Block Explorer

BFT Explore

User

- Home BlockExplorer
- view details Block
- View Details Block — Block detains by number
- view details Transaction
- View Details Transactions — Transaction Detail by hash
- search field wallet
- Search Address — transactions (from / to) by wallet
- wallet
- Wallet Balance
- Services

System API

- Peers Nodes / Signers
- Network Services — Returns
- balance
- Total Supply
- Token Service — Returns
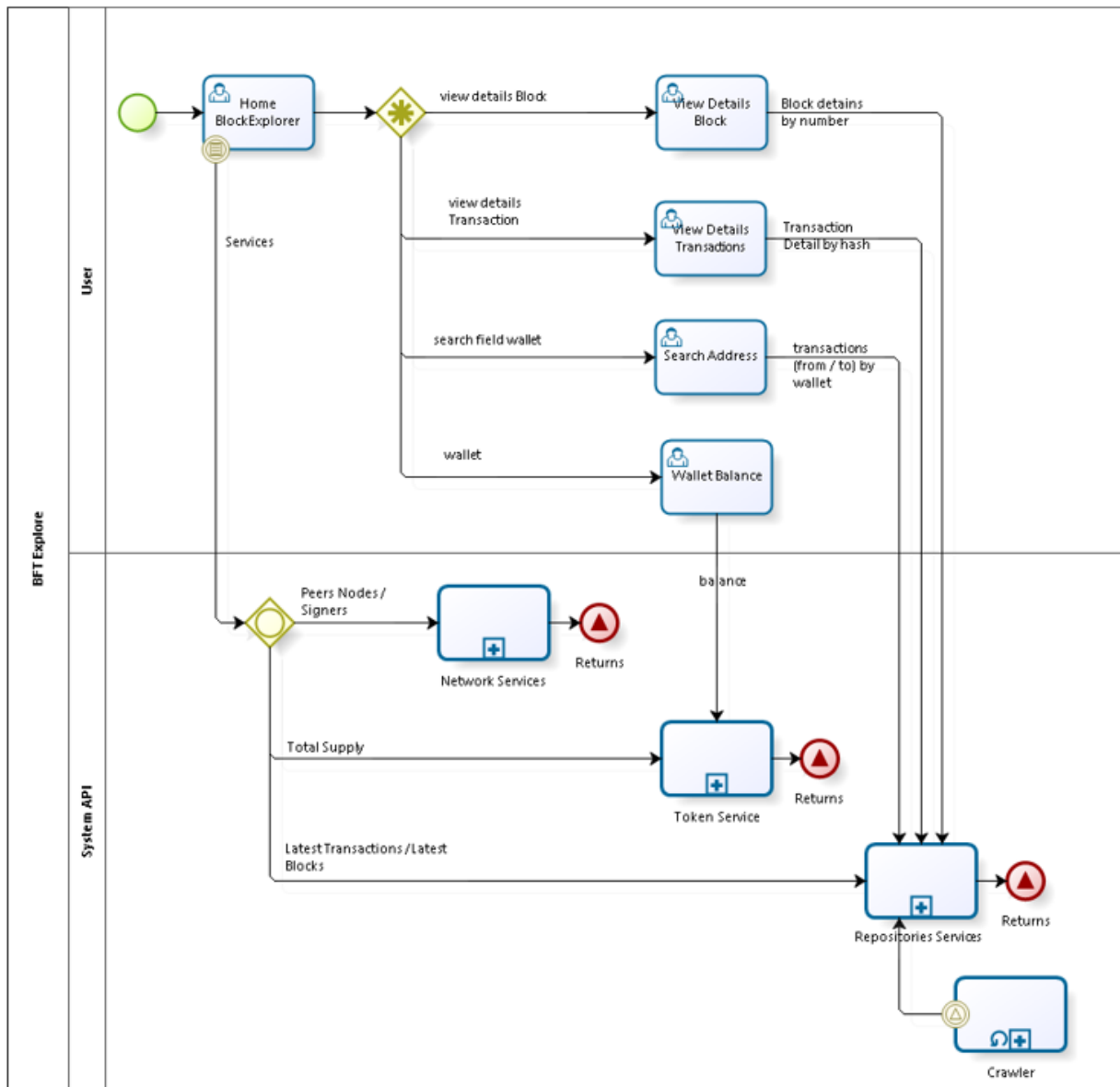- Latest Transactions / Latest Blocks
- Repositories Services — Returns
- Crawler

Acceptance criteria:

View the activity of the permissioned network:

- blocks created
- transactions generated
- number of connected peers
- number of connected signers
- total SPL supply

Search details of:

- transactions with his hash number
- transactions for an address
- block by blockNumber

- block by blockHash
- address balance SPL

Features
Searches
- Balance SPL account
- Transaction hash
- Block hash
- Block number

Home BlockExplorer
- Summary of the key metrics for the network
  - Lastest transctions and blocks
  - Total suply SPL
  - Total Peers nodes
  - Total signers

Transaction Details
- View the details of individual transactions
- Transaction Objects:

blockHash	Data, 32 bytes	Hash of the block containing this transaction. `null` when transaction is pending.
from	Data, 20 bytes	Address of the sender.
hash	Data, 32 bytes	Hash of the transaction.
to	Data, 20 bytes	Address of the receiver. `null` if a contract creation transaction.
value	Quantity	Value transferred, in SPL
status	Quantity	Either `0x1` (success) or `0x0` (failure)
time	Quantity	Unix timestamp for transaction.
type		Transaction type: mint, tranfer

Block Details
- View provides details of all blocks being generated on the network.
- Block Objects:

size	Quantity, Integer	Size of block in bytes.
signers	Array	Signature hash.
time	Quantity	Unix timestamp for block assembly.
hash	*Data*, 32 bytes	Hash of the block. `null` when block is pending.
transactions	Array	Array of transaction objects, or 32 byte transaction hashes depending on the specified boolean parameter.
height	Quantity	Number of block that includes the log. `null` when log is pending.

Features Details

```
@Information_Network
In order to I want see network activity
As a user I want to access network information

Scenario: view network information
    Given I can access BlockExplorer home_page
    Then I see <TotalSuplySPL>
    And I see <PeersNode>
    And I see <Signers>
    And I see <LastestBlocks>
    And I see <LastestTransactions>


Background: Access BlockExplorer page
Given I am home page BlockExplorer

@Search_Block_By_Hash
In order to I need to find a block
As a user I want to search with a blockHash

Scenario: search with a valid block hash
    Given I fill search field with <blockHash>
    When I click 'Enter'
    Then I see 'Block Details page'

Scenario: search with a invalid block hash
    Given I fill search field with <blockHash>
    When I click 'Enter'
    Then I see 'Warning message'

@Search_Block_By_Number
In order to I need to find a block
As a user I want to search with a blockNumber
```

Scenario: search with a valid block number
    Given I fill search field with <blockNumber>
    When I click 'Enter'
    Then I see 'Block Details page'

Scenario: search with a invalid block number
    Given I fill search field with <blockNumber>
    When I click 'Enter'
    Then I see 'Warning message'

@Search_Transaction_By_Hash
In order to I need to find a transaction
As a user I want to search with a transactionHash

Scenario: search with a valid transaction hash
    Given I fill search field with <transactionHash>
    When I click 'Enter'
    Then I see 'Transaction Details page'

Scenario: search with a invalid transaction hash
    Given I fill search field with <transactionHash>
    When I click 'Enter'
    Then I see 'Warning message'

@Search_Address
In order to I need to find a wallet
As a user I want to search with a address

Scenario: search with a valid address
    Given I fill search field with <address>
    When I click 'Enter'
    Then I see 'Balance account page'

Scenario: search with a invalid address
    Given I fill search field with <address>
    When I click 'Enter'
    Then I see 'Warning message'