Deliverable IV: Complete Testing Framework
Project: Martus

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Task: Complete the design and implementation of your testing framework as specified in **Deliverable #3**. You are now ready to test your project in earnest. You will create 25 test cases that your framework will automatically use to test your H/FOSS project. Document progress on wiki.

Deliverable:

We designed a testing framework built around the Project Specifications, which serves to test three different methods within the Martus Project. The folder structure itself also contains the Martus files that we are testing. Each folder within the framework contains the files pertinent to the folders name and testCasesExecutables, which contains our testing suite, made up of a driver and testing class.

Our script, runAllTests, will scan the contents of the testCases folder then run the various test on these examples based on the information provided, as well as the specified driver file at the bottom of the text file.

Experiences:
The overall experience continues to be a good one. We have smoothed out some of our previous issues and have finished creating the necessary 25 test cases to test the autonomous framework that we have designed.

How-to:

-Step one: Clone repository to a chosen directory
-Step two: Navigate to the parent directory (TestAutomation) in terminal -Step three: Run the "bash ./scripts/runAllTests.sh" command
-Step four: Results of all tests should be displayed in the terminal
-Step five: View the table displayed in your browser

Test Cases print out within browser:

```
#Test case number
#Requirement being tested
#Class name
#method name
#test input
#expected output
#driver used

03
The method should return true if the input password length is greater than 15 and has at least 2 non-alphabetical characters.
MartusUserNameAndPassword
isWeakPassword
TestedPassword21
true
testCase1
```

```
#Test case number
#Requirement being tested
#Class name
#method name
#test input
#expected output
#driver used

05
The method should return NoError if the password was longer than 8 characters and didn't match the username, or it should return the exception generated.
MartusUserNameAndPassword
validateUserNameAndPassword
TestUserName,TestUserName
PasswordMatchedUserNameException
testCase2
```

```
#Test case number
#Requirement being tested
#Class name
#method name
#test input
#expected output
#driver used

15
The method should return the correct date format
MartusFlexidate
toStoredDateFormat
3,11,29
0003-11-29
testCase4
```

Results:

TestCase Number	Method	Input	Expected Output	Actual Output	Oracle Pass/Fail
01	isWeakPassword	password	true	true	pass
02	isWeakPassword	Testedpassword$$	false	false	pass
03	isWeakPassword	TestedPassword21	true	true	pass
04	validateUserNameAndPassword	TestUserName,TestPassword&&	NoError	NoError	pass
05	validateUserNameAndPassword	TestUserName,TestUserName	PasswordMatchedUserNameException	PasswordMatchedUserNameException	pass
06	validateUserNameAndPassword	TestUserName_1,TestUserName_1	PasswordMatchedUserNameException	PasswordMatchedUserNameException	pass
07	validateUserNameAndPassword	"",passwordTest_01	NoError	NoError	pass
08	validateUsernameAndPassword	testUser,test021	PasswordTooShortException	PasswordTooShortException	pass
09	getCombinedPassPhrase	testUser,test021	test021:testUser	test021:testUser	pass
10	getCombinedPassPhrase	testUser,	ArrayIndexOutOfBoundsException	ArrayIndexOutOfBoundsException	pass
11	getCombinedPassPhrase	,testPassCombo	testPassCombo:	testPassCombo:	pass
12	getCombinedPassPhrase	,,:	::,	:	fail
13	getCombinedPassPhrase	:,:	:::	:::	pass
14	toStoredDateFormat	0	1970-01-01	1970-01-01	pass
15	toStoredDateFormat	3,11,29	0003-11-29	0003-11-29	pass
16	toStoredDateFormat	3,11	ArrayIndexOutOfBoundsException	ArrayIndexOutOfBoundsException	pass
17	toStoredDateFormat	9990,18,40	9991-07-10	9991-07-10	pass
18	toStoredDateFormat	-,-,-	NumberFormatException	NumberFormatException	pass
19	getMartusFlexidateString	2003-01-05,2	20030105+2	20030105+2	pass
20	getMartusFlexidateString	100-05-20,2	NumberFormatException	NumberFormatException	pass
21	getMartusFlexidateString	0100-05-20,9999999999	NumberFormatException	NumberFormatException	pass
22	extractIsoDateFromStoredDate	1989-11-29	1989--1-1-	1989--1-1-	pass
23	extractIsoDateFromStoredDate	189-11-29	189--11--2	189--11--2	pass
24	extractIsoDateFromStoredDate	19981129	1998-11-29	1998-11-29	pass
25	extractIsoDateFromStoredDate	0031129	StringIndexOutOfBoundsException	StringIndexOutOfBoundsException	pass
26	isWeakPassword		true	EmptyArgument	fail