

# COMP 354

## Test Document for the project myMoney

### Team PA-PK

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Table 1: Team

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Table 2: Revision history

Version	Date	Changes
1.0	15 March 2018	Completed test document

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# 1 Introduction

*The introduction of the document provides an overview of the entire document, briefly introducing what are its goals, and what information is to be found in it.*

## 2 Test Plan

*Describe what forms of testing you plan to do (unit, subsystem, integration), describe briefly the schedule and resources for testing, and how you designed your test cases.*

*Indicate which qualities (from requirements) were tested and which qualities were not tested.*

### 2.1 System Level Test Cases

*All test cases for testing at the system level.*

#### Test Case 1

##### **Purpose**

State the purpose of the test. Indicate which requirement and which aspect of that requirement is being tested.

##### **Input Specification**

State the context for the test in terms of system state. State the input test data. You may need to mention operations invoked as well as data for the operation. You can cross-reference to actual file data specified in an appendix.

##### **Expected Output**

State the expected system response and output. You can cross-reference to actual file data specified in an appendix.

##### **Traces to Use Cases**

State which requirements (at the level of use case and scenario) are tested by this test case.

### 2.2 Subsystem Level Test Cases

*All test cases for testing at the subsystem level.*

*One subsection per subsystem*

## Subsystem X

### 2.3 Unit Test cases

`com.github.comp354project.model.user.UserService.createUser(User)`

Table 3: `createUser(User)`

Tester Name	Hrachya	
Test Date	1/31/18	
Class Name	com.github.comp354project.model.user.UserService	
Method Name	createUser(User)	
Purpose	This test suite tests the creation of a user	
Use Cases	01	
Test Scenarios		
createUser_withNullUser_shouldThrow		
Input Specification	user	
	null	
Expected Output	ValidationException is thrown	
Actual Output	ValidationException is thrown	
Bug Found	false	
Purpose	No null user can be saved in the database	
testCreateUser_withInvalidUser_shouldThrow		
Input Specification	user	errors
		4
Expected Output	ValidationException is thrown 4 exceptions are thrown because missing fields: username, password, firstname,	
Actual Output	ValidationException is thrown 4 exceptions are thrown because missing fields: username, password, firstname,	
Bug Found	false	
Purpose	No empty value user can be saved in the database	
testCreateUser_withValidUser_shouldReturnUser		
Input Specification	user	
	username: USERNAME password: PASSWORD firstName: FIRSTNAME lastName: LASTNAME	
Expected Output	User ID was autogenerated upon save The saved user is the same as the inputted user	
Actual Output	User ID was autogenerated upon save The saved user is the same as the inputted user	
Bug Found	false	

<b>Purpose</b>	A valid user should be inserted in the database
testCreateUser_withExistingUsername_shouldThrow	
<b>Input Specification</b>	user
	username: USERNAME
	password: PASSWORD
	firstName: FIRSTNAME lastName: LASTNAME
<b>Expected Output</b>	ValidationException is thrown
<b>Actual Output</b>	ValidationException is thrown
<b>Bug Found</b>	false
<b>Purpose</b>	A user cannot be created if the username is already taken

com.github.comp354project.model.user.UserService.deleteBankAccount(Account)

Table 4: deleteBankAccount(Account)

Tester Name	Anne-Laure	
Test Date	3/7/18	
Class Name	com.github.comp354project.model.user.UserService	
Method Name	deleteBankAccount(Account)	
Purpose	This test suite tests the deletion of a bank account	
Use Cases	04	
Test Scenarios		
testDeleteBankAccount_withNullAccount_ShouldThrow		
Input Specification	account	
	null	
Expected Output	ValidationException is thrown	
Actual Output	ValidationException is thrown	
Bug Found	false	
Purpose	No null account can be passed to the function	
testDeleteBankAccount_withoutBeingLoggedIn_ShouldThrow		
Input Specification	account	testUser
	ID: 1 user: testUser bankName: TD type: Checking balance: 15823.12	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111
Expected Output	AuthenticationException is thrown	
Actual Output	AuthenticationException is thrown	

Bug Found	false		
Purpose	A user that is not authenticated cannot delete his accounts		
testDeleteBankAccount_withoutProperAuthorisation_ShouldThrow			
Input Specification	testUser	user2	testAccount
	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111	username: username password: password firstName: firstname lastName: lastname ID: 999	ID: 1 user: testUser bankName: TD type: Checking balance: 15823.12
Expected Output	AuthorisationException is thrown		
Actual Output	AuthorisationException is thrown		
Bug Found	false		
Purpose	A user cannot modify the accounts of another user		
testDeleteBankAccount_WithProperAuthorisation_ShouldSucceed			
Input Specification	testUser	testAccount	invocationCount
	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111	ID: 1 user: testUser bankName: TD type: Checking balance: 15823.12	1
Expected Output	Execution of the deletion of the account once		
Actual Output	Execution of the deletion of the account once		
Bug Found	false		
Purpose	An authenticated user should succeed in deleting his own bank accounts		

com.github.comp354project.model.user.UserService.deleteUser(User)

Table 5: deleteUser(User)

<b>Tester Name</b>	Abed Jawhar
<b>Test Date</b>	3/13/18
<b>Class Name</b>	com.github.comp354project.model.user.UserService
<b>Method Name</b>	deleteUser(User)
<b>Purpose</b>	This test suite tests the creation of a user
<b>Use Cases</b>	02
<b>Test Scenarios</b>	

testDeleteUser_withNullUser_shouldThrow				
Input Specification	user			
	null			
Expected Output	ValidationException is thrown			
Actual Output	ValidationException is thrown			
Bug Found	false			
Purpose	A null user can't be deleted			
testDeleteUser_withNonexistantUser_shouldThrow				
Input Specification	testUser			
	ID: 1			
	firstName: Hrachya			
	lastName: Hakobyan			
	username: admin			
	password: admin			
	email: sample@email.com			
	address: address			
phone: 111111				
Expected Output	ValidationException is thrown			
Actual Output	ValidationException is thrown			
Bug Found	false			
Purpose	A user that does not exist can't be deleted			
testDeleteUser_withExistingtUser_shouldSucceed				
Input Specification	testUser	returnSize		
	ID: 1	0		
	firstName: Hrachya			
	lastName: Hakobyan			
	username: admin			
	password: admin			
	email: sample@email.com			
address: address				
phone: 111111				
Expected Output	The number of users with ID 1 is 0			
Actual Output	The number of users with ID 1 is 0			
Bug Found	false			
Purpose	A valid user should be deleted			
testDeleteUser_withExistingtUser_shouldDeleteAssociatedAccounts				
	testUser	testAccount	returnSize	deleteAccountInvo



<b>Input Specification</b>	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111	ID: 1 user: testUser bankName: TD type: Checking balance: 15823.12	0	1
<b>Expected Output</b>	The number of users with ID 1 is 0 Delete account should be invocated 1 time			
<b>Actual Output</b>	The number of users with ID 1 is 0 Delete account should be invocated 1 time			
<b>Bug Found</b>	false			
<b>Purpose</b>	A valid user should be deleted and his accounts also			

`com.github.comp354project.model.user.UserService.updateUser(User)`

Table 6: updateUser(User)

<b>Tester Name</b>	Abed Jawhar
<b>Test Date</b>	3/13/18
<b>Class Name</b>	com.github.comp354project.model.user.UserService
<b>Method Name</b>	updateUser(User)
<b>Purpose</b>	This test suite tests the update of a user
<b>Use Cases</b>	02
<b>Test Scenarios</b>	
testUpdateUser_withNullUser_shouldThrow	
<b>Input Specification</b>	user
	null
<b>Expected Output</b>	ValidationException is thrown
<b>Actual Output</b>	ValidationException is thrown
<b>Bug Found</b>	false
<b>Purpose</b>	A null user can't be updated
testUpdateUser_withNonexistentttUser_shouldThrow	
testUser	

Input Specification	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111			
Expected Output	ValidationException is thrown			
Actual Output	ValidationException is thrown			
Bug Found	false			
Purpose	A user that does not exist can't be updated			
testUpdateUser_withValidUser_shouldSucceed				
Input Specification	testUser	firstName	lastName	password
	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111	Abed	jawhar	admin2
Expected Output	The firstName is updated to 'Abed' The lastName is updated to 'jawhar' The password is updated to 'admin2'			
Actual Output	The firstName is updated to 'Abed' The lastName is updated to 'jawhar' The password is updated to 'admin2'			
Bug Found	false			
Purpose	A valid user should be updated			

`com.github.comp354project.model.auth.SessionManager.login(username, password)`

Table 7: login(username, password)

<b>Tester Name</b>	Hrachya
<b>Test Date</b>	2/7/18
<b>Class Name</b>	com.github.comp354project.model.auth.SessionManager
<b>Method Name</b>	login(username, password)
<b>Purpose</b>	This test suite tests the login of a user
<b>Use Cases</b>	02
<b>Test Scenarios</b>	

testLogin_withInvalidCredentials_shouldThrow					
Input Specification	username	password			
Expected Output	ValidationException is thrown				
Actual Output	ValidationException is thrown				
Bug Found	false				
Purpose	A user with invalid credentials should not be able to login				
testLogin_withValidCredentials_shouldReturnUser					
Input Specification	testUser	username	password	loggedIn	authenticateInvoc
	ID: 1 firstName: Hrachya lastName: Hakobyan username: admin password: admin email: sample@email.com address: address phone: 111111			true	1
Expected Output	The method authenticate is invoked 1 time The user is logged in The logged in user is equal to 'testUser' object				
Actual Output	The method authenticate is invoked 1 time The user is logged in The logged in user is equal to 'testUser' object				
Bug Found	false				
Purpose	A user with valid credentials should be able to login				
testLogin_withLoggedInUser_shouldThrow					
Input Specification	username	password			
Expected Output	UserLoggedInException is thrown				
Actual Output	UserLoggedInException is thrown				
Bug Found	false				
Purpose	A user that is already logged in should not be able to login again				

`com.github.comp354project.model.auth.SessionManager.logout()`

Table 8: logout()

<b>Tester Name</b>	Hrachya
<b>Test Date</b>	2/7/18
<b>Class Name</b>	com.github.comp354project.model.auth.SessionManager
<b>Method Name</b>	logout()
<b>Purpose</b>	This test suite tests the function to logout

Use Cases	02			
Test Scenarios				
testLogin_withInvalidCredentials_shouldThrow				
Input Specification	username	password	isLoggedIn	currentUser
			false	null
Expected Output	After logout, the login status should be false			
	After logout, the current user should be null			
Actual Output	After logout, the login status should be false			
	After logout, the current user should be null			
Bug Found	false			
Purpose	A user should be completely logged out of the application			

*All test cases for testing at the unit level.*

*One subsection per unit*

**Unit X**

## 3 Test Results

*List the tests, indicating which passed and which did not pass. List requirements indicating the percentage of tests that passed for that requirement.*

## 4 References

### A Description of Input Files

Describe/include test data from input files.

### B Description of Output Files

Describe/include test expected output that are output files.