

ASAP PAINT TOOL

OSP 3RD CYCLE

PRESENTOER T4. Lim, Min-woo
dn3108@gmail.com

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- SYSTEM TEST DEALING REPORT
- UNIT TEST REPORT
- STATIC ANALYSIS DEALING REPORT
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SYSTEM TEST DEALING REPORT (1/2)

- Usecase 4.1 Image rotation
Pixel losing when rotation revoked.
Ex> When rotated 60 degrees.

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SYSTEM TEST DEALING REPORT (2/2)

- Usecase 4.1 Image rotation

Solution> limitations of variable ranges in Double type.

When rotations revoked, double type's variables lose their exact pixel values when not in 90, 180, 270, 360, etc degrees.

Every degrees but 90, 180, 270, 360 degrees can be rotated in normal way.

Limit of knowledge and experience of data handling.

Unit Test Report (1/3)

1. When user revoke 'New File', 'Load' and 'Save', We put exception handling code into those logics. (Time Exceeding)
2. Time consuming when Oval circle drawing. Because algorithms takes too much time to operate Double data types.
3. Like no.2, Accessing clipboard takes more than operate double data.

All the functions unit test were perfectly done.

Unit Test Report (2/3)

The screenshot shows the JUnit test runner interface in an IDE. The window title is "JUnit". The status bar indicates "Finished after 3.813 seconds", "Runs: 21/21", "Errors: 0", and "Failures: 0". A green progress bar is visible in the top right corner. The test suite "ASAP.Canvas.MYCanvasTest [Runner: JUnit 4] (3.804 s)" is expanded, showing a list of 21 individual test methods, each with a green checkmark icon and its execution time in seconds.

Test Method	Execution Time (s)
testDrawPixel	0.465
testCopyAllImage	0.398
testCutAllImage	0.233
testRotateImage1	0.154
testRotateImage2	0.150
testRotateImage3	0.189
testResizeImage1	0.081
testResizeImage2	0.112
testReverseImage1	0.185
testReverseImage2	0.180
testReverseImage3	0.103
testSetSelectArea	0.143
testMoveSelected1	0.143
testMoveSelected2	0.323
testReleaseSelected	0.135
testDrawingSpeed	0.114
testExpandview	0.115
testExpandviewfull	0.124
testReduceview	0.116
testReduceviewfull	0.099
testGetImageSize	0.240

Unit Test Report (3/3)

Markers Properties Servers Data Source Explorer Snippets Console Progress History JUnit

Finished after 0.46 seconds

Runs: 1/1 Errors: 0 Failures: 0

- ASAP.Tools.BrushToolTest [Runner: JUnit 4] (0.453 s)
 - testSetEndPoint (0.453 s)

Failure Trace

Markers Properties Servers Data Source Explorer Snippets Console Progress History JUnit

Finished after 0.442 seconds

Runs: 1/1 Errors: 0 Failures: 0

- ASAP.Tools.CircleToolTest [Runner: JUnit 4] (0.437 s)
 - testSetEndPoint (0.437 s)

Failure Trace

Markers Properties Servers Data Source Explorer Snippets Console Progress History JUnit

Finished after 0.446 seconds

Runs: 1/1 Errors: 0 Failures: 0

- ASAP.Tools.EraseToolTest [Runner: JUnit 4] (0.427 s)
 - testSetEndPoint (0.427 s)

Failure Trace

Markers Properties Servers Data Source Explorer Snippets Console Progress History JUnit

Finished after 0.474 seconds

Runs: 1/1 Errors: 0 Failures: 0

- ASAP.Tools.PipetteToolTest [Runner: JUnit 4] (0.468 s)
 - testSetEndPoint (0.468 s)

Failure Trace

Static Analysis Dealing Report (1/3)

- Result of Sonar report.
 - Code duplication in many spots.
 - Empty If statements.
 - Empty exception handling when finally statement.
 - Unused variables in many spots.
 - Unnecessary return statements although they have nothing to return.(NULL)
 - Not using protected, but using private(In class)

Static Analysis Dealing Report (2/3)

- Result of Jarchitect report.
 - Dependency problems: Nested loop depends each packages.
 - Too big methods.
 - Singleton pattern problems: Memory abusing.
 - Object-Oriented designing.

Static Analysis Dealing Report (3/3)

- Result of Clover report.
 - We don't need to have unit test on Abstract class and structured classes.
 - Almost methods or portions in code are perfectly passed.

Static Analysis Dealing Report (4/4)

- Result of JDepend report.
 - Cycle dependency in Result of Jarchitect Report
 - Abstraction zero: not declared of abstract.

THE END