



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 : Explore the Chain – Using a Blockchain Explorer

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

ALGORITHM:

1. Open a **Bitcoin blockchain explorer**.
2. Find the **search bar** on the explorer.
3. Enter a **transaction hash (TXID)** to view its details.
4. Review the transaction information – sender, receiver, amount, fee, block number, and status.
5. Enter a **wallet address** to check its balance and transaction history.
6. Click on a **block number** to explore block details such as hash, miner, transactions, and timestamp.
7. Open a **smart contract address** (if applicable) to view its code and available functions.

* Softwares used

1. Chrome Web Browser
2. Blockchain Explorer Website
(<https://etherscan.io/>)

* Implementation Phase: Final Output (no error)

First open the bitcoin explorer- <https://www.blockchain.com/explorer>

The screenshot shows the Etherscan website. At the top, there's a navigation bar with links like Home, Blockchain, Tokens, NFTs, Resources, Developers, and More. Below this is a search bar with the text "Search by Address / Txn Hash / Block / Token / Domain Name". The main content area is titled "The Ethereum Blockchain Explorer" and features several data sections: ETH Price (\$4,759.39), Market Cap (\$574,498,183,439.00), Transactions (2,940.98 M), MED GAS PRICE (0.812 Gwei), and a Transaction History graph. Below these are sections for "Latest Blocks" and "Latest Transactions".

Then in search bar you can search with address, TXID and Token name

This screenshot shows a close-up of the search bar on the Etherscan website. The search bar contains the transaction hash "0xa62463A56EE9D742F810920F56cEbc4B696eBd0a". The search bar is labeled "The Ethereum Blockchain Explorer" and has a search icon on the right.

After searching will be able to see all details about the transaction like hash, timestamp, status, block number, value, gas price etc.

This screenshot shows the "Transaction Details" page on Etherscan. The transaction is a "Transfer 10 PT to 0xe4d95DdeB8a2C5cC1646171850841668E8Ca52E". The transaction is successful and has 8931935 block confirmations. The transaction hash is "0xd1e488302ee585ad36c067d57864440019d80c179ade45f3ba4e6328b0142ef". The transaction was sent from "0xa62463A56EE9D742F810920F56cEbc4B696eBd0a" to "0xe4d95DdeB8a2C5cC1646171850841668E8Ca52E". The transaction value is 10 PT (ERC-20: PttToken) and the gas price is 1.500581477 Gwei.

* Implementation Phase: Final Output (no error)

Applied and Action Learning

Gas Limit & Usage by Txn:

1,220,865 | 1,210,094 (99.12%)

Gas Fees:

Base: 0.000166635 Gwei | Max: 1.500239596 Gwei | Max Priority: 1.5 Gwei

Burnt & Txn Savings Fees:

Burnt: 0.00000020164401369 ETH (\$0.00)

Txn Savings: 0.000000088289668334 ETH (\$0.00)

Other Attributes:

Txn Type: 2 (EIP-1559)

Nonce: 84

Position In Block: 29

Input Data:

0x6080604052601260025f6101000a81548160ff021916908360ff16021790555034801561002a575f5ffd5b50604051611a8e380380611a8e833981810160405281019061004c91906102cd565b825f908161005a919061055c565b50816001908161006a919061055c565b5060025f9054906101000a900460ff1660ff16600a6100899190610787565b8161009491906107d1565b60038190555060035460045f3373fff1673fff1681526020019081526020015f20819055503373fff

View Input As ▾

More Details:

— Click to show less

Now you can see all the details of the transactions on a blockchain explorer

* Observations

1. The transaction was successfully found on the Bitcoin blockchain using the provided TXID, showing full details such as sender/receiver addresses, amount transferred, and transaction fee.
2. The explorer displayed confirmation status, block number, and timestamp, confirming the transaction's inclusion in the blockchain.
3. Inputs and outputs were clearly listed, showing how Bitcoin was spent from one address and sent to one or more recipients.

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.