

Lab #3 - Week 4 - Introduction to Java GUI Drawing

In this lab, we will explore some basic GUI drawing using *Java* and its *SDK*.

Lab setup:

- Create a project named Week4LastnameFirstname
 - Create appropriately named packages for your classes
1. **(50 points)** Draw 10 concentric squares of alternating light gray (`Color.LIGHT_GRAY`) and gray (`Color.GRAY`) color in the center of a `JPanel` (see the figure below for our example image). The innermost square should have sides of 10 pixels, and each successive square should have sides 10 pixels larger than the previous one. Begin by finding the center of the `JPanel` using `getWidth` and `getHeight` methods.

Note: Use the GUI classes that we have covered in class, such as, `javax.swing.JFrame`, `javax.swing.JPanel`, `java.awt.Color` and `java.awt.Graphics`.

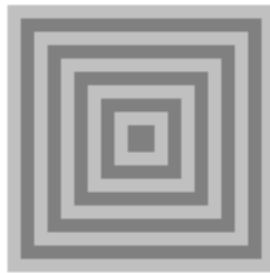


Figure 1: Final GUI layout

2. **(50 points)** Write a GUI program, with `JPanel` and `JFrame` classes, to draw (as closely as possible) the national flag of Italy using standard SDK `java.awt.Graphics` methods (such as `fillRect`, `fillOval`, etc).

The flag consists of a green, white, and red vertical stripe, each with an equal width. The flag should proportionally fill the whole panel as it is resized.