

Lab 2. Understanding Asserts

Challenge

1. Explain what the purpose of each method added in the step 1 is
whenAssertingEquality_thenEqual(): Tests if strings are equal
whenAssertingArraysEquality_thenEqual(): Tests if arrays are equal
givenNullArrays_whenAssertingArraysEquality_thenEqual(): Tests if arrays are equal with empty arrays
whenAssertingNull_thenTrue(): Tests if value is Null
whenAssertingNotSameObject_thenDifferent(): Tests if two variables don't refer to the same object.
whenAssertingConditions_thenVerified(): Tests Boolean conditions
2. Modify the method whenAssertingEquality_thenEqual changing the actual string to "Not today", run and see the results, then update the method to use the commented assert instead of assertEquals. What is the difference of both asserts?
Test fails now, AssertEquals with a string displays a message.
3. Create whenAssertingNull_thenFalse method based on whenAssertingNull_thenTrue and make test pass

```
@Test
public void whenAssertingNull_thenFalse() {
    Object longclaw = new Object();
    assertNotNull(longclaw, "The longclaw should not be null");
}
```

4. Create whenAssertingSameObject_thenSame method based on whenAssertingNotSameObject_thenDifferent and make test pass

```
@Test
public void whenAssertingSameObject_thenSame() {
    Object oathkeeper = new Object();
    Object widowswall = oathkeeper;
    assertSame(oathkeeper, widowswall);
}
```

5. Modify the methodThatShouldThrowException method to make the whenCheckingExceptionMessage_thenEqual fail

```
public void methodThatShouldThrowException() {
    throw new UnsupportedOperationException("Different Message");
}
```

6. Modify testAssertThatHasItems method to make it pass

```
@Test
public void testAssertThatHasItems() {
```

```
        assertThat(Arrays.asList("Harrenhal", "Dragonstone",  
                                "Winterfell", "Riverrun")).contains("Winterfell", "Riverrun");    }
```

7. Modify testMultiply method to use the proper assert and to pass the test

```
@Test  
public void testMultiply() {  
    try {  
        OtherClass multiplier = new OtherClass();  
        multiplier.multiply(5, 10);  
    } catch (IllegalArgumentException e) {  
        assertEquals("X should be less than 1000", e.getMessage());  
    }  
}
```

8. Modify testMultiply_ExceptionIsThrown method to use the proper assert and to pass the test

```
@Test  
public void testMultiply_ExceptionIsThrown() {  
    try {  
        OtherClass multiplier = new OtherClass();  
        multiplier.multiply(5000, 10);  
    } catch (IllegalArgumentException e) {  
        assertEquals("X should be less than 1000", e.getMessage());  
    }  
}
```

Git Repo:

<https://github.com/GerardoSoftwareQualityAndTesting/Lab-2.git>