

TESTING OF THE MARKETPLACE SMART CONTRACT

HASKELL VERSION

```
-- Ange is a seller
sampleSeller :: Seller
sampleSeller = "039f51d0c3f33b9d4c78d4492548d62fdf116f1dbbdfa5e0d6d900dd"
-- robert is the buyer
sampleBuyer :: Buyer
sampleBuyer = "53b4939fa0fef0b160ee80334f179d4251d59e064876ae030749ef66"
-- MarketplaceOwner ----Cyprien
sampleMarketplaceOwner :: MarketplaceOwner
sampleMarketplaceOwner =
  "c1272b677c5d0a894f5dd5472711aab5ca59d856f55d12157670c930"
```

NFT:

```
nftSymbol : IVOCOINS
nftImage : ipfs://QmUNT1Ziv2915gN23SVtAswKZQY9cPtMGmcNzgEQq7Pxb9
```

Displaying nft-marketplace

```
guess@NYC:~/emurgo-test/jambhala$ j cli -l
Build profile: -w ghc-8.10.7 -O1
In order, the following will be built (use -v for more details):
- jambhala-0.5.0.0 (lib) (file src/Contracts/MarketPlace.hs changed)
- jambhala-0.5.0.0 (exe:cli) (dependency rebuilt)
Preprocessing library for jambhala-0.5.0.0..
Building library for jambhala-0.5.0.0..
[29 of 30] Compiling Contracts.MarketPlace ( src/Contracts/MarketPlace.hs,
/home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-
0.5.0.0/build/Contracts/MarketPlace.o, /home/guess/emurgo-test/jambhala/dist-
newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/build/Contracts/MarketPlace.dyn_o )
Preprocessing executable 'cli' for jambhala-0.5.0.0..
Building executable 'cli' for jambhala-0.5.0.0..
Linking /home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-
8.10.7/jambhala-0.5.0.0/x/cli/build/cli/cli ...
Available Contracts:
```

```
auction
burn
custom-typed
forward-minting
forward-minting-policy
free-minting
gift
guessing
nft
nft-marketplace
param-vesting
signed-minting
```

simple-typed
simple-untyped
state-counter
vesting

Write and export nft-marketplace

guess@NYC:~/emurgo-test/jambhala\$ j cli -w nft-marketplace

File '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/scripts/plutus/nft-marketplace.plutus' already exists. Do you want to overwrite it? (Y/N): Y

Wrote script to '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/scripts/plutus/nft-marketplace.plutus'

File '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/addr/nft-marketplace.addr' already exists. Do you want to overwrite it? (Y/N): Y

Wrote address 'addr_test1wq4rtdmealsck78y69x2w5sjne3vs4uac6nw6f658fszyv3cj0p5c4' to '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/addr/nft-marketplace.addr'

File '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/lockedNFT1.json' already exists. Do you want to overwrite it? (Y/N): Y

Wrote data to '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/lockedNFT1.json':

```
{
  "constructor": 0,
  "fields": [
    {
      "constructor": 0,
      "fields": [
        {
          "bytes": "4e465431"
        },
        {
          "bytes":
"697066733a2f2f516d554e74315a697632393135674e32335356744173774b5a5159396350744d476d634e7a674551713750786839"
        },
        {
          "bytes": "49564f434f494e53"
        },
        {
          "bytes": "039f51d0c3f33b9d4c78d4492548d62fdf116f1dbbdfa5e0d6d900dd"
        },
        {
          "int": 1000000
        }
      ]
    }
  ]
}
```

File '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/unlockRedeemer.json' already exists. Do you want to overwrite it? (Y/N): Y

Wrote data to '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/unlockRedeemer.json':

```
{
  "constructor": 1,
  "fields": []
}
```

File '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/lockRedeemer.json' already exists. Do you want to overwrite it? (Y/N): Y

Wrote data to '/home/guess/emurgo-test/jambhala/cardano-cli-guru/assets/data/lockRedeemer.json':

```
{
  "constructor": 0,
  "fields": []
}
```

Test after unlocking

guess@NYC:~/emurgo-test/jambhala\$ **j cli -t nft-marketplace**

Build profile: -w ghc-8.10.7 -O1

In order, the following will be built (use -v for more details):

- jambhala-0.5.0.0 (lib) (file src/Contracts/MarketPlace.hs changed)

- jambhala-0.5.0.0 (exe:cli) (dependency rebuilt)

Preprocessing library for jambhala-0.5.0.0..

Building library for jambhala-0.5.0.0..

[29 of 30] Compiling Contracts.MarketPlace (src/Contracts/MarketPlace.hs,
/home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/build/Contracts/MarketPlace.o, /home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/build/Contracts/MarketPlace.dyn_o)

[30 of 30] Compiling Contracts (src/Contracts.hs, /home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/build/Contracts.o,
/home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/build/Contracts.dyn_o) [Contracts.MarketPlace changed]

Preprocessing executable 'cli' for jambhala-0.5.0.0..

Building executable 'cli' for jambhala-0.5.0.0..

[1 of 1] Compiling Main (j-cli/Main.hs, /home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/x/cli/build/cli/cli-tmp/Main.o)

[Contracts changed]

Linking /home/guess/emurgo-test/jambhala/dist-newstyle/build/x86_64-linux/ghc-8.10.7/jambhala-0.5.0.0/x/cli/build/cli/cli ...

[INFO] Slot 0: TxnValidate

c87be2c2d75bf26a854275b142abe178c829cb2e81da35e5f8cd522d4f0dde84 []

[INFO] Slot 1: 00000000-0000-4000-8000-000000000000 {Wallet W[1]}:

Contract instance started

[INFO] Slot 1: 00000000-0000-4000-8000-000000000001 {Wallet W[2]}:

Contract instance started

[INFO] Slot 1: 00000000-0000-4000-8000-000000000002 {Wallet W[3]}:

Contract instance started

[INFO] Slot 1: 00000000-0000-4000-8000-000000000001 {Wallet W[2]}:

Receive endpoint call on 'grab' for Object (fromList [{"contents",Array [Object (fromList [{"getEndpointDescription",String "grab"}]),Object (fromList [{"unEndpointValue",Object (fromList [{"unTokenName",String "NFT1"}])})]),{"tag",String "ExposeEndpointResp"}])

[INFO] Slot 1: W[2]: Balancing an unbalanced transaction:

Tx ba466e239054bec1a866af7224adf4acef08111ed8a09da113e2335a841e778c:
inputs:
reference inputs:
collateral inputs:
outputs:
- 3000000 lovelace addressed to
PubKeyCredential:
c1272b677c5d0a894f5dd5472711aab5ca59d856f55d12157670c930 (no staking credential)
- 3000000 lovelace addressed to
PubKeyCredential:
039f51d0c3f33b9d4c78d4492548d62fdf116f1dbbdfa5e0d6d900dd (no staking credential)
mint:
fee: 0 lovelace
validity range: Interval {ivFrom = LowerBound NegInf True, ivTo = UpperBound PosInf
True}
data:
redeemers:
Utxo index:

[INFO] Slot 1: W[2]: Finished balancing:

Tx 1e28cd00f9df1bd57787435a474f7aab8daae19845b47a03ff982a1096834b2:
inputs:
- c87be2c2d75bf26a854275b142abe178c829cb2e81da35e5f8cd522d4f0dde84!10
reference inputs:
collateral inputs:
outputs:
- 3000000 lovelace addressed to
PubKeyCredential:
c1272b677c5d0a894f5dd5472711aab5ca59d856f55d12157670c930 (no staking credential)
- 3000000 lovelace addressed to
PubKeyCredential:
039f51d0c3f33b9d4c78d4492548d62fdf116f1dbbdfa5e0d6d900dd (no staking credential)
- 3832739 lovelace addressed to
PubKeyCredential:
80a4f45b56b88d1139da23bc4c3c75ec6d32943c087f250b86193ca7 (no staking credential)
mint:
fee: 167261 lovelace
validity range: Interval {ivFrom = LowerBound NegInf True, ivTo = UpperBound PosInf
True}
data:
redeemers:

[INFO] Slot 1: W[2]: Signing tx:

1e28cd00f9df1bd57787435a474f7aab8daae19845b47a03ff982a1096834b2

[INFO] Slot 1: W[2]: Submitting tx:

1e28cd00f9df1bd57787435a474f7aab8daae19845b47a03ff982a1096834b2

[INFO] Slot 1: W[2]: TxSubmit:

1e28cd00f9df1bd57787435a474f7aab8daae19845b47a03ff982a1096834b2

[INFO] Slot 1: TxnValidate

1e28cd00f9df1bd57787435a474f7aab8daae19845b47a03ff982a1096834b2 []

[INFO] Slot 2: 00000000-0000-4000-8000-000000000001 {Wallet W[2]}:

Contract log: String "Unlocked NFT from contract"

Final balances

Wallet 2: 93832739 lovelace

Wallet 1: 100000000 lovelace

Wallet 3: 100000000 lovelace

PubKeyHash 039f51d0c3f33b9d4c78d4492548d62fdf116f1dbbdfa5e0d6d900dd: 3000000
lovelace

PubKeyHash c1272b677c5d0a894f5dd5472711aab5ca59d856f55d12157670c930: 3000000
lovelace

AIKEN TESTING

guess@NYC:~/emurgo-test/jambhala/jambhalaiken\$ **aiken check -m marketplace**

Compiling aiken-lang/stdlib 1.7.0 (/home/guess/emurgo-
test/jambhala/jambhalaiken/build/packages/aiken-lang-stdlib)

Compiling jambhala/jambhalaiken 0.0.0 (/home/guess/emurgo-test/jambhala/jambhalaiken)

Summary 0 errors, 0 warnings