

# Project 5-2

## GUI Programming\*

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### I. OBJECTIVE

Write a program that displays the Olympic rings. Make the rings colored in the Olympic colors. If you like to make it fancier, you can add "USA" on top the rings (not required).

You are not required to draw exactly the same as in the pictures. Anything looks similar is fine. And the color in the intersection part of the rings is not strictly required.

### II. ALGORITHM

#### II.1 Draw the Picture

By extending *JFrame*, we are free to use some draw methods to draw. When *setVisible(true)* is executed, *paint(Graphics g)* will be executed automatically. In this method, *drawOval()* is used to draw the circle with the coordinates of the left upper corner. Meanwhile, *setColor()* is used to set the color of the circles. And *drawString()* is used to print strings.

The distance among the three circles in the first row should be less than the diameter. And the centers of the nearest three circles should almost make an equilateral triangle. Then we will get the coordinates of each circles.

#### II.2 More details

To overstrike the circle, *Graphics2D* is used to make it free to use *setStroke()* method. Besides, *setFont()* is used to set the font type and font size of Strings.

### III. RESULTS AND CONCLUSIONS

#### III.1 Environment

- Windows 8
- NetBeans IDE 7.3

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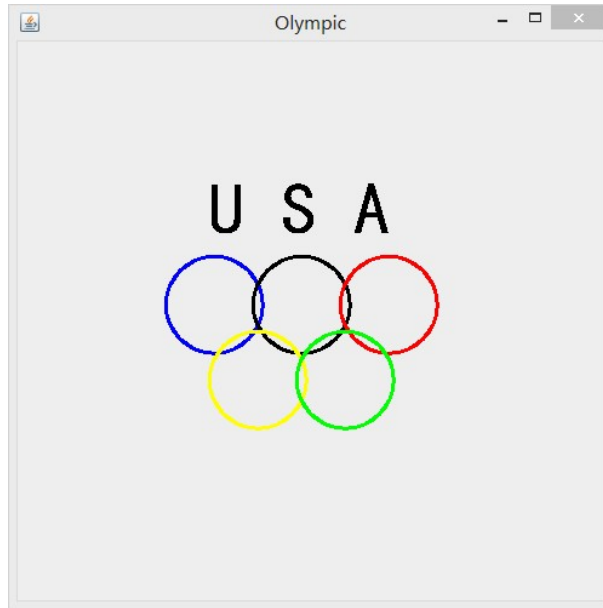
\*Designed by L<sup>A</sup>T<sub>E</sub>X

### III.2 Screenshots of the result

Use JVM to compile and execute the program in Figure 1.

### III.3 Thoughts

With Java, GUI programming is becoming much easier.



**Figure 1:** *Screenshots of GUI Programming*