

DesktopHandlerTest result:

eclipse-workspace - BankProject/src/DesktopHandlerTest.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

The screenshot displays the Eclipse IDE interface. The top toolbar includes icons for File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. Below the toolbar, the Package Explorer on the left shows the project structure with DesktopHandlerTest.java selected. The main editor area displays the source code of DesktopHandlerTest.java, which includes a @Test method stage1_testLoginType(). The code sets up a test environment with a bank number, username, password, sender, type, and status, then sends a message to the server and asserts the response. The bottom console window shows the output of the test, including the test name, the test method, and the test results for each stage.

inshied after 0.268 seconds

Runs: 6/6 Errors: 0 Failures: 0

DesktopHandlerTest [Runner: JUnit 5] (0.061 s)

- stage1_testLoginType (0.000 s)
- stage2_testAuthorizationType (0.002 s)
- stage3_testInquiryType (0.006 s)
- stage4_testUpdateType (0.035 s)
- stage5_testLogout (0.010 s)
- stage6_testNotType (0.003 s)

```
26 }
27
28 @Test
29 public void stage1_testLoginType() {
30     System.out.println("***Bank1-Internal Test***\n");
31     String username = "Cat"; // Cat/Dog/Duck *fail if username used is not as li:
32     String password = "1234"; // 1234/2345/3456 *fail if password used is not as :
33     String sender = "desktop";
34     String type = "login";
35     String status = "";
36     String text = username + "," + password;
37
38     dtMsgTest = new Message(bankNum ,sender,type,status,text);
39     dtTest = new ClientHandlerMethod(dtMsgTest);
40
41     Message svrMsg = dtTest.desktopHandler(dtMsgTest);
42     String msgStatus = svrMsg.getStatus(); // Client looks for
43
44     System.out.println("Employee login: " + msgStatus);
45     assertTrue("success".equalsIgnoreCase(msgStatus));
46 }
```

Problems Javadoc Declaration Console

<terminated> DesktopHandlerTest [JUnit] C:\Users\b0yra\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64

Bank1-Internal Test

Employee login: success

Authorization login: authorized

CustomerInfo and AccountInfo: 3456,4567,888888,0202,Doe,J,96 Sun,4567,checking,in use,2.00

Number of object in text: 11

Inquiry 'status' from server: success

Update: success

Logout status: success

No 'type' return from server: 1,desktop,login,failed,how are you

ATMHandlerTest result:

eclipse-workspace - BankProject/src/ATMHandlerTest.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer JUnit ×

Finished after 0.339 seconds

Runs: 6/6 Errors: 0 Failures: 0

ATMHandlerTest [Runner: JUnit 5] (0.085 s)

- stage1_Bank1testAcceptCard (0.023 s)
- stage2_Bank1testRejectCard (0.004 s)
- stage3_Bank1testRejectUseRepeatedCard (0.003 s)
- stage4_Bank1testChangeAndSave (0.016 s)
- stage5_Bank2testAcceptCard (0.016 s)
- stage6_Bank2testChangeAndSave (0.018 s)

```
26 }
27
28 @Test
29 public void stage1_Bank1testAcceptCard() {
30     System.out.println("***Bank1-ATM Test***\n");
31     aAccount.loadData(acctFile);
32     int aCount = 0;
33     int bCount = 0;
34
35     for(int i = 0; i < aAccount.getNumAcct(); i++) {
36         if("not used".equalsIgnoreCase(aAccount.getStatus(i))) {
37             aCount++;
38         }
39     }
40     System.out.println("Before login - Number of account: " + aCount);
41
42     atmMsgTest = new Message("1", "ATM", "login", "", "77777");
43     atmTest = new ClientHandlerMethod(atmMsgTest);
44     atmMsgTest = atmTest.atmHandler(atmMsgTest);
45
46     String msgStatus = atmMsgTest.getStatus();
```

Problems Javadoc Declaration Console ×

<terminated> ATMHandlerTest [JUnit] C:\Users\b0yra\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full\jre\bin\java.exe

Bank1-ATM Test

Before login - Number of accounts 'not used' status: 4
ATM(correct pin) - Card accepted: success
After login - Number of accounts 'not used' status: 3

ATM(incorrect pin) - Card accepted: failed

Using card already in use: Account is in use

ATM - Before logout account info: 2345,checking,in use,341.08
ATM - Logout status: success
ATM - After logout account info: 2345,checking,not used,361.08

Bank2-ATM Test

Before login - Number of accounts 'not used' status: 2
ATM(correct pin) - Card accepted: success
After login - Number of accounts 'not used' status: 1

ATM - Before logout account info: 6789,checking,in use,1601.09
ATM - Logout status: success
ATM - After logout account info: 6789,checking,not used,1621.09

ServerTestsRunner result:

```
ServerTestsRunner.java ×
1 import org.junit.runner.JUnitCore;
4
5 public class ServerTestsRunner {
6     public static void main(String[] args) {
7         Result result = JUnitCore.runClasses(AllTests.class);
8
9         for (Failure failure : result.getFailures()) {
10             System.out.println(failure.toString());
11         }
12
13         System.out.println("All tests success: " + result.wasSuccessful());
14     }
15 }
16 }
17
```

```
Problems @ Javadoc Declaration Console ×
<terminated> ServerTestRunner [Java Application] C:\Users\b0yra\.p2\pool\plugins\org.eclipse.justj.c
Number of object in text: 11
Inquiry 'status' from server: success

Update: success

Logout status: success

No 'type' return from server: 1,desktop,login,failed,how are you
***Bank1-ATM Test***

Before login - Number of accounts 'not used' status: 4
ATM(correct pin) - Card accepted: success
After login - Number of accounts 'not used' status: 3

ATM(incorrect pin) - Card accepted: failed

Using card already in use: Account is in use

ATM - Before logout account info: 2345,checking,in use,321.08
ATM - Logout status: success
ATM - After logout account info: 2345,checking,not used,341.08

***Bank2-ATM Test***

Before login - Number of accounts 'not used' status: 2
ATM(correct pin) - Card accepted: success
After login - Number of accounts 'not used' status: 1

ATM - Before logout account info: 6789,checking,in use,1581.09
ATM - Logout status: success
ATM - After logout account info: 6789,checking,not used,1601.09
All tests success: true
```