Chapter 2

Experiences

We struggled with deliverable 2 for several reasons. We still feel a little unsure about the Test Template as different people on our teams had varied interpretations of what that meant. We were initially searching for a class that had at least five testable methods, which we never found, but we were informed that the methods didn't have to all come from the same file. We finally chose a file to at least base the first five test cases on, but we didn't think through needing a method that takes input. To find methods to test, we chose ColorCombinaisonImpl.java and decided on the method public boolean equals(Object obj).

Report

Once we chose ColorCombinaisionImpl and equals(obj), it became clear on what we need to test. This method checks that the color combination that is being suggested is valid. It will fail if the object is null, isn't a ColorCombinaisionImpl object, or the colors differ between objects. The method will otherwise pass.

Our five tests on this method should test the three ways to fail and cases to pass. Case 1 includes the comparison object being tested against itself, which should pass. Case 2 will be the correct object type with the same values as the comparison object, which we expect to pass. Case 3 will be the correct object, but with color values that differ from the comparison object, which will fail. Case 4 will pass null into the method, which will fail. Case 5 will fail, since the input won't even be the correct object type.

Test Plan

In these test cases, the comparison object will be constructed as ColorCombinaisonImpl(Color(0,0,255), Color(255,0,0), 50).

Test Template:

1. Test ID
2. Requirement being tested
3. Component being tested
4. Method being tested
5. Test input(s) including command line argument(s)
6. Expected outputs

Case 1:

1. 01
2. The object itself, equals itself.
3. ColorCombinaisonImpl
4. equals(obj)
5. this
6. true

Case 2:

1. 02
2. The object must be of type ColorCombinaisonImpl and valid colors.
3. ColorCombinaisonImpl
4. equals(obj)
5. ColorCombinaisonImpl(Color(0,0,255), Color(255,0,0), 50)
6. true

Case 3:

1. 03
2. The object must be of type ColorCombinaisonImpl and valid colors.
3. ColorCombinaisonImpl
4. equals(obj)
5. ColorCombinaisonImpl(Color(255,0,0), Color(0,0,255), 50)
6. false

Case 4:

1. 04
2. Null is not a valid object.
3. ColorCombinaisonImpl
4. equals(obj)
5. null
6. false

Case 5:

1. 05
2. Only the ColorCombinaisonImpl object is valid
3. ColorCombinaisonImpl
4. equals(obj)
5. String "test"
6. false