# ASAP PAINT TOOL

OSP 3<sup>RD</sup> CYCLE

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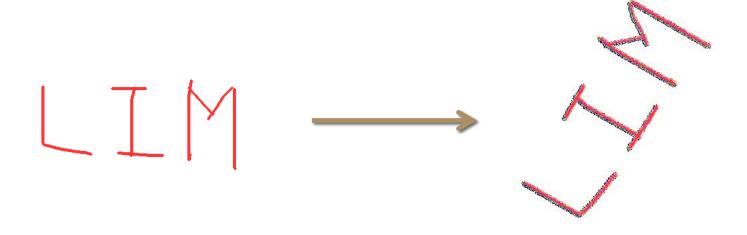dn3108@gmail.com

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- SYSTEM TEST DEALING REPORT
- UNIT TEST REPORT
- STATIC ANALYSIS DEALING REPORT
- CONCLUSION

# SYSTEM TEST DEALING REPORT (1/2)

- Usecase 4.1 Image rotation

Pixel losing when rotation revoked.

Ex> When rotated 60 degrees.

# 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.

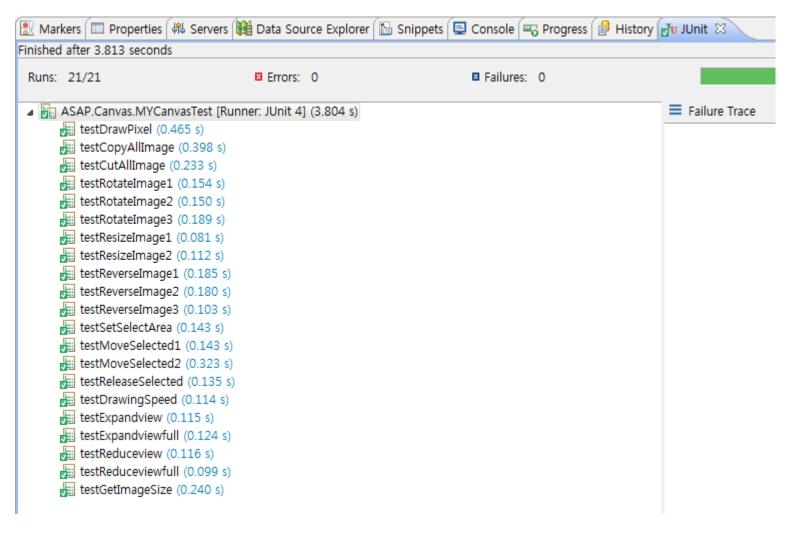Every degrees but 90, 180, 270, 360 degrees can be rotated in normal way.

**Limit of knowledge and experience of data handling.**

# Unit Test Report (1/3)

1. When user revoke 'New File', 'Load' and 'Save', We put <span style="color:red"><u>exception handling</u></span> 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.

**<u>All the functions unit test were perfectly done.</u>**

# Unit Test Report (2/3)

# Unit Test Report (3/3)

# 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