Swing redraw

codice: (aggiunto data ember e setter msg)

```
public class CustomFrame extends JFrame {
   private String msg = "Hello";
   // veery bad hack:
   Graphics q = null;
   public CustomFrame(String title) throws HeadlessException {
        super(title);
    }
   public void paint(Graphics g) {
        this.g = g; // fake, trying to save to paint in code.
        g.drawString(msg, 200, 50);
        int x = 30; int y = 100; int rectwidth = 50; int rectheight = 100;
        g.drawRect(x, y, rectwidth, rectheight);
    }
   public void setMsg(String msg) {
        this.msg = msg;
        System.out.println(msg);
        // dont update.. crash...
       paint(this.q);
```

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codice ok:

```
public class CustomFrame extends JFrame {
   private String msg = "Hello";
    // veery bad hack: //Graphic g = null;
    public CustomFrame(String title) throws HeadlessException {
        super(title);
   public void paint(Graphics q) {
        //this.g = g; // fake, trying to save to paint in code.
        g.drawString(msg, 200, 50);
        int x = 30; int y = 100; int rectwidth = 50; int rectheight = 100;
        g.drawRect(x, y, rectwidth, rectheight);
    public void setMsg(String msg) {
        this.msg = msg;
        System.out.println(msg);
        // dont update.. crash... paint this.g);
        this.repaint();
```

Swing redraw: il Thead è giusto??

I vari thread possono comunicare con il Thread della GUI Swing SOLO con una call inter-thread apposita:

```
SwingUtilities.invokeLater(
        () -> { ....
        );
Quindi:
SwingUtilities.invokeLater( () -> {
         this.repaint();
```

Swing redraw: il Thead è giusto??

NO:

repaint() va GIA sulla coda corretta, i.e. chiama GIA InvokeLater:

https://www.oracle.com/java/technologies/painting.html#swing

- (B) The paint request originates from a call to repaint() on an extension of javax.swing.JComponent:
 - JComponent.repaint() registers an asynchronous repaint request to the component's RepaintManager, which uses invokeLater() to queue a Runnable to later process the request on the event dispatching thread.