



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 : Read the Chain – Web3.js Basics

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

- ☐ Connect Web3 wallet.
- ☐ Fetch smart contract with ABI and address.
- ☐ For write:
 - Call a function like set() with .send({ from: user })
- ☐ For read:
 - Call a function like get() with .call()
- ☐ Display result on the frontend.

Software used

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

* 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.

```

1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 contract HelloSolidity {
5     uint public storedData;
6
7     constructor(uint _data) {
8         storedData = _data;
9     }
10
11     function set(uint x) public {
12         storedData = x;
13     }
14
15     function get() public view returns (uint) {
16         return storedData;
17     }
18 }
  
```

Read the Chain

Connect Wallet

Connected: 0x7760106495a804b2DE289dc8010Bc5b2a61feB14

Store Number

456866 Set Number

Read Number

Get Number

Stored Number: 456866

Read the Chain

Connect Wallet

Connected: 0x7760106495a804b2DE289dc8010Bc5b2a61feB14

Store Number

555555 Set Number

Read Number

Get Number

Stored Number: 555555

*** Observations:**

- ☐ Writing (set) requires gas and confirmation from MetaMask.
- ☐ Reading (get) is free and fast.
- ☐ Updates reflect in UI once the transaction is confirmed.

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: