



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 Experiment : Know Your TX – Dissecting a Transaction

Objective/Aim :

To analyze the internal structure and behavior of a blockchain transaction by using a transaction hash and exploring it through a blockchain explorer (Sepolia Testnet)

Apparatus/Software Used:

- 🕒 MetaMask Wallet (Testnet enabled)
- 🕒 Sepolia Testnet ETH
- 🕒 Sepolia Etherscan
- 🕒 Web browser and internet
- 🕒 Ethereum test contract (for interaction)

Theory/Concept:

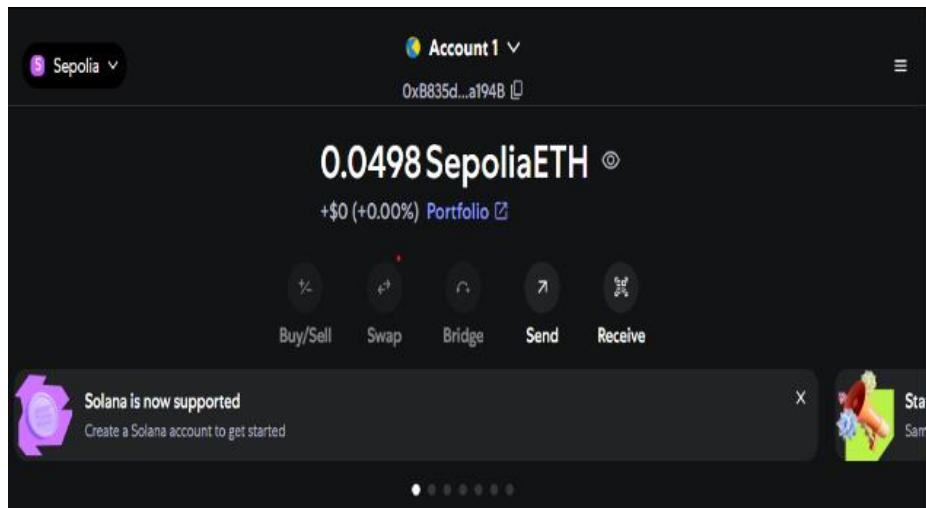
A **transaction (TX)** on the Ethereum blockchain represents an action initiated by an externally owned account (EOA). Transactions may transfer ETH or interact with smart contracts. Key parts of a transaction include:

- **TX Hash** – unique ID of the transaction
- **From** – sender address
- **To** – receiver or contract address
- **Value** – amount of ETH transferred
- **Gas Fee** – amount paid to miners/validators
- **Status** – success or failure
- **Block** – block number where TX was recorded

Procedure:

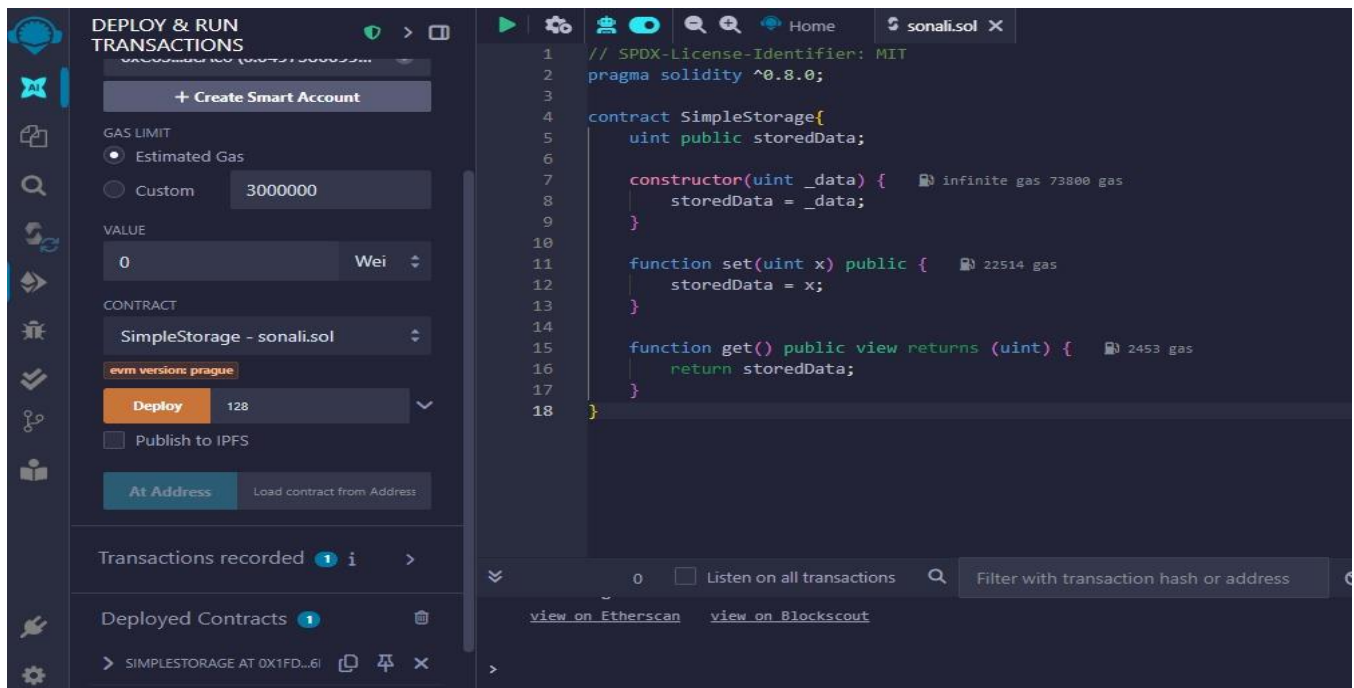
1. Setup MetaMask for Sepolia Testnet:

- Open the **MetaMask** browser extension or mobile app.
- Enable **Sepolia Test Network** from the network list.
- Make sure you have some **test ETH** in your wallet.



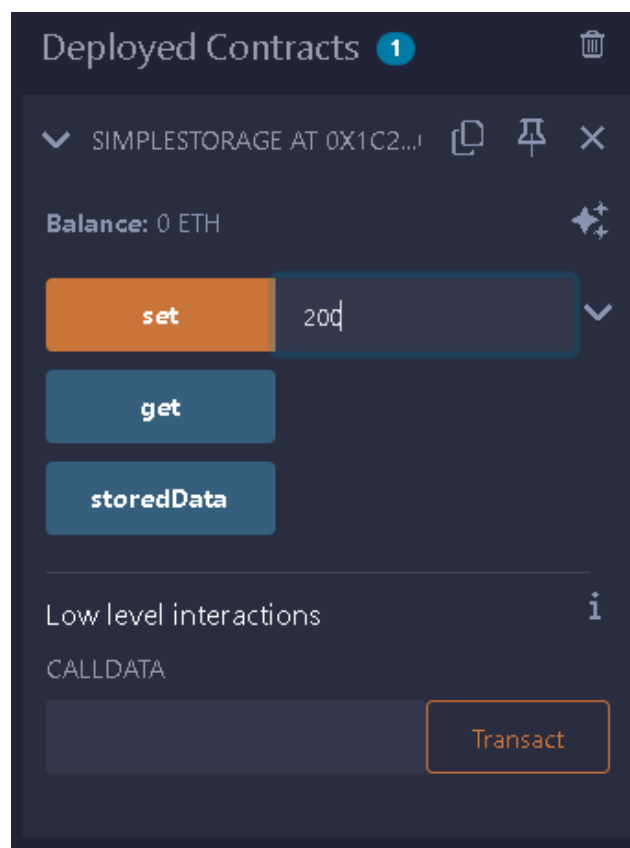
2. Interact with a Smart Contract:

- Visit a platform like **Remix IDE** or any dApp connected to Sepolia.
- Use MetaMask to **call a function** on a deployed **smart contract** (e.g., a counter contract or any public method).
- Submit the transaction



3. Copy the Transaction Hash (TX Hash):

- After sending the transaction, MetaMask will show a **TX hash** (a long alphanumeric string).
- This hash is a **unique identifier** for your transaction on the blockchain.



4. Open Sepolia Etherscan:

- Go to <https://sepolia.etherscan.io>.
- Paste the **transaction hash** in the search bar and hit **Enter**

Home Blockchain Tokens NFTs More

Address 0xC63E45B99635Abbf2f35d861465f876AD73acAc6

</> API
☰

Overview

ETH BALANCE

0.223338667881666588 ETH

TOKEN HOLDINGS

\$0.00 (6 Tokens)

More Info

TRANSACTIONS SENT

Latest: 6 mins ago First: 26 days ago

FUNDED BY

0xAfEDA61d...b37Bb5E4a | 26 days ago

Multichain Info

N/A

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BaseScan Etherscan BscScan

polygonscan SOLSCAN

Transactions
Token Transfers (ERC-20)

Latest 25 from a total of 39 transactions
Download Page Data

Transaction Hash	Method	Block	Age	From	To	Amount	Txn Fee
0x56c1a73ecb...	0x60806040	9009250	6 mins ago	0xC63E45B9...AD73acAc6	OUT Contract Creation	0 ETH	0.00023671

5. Analyze the Transaction Details:

On the transaction page, observe the following:

- **Status:** Success or Failure of the transaction.
- **Block Number:** The block that included your TX.
- **Timestamp:** Exact time and date of confirmation.
- **From & To Address:** Sender (your wallet) and receiver (wallet or contract).
- **Value:** Amount of ETH transferred.
- **Transaction Fee:** Calculated as Gas Used × Gas Price.
- **Gas Price:** Fee per unit of gas set by the sender.
- **To (Contract):** If the transaction is a contract call, it shows the contract address.

Transaction Details
<
>

Overview
State

TRANSACTION ACTION

Call 0x60806040 Method by 0xC63E45B9...AD73acAc6

[This is a Sepolia Testnet transaction only]

Transaction Hash: 0x56c1a73ecb04372cc7d6a9b1c90707fadb2cc35e6b21af5c3c0ddd119ef464e9

Status: Success

Block: 9009250 8 Block Confirmations

Timestamp: 1 min ago (Aug-18-2025 06:21:00 AM UTC)

From: 0xC63E45B99635Abbf2f35d861465f876AD73acAc6

To: [0x0c11007371fc910e77142cc2bb200e1d96d00ab6 Created]

Observation:

A transaction was sent on the **Sepolia Testnet** and completed successfully. It was included in **block 8787597** and had over **29,000 confirmations**. The **sender address** was `0x80C0 . . .`, and the **receiver** was a smart contract at `0x7EF2 . . .`. No ETH was sent (value = 0), but a **transaction fee of 0.00003349 ETH** was paid. The **gas price** was **1.5 Gwei**, and the transaction status was **successful**.

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:

Page No.....

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

