TERM PROJECT : Server-Client RMI Whiteboard

1. Introduction
   In this project you will learn about GUI programming. You implement a paint and connect it to a network by RMI. That is, paints share the same result.

2. Design
   Using the given skeleton code that already declared methods. Students just fill the constructor and method. RMI module is already implemented.

3. Requirements
   Implement a button to select the shape(Line/Circle/Rectangular) and a choice menu to select a color(Black/Red/Green/Blue) and a ShapeContainer to draw a paint.
4. Running program

In the cmd window, move to class folder and type command

```
rmic WhiteBoardServiceImpl
Java WhiteBoardServiceImpl server localhost
Java WhiteBoardServiceImpl client localhost
```

5. Implement

A. Add a button

1. Make a Panel instance in Constructor of DrawingFrame
   ```java
   buttonPanel = new Panel();
   ```

2. Add a button(Line, Circle, Rectangular, Clear ALL)
   ```java
   new ButtonController(this);
   Button b1 = new("line");
   jF.getButtonPanel().add(b1);
   ```

3. align panel at South
   ```java
   getContentPane().add("South", buttonPanel);
   ```

4. Set a action when button is clicked.
   ```java
   if(ae.getActionCommand().equals("line")) {
       bT.setShape(new Shape().LINE);
   }
   ```
B. Add a choice menu
C. Add a name panel
D. Add a ShapeContainer

E. Declare MouseController Class
   Declare CanvasMouseController in constructor of DrawingFrame, Define Constructor and Method. You don’t need to define all the method.
   (hint : DrawingFrame class - removeFrontShape(), addShape())

F. Draw Line, Circle, Rectangular
   First of all you need to call all of Paint Method. Also fill Line/Circle/Rectangular method
Blue: Link(Listener)
Red: Class Hierarchy
Green: Contain
6. Submission – Compressed file that source code and report

   **Name:** PROJ_STUDENT ID_NAME.zip

   1. Source Code
      - It is recommended that you create a batch file for compiling such Compile.bat

   2. Report
      - Free-form
      - Detailed description of code
      - Need screen capture running program
      - PDF, DOC, HWP

   3. How to submit
      - snu.comp2015@gmail.com
      - Deadline 6 월 18 일 23 시 59 분
      - Mail on the subject “[COMP-PROJ]STUDENT ID_NAME”