Centurion University
Shaping Lives... Empowering Communities...

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 Experiement : Blockchain Dev Tools – Setting Up Environment

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

1. Start
2. Install Node.js and npm on the system.
3. Verify installations using Command Prompt: npm -v
4. Install Visual Studio Code for coding.
5. Install and set up Git for version control.
6. Install MetaMask browser extension and create/import a wallet.
7. Create a new project folder and initialize it using:
8. Install Web3.js library .
9. Verify the complete setup by running a sample Web3 connection script.
10. End

* Software used

1.Node.js
2.npm (Node Package Manager)
3.Git
4.Visual Studio Code
5.MetaMask
6. Web 3.js
7. Terminal

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

* Testing Phase: Compilation of Code (error detection)

1. Node.js & npm Verification:

2. Open terminal → Type node -v and npm -v

3. If version numbers are displayed, Node.js and npm are successfully installed.

4. Open terminal → Type git --version

5.If version appears, Git is properly installed and ready for version control.

6. Open Visual Studio Code → Create a new workspace → Save the project as “BlockchainSetup”.

7. Add MetaMask browser extension → Create or import a wallet → Connect to a test network (e.g., Ganache or Se

8. Web3.js Installation:

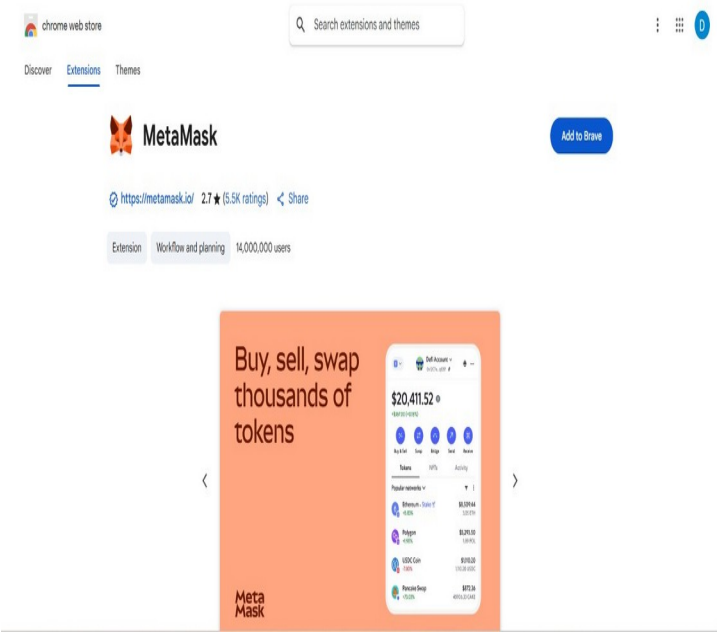
9. npm install web3

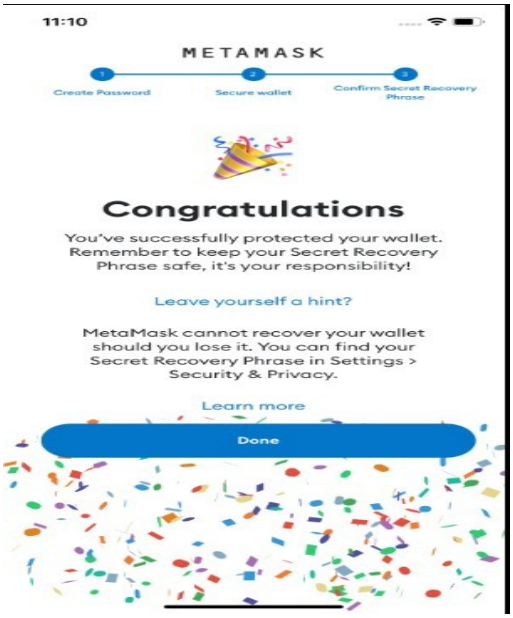
10.node testWeb3.js

*Implementation Phase: Final Output (no error)

1.Successfully deployed contract on Ganache local blockchain.

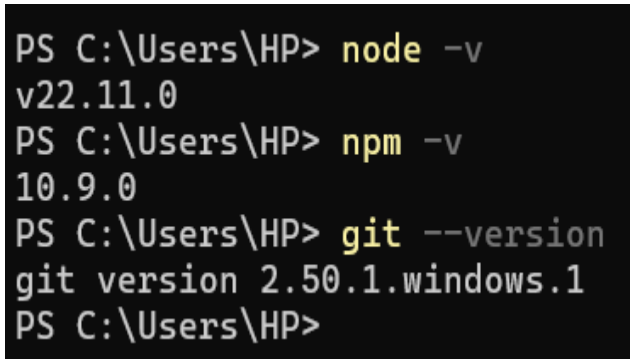
2.Interacted with the contract using MetaMask / Remix / Hardhat.

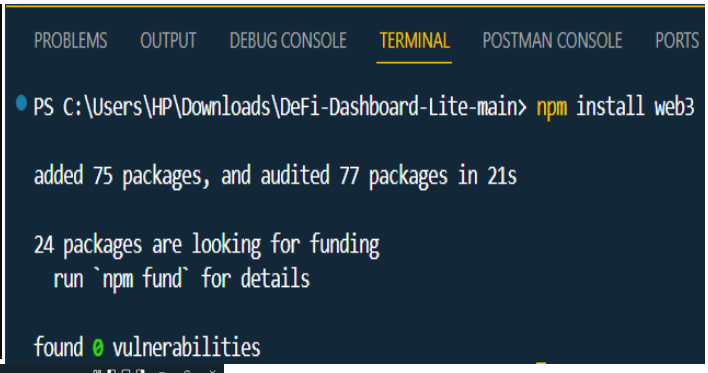


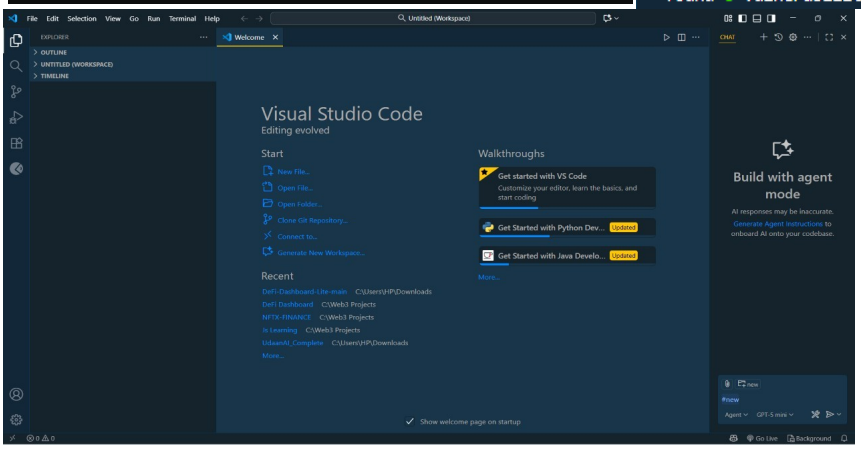


*As applicable according to the experiment.
Two sheets per experiment (10-20) to be used.

* Implementation Phase: Final Output (no error)







* Observations

1. Successfully deployed contract on Ganache local blockchain.

2.Interacted with the contract using MetaMask / Remix / Hardhat.

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:

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