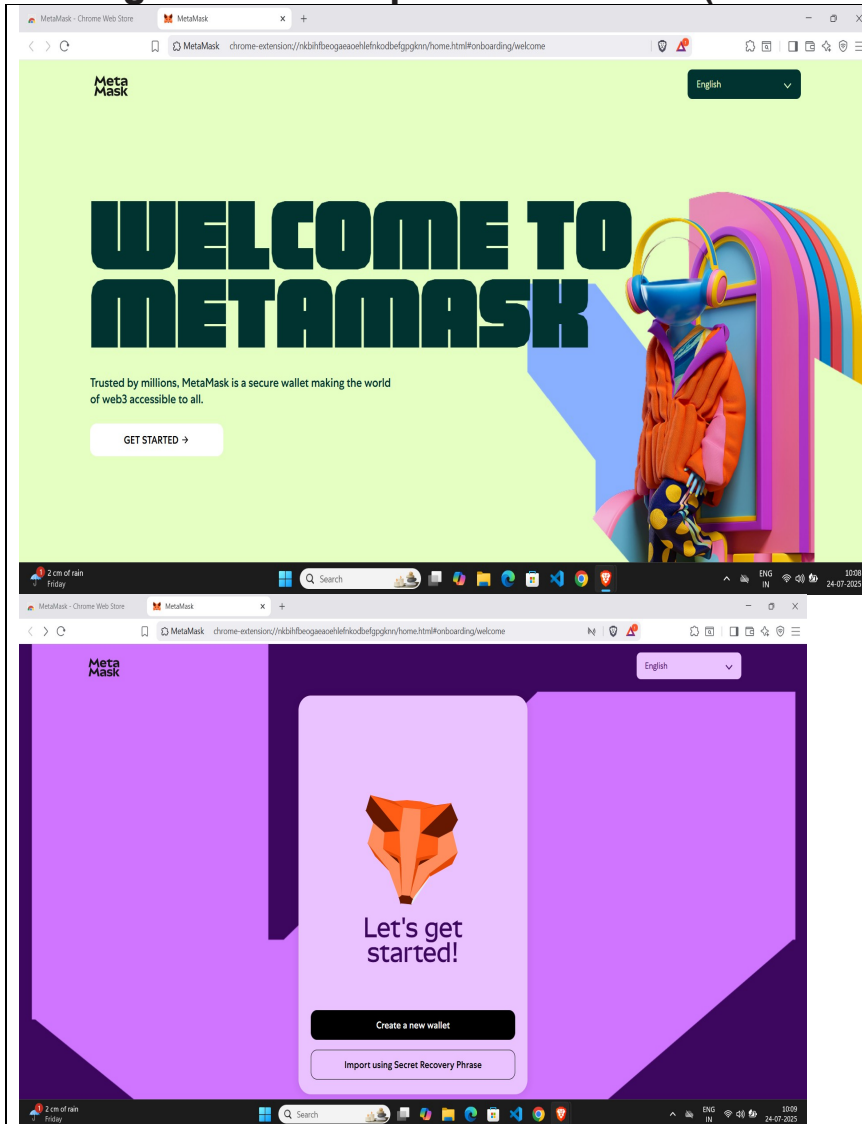**Coding Phase: Pseudo Code / Flow Chart / Algorithm**

* Softwares used

- ➢ Brave Browser

- ➢ MetaMask

* Testing Phase: Compilation of Code (error detection)

* **Testing Phase: Compilation of Code (error detection)**

Testing Phase: detection of Code (error detection)

Help us improve MetaMask

We'd like to gather basic usage and diagnostics data to improve MetaMask. It will always be:

✓ **Private:** Clicks and views on the app are stored, but other details (like your public address) are not.

✓ **General:** We temporarily use your IP address to detect a general location (like your country or region), but it's never stored.

✓ **Optional:** You decide if you want to share or delete your usage data via settings any time.

☑ **We'll use this data to learn how you interact with our marketing communications. We may share relevant news (like product features).**
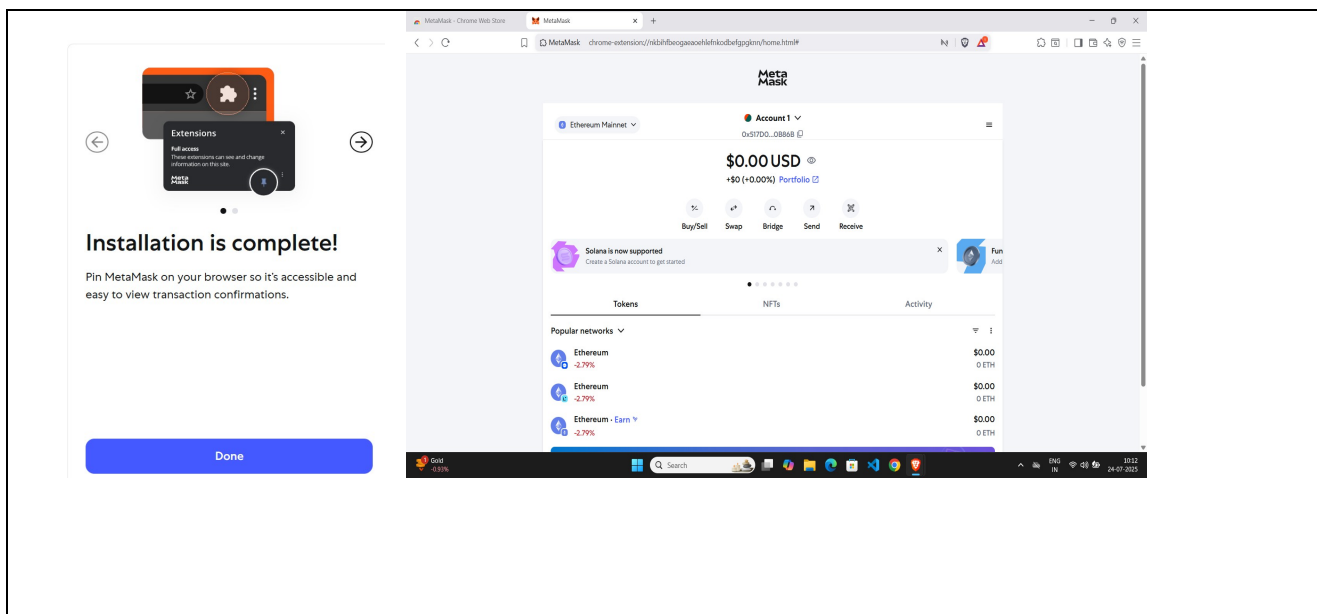
We'll let you know if we plan to use this data for other purposes. You can review our Privacy Policy any time (we never sell the data you provide here).

No thanks   I agree

Step 2 of 3

Secure your wallet

Don't risk losing your funds. Protect your wallet by saving your Secret Recovery Phrase in a place you trust.

It's the only way to recover your wallet if you get locked out of the app or get a new device.

Get started

Remind me later

Your wallet is ready!

If you lose your Secret Recovery Phrase, you won't be able to use your wallet.

Learn how you can keep this phrase safe so you never lose access to your money.

⚙ Manage default settings   >

Done

* Implementation Phase: Final Output (no error)   Applied and Action Learning

* Observations

> ➤ The seed phrase serves as the master key to your wallet, allowing complete access and recovery of funds.
> ➤ Password protection secures MetaMask access on your local device, but it does not replace the need to back up your seed phrase.
> ➤ Every wallet consists of a public address (used to receive funds) and a private key (used to authorize or sign transactions).
> ➤ The public address can be safely shared with others, while the private key must always remain confidential.
> ➤ Crypto wallets do not store actual cryptocurrencies; instead, they store the cryptographic keys that grant access to blockchain-based assets.
> ➤ MetaMask functions as both a key manager and a transaction signer, facilitating secure blockchain interactions.
> ➤ The selected network determines which blockchain and associated assets are visible within the wallet interface.

ASSESMENT

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. :

*As applicable according to the experiment.
Two sheets per experiment (10-20) to be used.