

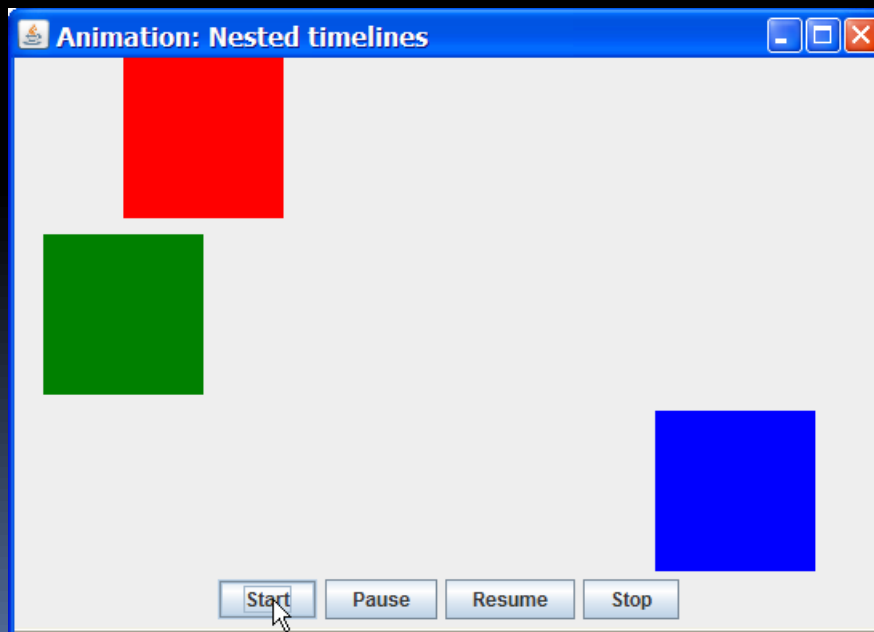


Section 1: Krasich, Mathieu, Lee

ANIMATION

Animation? Huh?

1. Drawing an image at a location
2. Moving the location of the image
3. Redrawing the image at new location



Methods of Animation

- **Runnable**
- Timer Class
 - `import myTimer;`
- Infinite Loop
 - `Public void paint (Graphics g) {
 while (true) {
 // infinite loop for animation
 }
}`

Threads (implements Runnable)

- Without threads, animation takes up the Java's interpreter's time and the rest of the program's GUI is unable to respond
- Control the timing of the animation

`Thread.sleep()`

Displaying images

- `run()`

A `while (runner == thisThread)` statement continues the loop until these two Thread objects become different



`repaint()`

- `paintComponent (Graphics g)`
 - Updates the thread (from `repaint()`)
 - Where GUI will be

Repaint()?

- Easy, built-in refreshing/undrawing of previous frame
- Fast
- Flicker ☹️

One way to eliminate this is to remove the void paint (Graphics g) method, and have everything inside the run()

BUT, no built-in redrawing!

Extras

- <http://www.java2s.com/Code/Java/2D-Graphics-GUI/Animation.htm>
 - Text animation
 - Series of images
 - Animated button
 - Animated text field