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 : **Read the Chain – Web3.js Basics**

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

- **Connect Wallet** – Establish a connection to the MetaMask wallet.
- **Load Smart Contract** – Fetch the deployed smart contract using its **ABI** and **address**.
- **Write Data to Blockchain** – Call a write function (e.g., `set()`) using `.send({ from: user });` approve the transaction in MetaMask.
- **Read Data from Blockchain** – Call a read function (e.g., `get()`) using `.call()`; no gas fee required.
- **Update Frontend UI** – Display the fetched results on the frontend after the transaction confirmation.

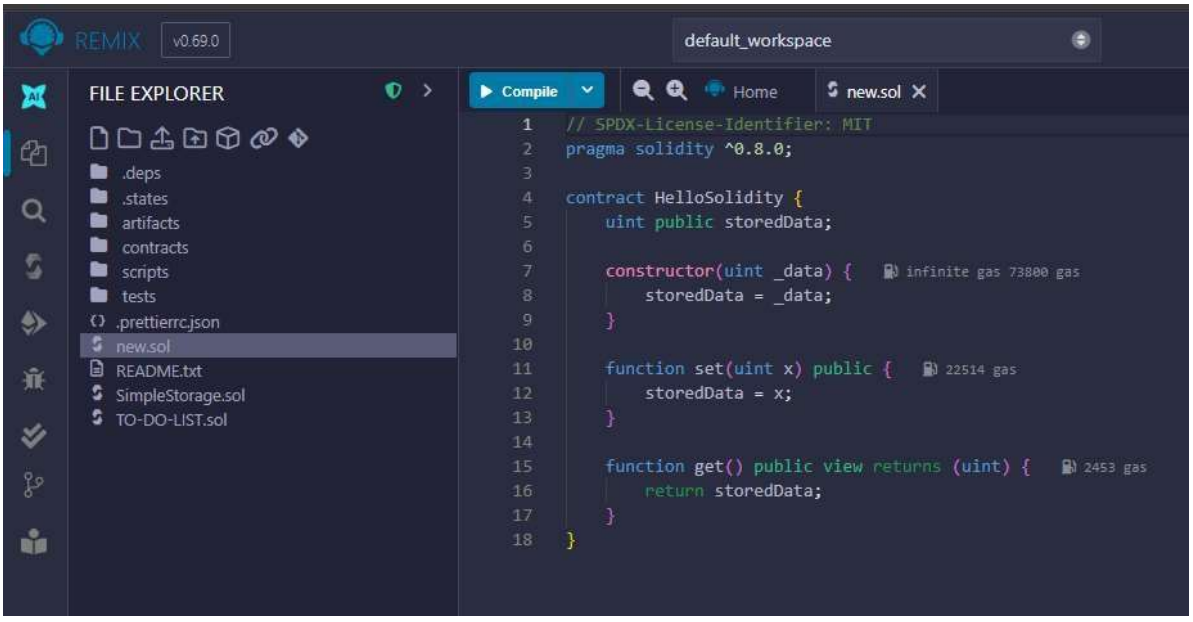
Software used

1. MetaMask Wallet
2. Remix IDE.
3. MS Word.
4. Brave for researching.

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

* Implementation Phase: Final Output (no error)

1. Connect to MetaMask Wallet.
2. Setup Contract.
3. Write value to Blockchain.
4. Read Value.
5. Update UI with result.



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

* Observations:

Writing data to the blockchain required gas and MetaMask confirmation, while reading data was free and instantaneous. The UI updated automatically once the transaction was confirmed, reflecting the latest blockchain state.

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.