Michael du Toit

2193161

SD6501 – Final Project

Testing Documentation

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# Unit Testing

## Unit Test Cases

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test ID** | **Test Class** | **Test Case / Test Method** | **Test Description** | **Expected Result** | **Actual Result** | **Status** | **Image** |
| UT01 | Account UnitTests | account\_defaultConstructor | Create an instance of the Account object using the default constructor and check that the fields are set as expected. | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Pass | 1 |
| UT02 | Account UnitTests | account\_nameConstructor | Create an instance of the Account object passing the string "Test Account" to the constructor, and check that the fields are set as expected. | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Pass | 1 |
| UT03 | Account UnitTests | account\_allParamsConstructor | Create an instance of the Account object passing the values: int 1, string "Test Account", long 10.00 to the constructor, and check that the fields are set as expected. | Account.id = 1 Account.name = "Test Acccount" Account.balance = 10.00 | Account.id = 1 Account.name = "Test Acccount" Account.balance = 10.00 | Pass | 1 |
| UT04 | Account UnitTests | account\_testAllGetterSetter Methods | Create an instance of the Account object using the default constructor, then use all the getter and setter methods of the class to set and get all the fields and check that they are as expected. | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Account.id = 0 Account.name = "Test Acccount" Account.balance = 0.0 | Pass | 1 |
| UT05 | Transaction UnitTests | transaction\_defaultConstructor | Create an instance of the Transaction object using the default constructor and check that the fields are set as expected. | Transaction.id = 0 Transaction.name = null Transaction.value = 0.0 Transaction.account = 0 Transaction.note = null Transaction.datetime = Calendar instance | Transaction.id = 0 Transaction.name = null Transaction.value = 0.0 Transaction.account = 0 Transaction.note = null Transaction.datetime = Calendar instance | Pass | 2 |
| UT06 | Transaction UnitTests | transaction\_allParamsExceptId Constructor | Create an instance of the Transaction object using the constructor that takes values for all the fields except ID and check that the fields are set as expected. | Transaction.id = 0 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance | Transaction.id = 0 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance | Pass | 2 |
| UT07 | Transaction UnitTests | transaction\_allParamsConstructor | Create an instance of the Transaction object using the constructor that takes values for all the fields and check that the fields are set as expected. | Transaction.id = 1 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance | Transaction.id = 1 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance | Pass | 2 |
| UT08 | Transaction UnitTests | transaction\_testAllGetterSetter Methods | Create an instance of the Transaction object using the default constructor, then use all the object's set methods to set the fields and use the get methods to validate that the fields are set as expected. | Transaction.id = 1 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance | Transaction.id = 1 Transaction.name = "Test Transaction UT" Transaction.value = 10.0 Transaction.account = 1 Transaction.note = "Unit Testing" Transaction.datetime = Calendar instance |  |  |
| UT09 | UserUnitTests | user\_testDefaultConstructor | Create an instance of the User object using its default constructor and check that the fields are set as expected. | User.id = 0 User.username = null User.pinNumber = null | User.id = 0 User.username = null User.pinNumber = null | Pass | 3 |
| UT10 | UserUnitTests | user\_testExcludingIdConstrutor | Create an instance of the User object using the constructor that takes two strings (username and pin number), pass test values to it and check that the fields are set as expected. | User.id = 0 User.username = "Test User" User.pinNumber = "1234" | User.id = 0 User.username = "Test User" User.pinNumber = "1234" | Pass | 3 |
| UT11 | UserUnitTests | user\_testAllParamsConstructor | Create an instance of the User object using the constructor that takes three values (id, username, pin number) and pass test values to it. Check that the fields are set as expected. | User.id = 1 User.username = "Test User" User.pinNumber = "1234" | User.id = 1 User.username = "Test User" User.pinNumber = "1234" | Pass | 3 |
| UT12 | UserUnitTests | user\_testAllGetterSetterMethods | Create an instance of the User object using the default constructor, then use all of the object's set methods to set the fields and use the get methods to validate that the fields are set as expected. | User.id = 2 User.username = "Test User" User.pinNumber = "1234" | User.id = 2 User.username = "Test User" User.pinNumber = "1234" | Pass | 3 |

## Unit Tests Screenshots

A screenshot of a computer

Description automatically generated with medium confidence

Figure - Unit Testing Reults for all the AccountUnitTests Test Cases

A screenshot of a computer

Description automatically generated with medium confidence

Figure - Unit Test Results for TransactionUnitTests Test Cases

A screenshot of a computer

Description automatically generated with medium confidence

Figure - Unit Test Results for UserUnitTests Test Cases

# Espresso Testing

## Espresso Test Cases

## Espresso Tests Screenshots

# User Acceptance Testing

## Draft Questions:

## Users Testing Results Screenshots: