The testing process

Testing will be carried out by running a runAllTests script from the linux command line that will walk through the testCases folder and use the specification files to execute each test case. This will be shown in an html file comparing the results to what is expected.

Requirements Traceability

The Tanaguru software should be able to properly calculate the contrast between two colors, as well as produce a more favorable color combination if needed.

Tested items

We are testing various methods from the Tanaguru Contrast Finder software.

DistanceCalculator.java: calculate

And 4 other methods

Testing Schedule

The schedule for testing will follow along with the class deadlines.

Test recording procedures

When the testing framework is invoked, a html file will be created and opened in a browser to display the results of the tests.

Hardware and software requirements

The testing framework will be run from the Linux command line using Java 7. The rest will be included in the testing framework.

Report

After looking through both the Tanaguru Contrast Finder and STEM source code, we decided to go with Tanaguru due to STEM's extensive code dependencies. When making the test cases for the calculate method, we found that what the documentation says the method returns is incorrect. It says it uses the distance formula but the code itself uses cubic operations rather than squared. Because of this we decided to base our expected outcomes on the code's formula.

Test Case Specifications:

Test ID

Tested class

Tested method

Method Parameters

Command line

Expected outcomes

calculate_1

DistanceCalculator.java

Calculate

Color(255,255,255), Color(0,0,0)

java /testCasesExecutables/calculate_1.java

255.0

calculate_2

DistanceCalcualtor.java

Calculate

Color(0,0,0), Color(255,255,255)

java /testCasesExecutables/calculate_2.java

255.0

calculate_3

DistanceCalculator.java

Calculate

Color(0,0,0), Color(0,0,0)

java /testCasesExecutables/calculate_3.java

0.0

calculate_4

DistanceCalcualtor.java

Calculate

Color(255,200,34), Color(255,255,17)

java /testCasesExecutables/calculate_4.java

54.45

calculate_5

DistanceCalcualtor.java

Calculate

Color(200,7,16), Color(57,57,57)

java /testCasesExecutables/calculate_5.java

139.77