

Lab Report for Software Engineering course
Lab 3: Starbubucks coffee online retailing system
v2.0

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Contents

1	Overview of this Lab	2
2	Tools adopted for quality analysis	3
2.1	Junit	3
2.2	JMock	3
3	Features added to the project	4
4	Features tested in the project	5
4.1	Login method	5
4.1.1	Login successfully	5
4.1.2	Login failed	5
4.2	Sign up method	5
4.3	Username checking method	5
4.4	Password checking method	5
4.5	Status checking method	5
4.6	Cost checking method	5

Chapter 1

Overview of this Lab

Chapter 2

Tools adopted for quality analysis

2.1 Junit

JUnit is a unit testing framework for the Java programming language. JUnit has been important in the development of test-driven development, and is one of a family of unit testing frameworks which is collectively known as xUnit that originated with SUnit.

JUnit is linked as a JAR at compile-time; the framework resides under package `junit.framework` for JUnit 3.8 and earlier, and under package `org.junit` for JUnit 4 and later.

2.2 JMock

JMock is a library that supports test-driven development of Java code with mock objects.

Mock objects help you design and test the interactions between the objects in your programs.

The jMock library:

1. makes it quick and easy to define mock objects, so you don't break the rhythm of programming.
2. lets you precisely specify the interactions between your objects, reducing the brittleness of your tests.
3. works well with the autocompletion and refactoring features of your IDE
4. plugs into your favourite test framework is easy to extend.

Chapter 3

Features added to the project

Chapter 4

Features tested in the project

4.1 Login method

The whole test for login can be divided into two functions: the one for login successfully and the other for login failure.

4.1.1 Login successfully

`assertTrue` method is used in this test function.

4.1.2 Login failed

`assertEquals` method is used in this test function. If we fail to login, a runtime exception will be thrown. Therefore, we should compare the message of exception with the expected string.

4.2 Sign up method

4.3 Username checking method

4.4 Password checking method

4.5 Status checking method

4.6 Cost checking method

Bibliography

- [1] Wikipedia contributors. (2018, December 24). Version control. In *Wikipedia, The Free Encyclopedia*. Retrieved 06:12, March 10, 2019, from https://en.wikipedia.org/w/index.php?title=Version_control&oldid=875227317
- [2] Wikipedia contributors. (2019, March 10). Systems development life cycle. In *Wikipedia, The Free Encyclopedia*. Retrieved 06:13, March 10, 2019, from https://en.wikipedia.org/w/index.php?title=Systems_development_life_cycle&oldid=887015682
- [3] Stolen, L. H. (1999). Distributed control system. *international telecommunications energy conference*.
- [4] Murayama, T. (1991). Distributed Control System. *international conference on advanced robotics robots in unstructured environments*.
- [5] Wikipedia contributors. (2019, March 6). Distributed control system. In *Wikipedia, The Free Encyclopedia*. Retrieved 06:18, March 10, 2019, from https://en.wikipedia.org/w/index.php?title=Distributed_control_system&oldid=886468871