



Decentralized Lending Platform

Testing Scenarios : Outputs

1. Add Funds to the Contract :

ACCOUNT +  

0x5B3...eddC4 (99.99999999995249804 ether) ▾

GAS LIMIT

☒ Estimated Gas

☐ Custom 3000000

VALUE

5 Ether ▾

Balance: 5 ETH

addFunds

fundLoan address borrower ▾

liquidateCollat... address borrower ▾



repayLoan

requestLoanW... uint256 amount, address ▾

availableBalance

0: uint256: 5000000000000000000

loans address ▾

CRYPTOCOLLATERIALIZEDLENDING   X

Balance: 5 ETH

addFunds

fundLoan address borrower ▾

>

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.constructor value: 0 wei data: 0x608...a0033 logs: 0 hash: 0xce7...d187c **Debug** ▾

transact to CryptoCollateralizedLending.addFunds pending ...

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.addFunds() 0x5Cb...C2f84 value: 5000000000000000000 wei data: 0xa26...759cb logs: 0 hash: 0xad0...d4c62 **Debug** ▾

2. Request a Loan with Collateral:

Approve token transfer from borrower to **CryptoCollateralizedLending**

TESTTOKEN AT 0X10D...C92A1 (MEN)

Balance: 0 ETH

approve

spender: 0x5Cbe4175Ab888a0D2e7389A9f

value: 5000000000000000000

Calldata Parameters **transact**

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.address hash: 0xad0...d4c62
call to CryptoCollateralizedLending.availableBalance

CALL [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC to: TestToken.approve pending ...

[vm] from: 0x5B3...eddC4 to: TestToken.approve(address,uint256) hash: 0x...

In **CryptoCollateralizedLending**, call **requestLoanWithCollateral**
case : Collateral < loan amount

requestLoanWithCollateral

amount: 6000000000000000000

collateralToken: 0x10dDBC4F6E73036acC29C508C

collateralAmount: 5000000000000000000

Calldata Parameters **transact**

data: 0xb85...40000 logs: 0 hash: 0xa94...57ffa
transact to CryptoCollateralizedLending.requestLoanWithCollateral errored: Error occurred
revert
The transaction has been reverted to the initial state.
Reason provided by the contract: "Collateral must be greater than the loan amount".
If the transaction failed for not having enough gas, try increasing the gas limit gently.

Loan condition :

requestLoanWithCollateral

amount: 2000000000000000000

collateralToken: 0x10dDBC4F6E73036acC29C508C

collateralAmount: 5000000000000000000

Calldata Parameters **transact**

If the transaction failed for not having enough gas, try increasing the gas limit gently.

transact to CryptoCollateralizedLending.requestLoanWithCollateral

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.requestLoanWithCollateral data: 0xb85...40000 logs: 1 hash: 0x8f6...d6caf

Again applying for loan with different value : Error

requestLoanWithCollateral

amount: 3000000000000000000

collateralToken: 0x10dDBC4F6E73036acC29C508C

collateralAmount: 5000000000000000000

Calldata Parameters **transact**

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.requestLoanWithCollateral data: 0xb85...40000 logs: 1 hash: 0x8f6...d6caf
transact to CryptoCollateralizedLending.requestLoanWithCollateral pending ...

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.requestLoanWithCollateral data: 0xb85...40000 logs: 0 hash: 0xb35...80d14
transact to CryptoCollateralizedLending.requestLoanWithCollateral errored: Error occurred
revert

3. Fund a Loan :

The screenshot shows a web interface with a sidebar on the left containing buttons: **fundLoan**, **liquidateCollat...**, **repayLoan**, **requestLoanW...**, and **availableBalance**. The **fundLoan** button is selected. The main area displays a transaction log with a green checkmark and the following text:
[vm] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: CryptoCollateralizedLending.fundLoan
hash: 0x25b...05f...
call to CryptoCollateralizedLending.fundLoan
CALL [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: CryptoCollateralizedLending.fundLoan
pending ...

Calling again

The screenshot shows the same web interface as before, but the **fundLoan** button is now disabled and labeled "fundLoan - transaction (not payable)". The transaction log on the right shows a red 'x' and the following text:
[vm] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: CryptoCollateralizedLending.fundLoan
hash: 0x534...670e4
transaction to CryptoCollateralizedLending.fundLoan errored: Error occurred
revert
The transaction has been reverted to the initial state.
Reason provided by the contract: "Loan is not in the requested state".
If the transaction failed for not having enough gas, try increasing the gas limit.

4. Repay a Loan :

The screenshot shows a web interface with a sidebar on the left containing buttons: **loans**, **addFunds**, **fundLoan**, **liquidateCollat...**, **repayLoan**, **requestLoanW...**, and **availableBalance**. The **loans** button is selected. The main area displays a list of loan details for the address 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4:
0: address: borrower 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
1: uint256: requestedAmount 2000000000000000000
2: uint256: repayAmount 2040000000000000000
3: uint256: interestRate 2
4: uint8: state 1
5: uint256: requestedDate 1733940953
6: address: collateralToken 0x10dDBC4F6E73036acC29C508Ce5dB1534e2C92a1
7: uint256: collateralAmount 5000000000000000000

VALUE

Wei

repayLoan

✓

[vm] from: 0x5B3...
hash: 0x261...00e8d

It was under 1 min .

If it exceed 1 min that loan change to default state .

5. Liquidate Collateral :

liquidateCollat...

0x5B38Da6a701c568545d

✓

[vm] from: 0x5B3...eddC...
hash: 0x3fc...90458

3: uint256: interestRate 2
4: uint8: state 3
5: uint256: requestedDate 1733941395
6: address: collateralToken 0x10dDBC4F6E73036acC29C508Ce5dB1534e2C92a1

Again calling repay after loan default .

fundLoan

0x5B38Da6a701c568545d

liquidateCollat...

0x5B38Da6a701c568545d

repayLoan

requestLoanW...

uint256 amount, address

✗

[vm] from: 0x5B3...eddC4 to: CryptoCollateralizedLending.repay
hash: 0x814...9a436
transact to CryptoCollateralizedLending.repayLoan errored: Error on
revert
The transaction has been reverted to the initial state.
Reason provided by the contract: "Loan is not in the funded state".
If the transaction failed for not having enough gas, try increasing