

Circle Demo

```
public class CircleDemo extends JPanel {
    int x = 200;
    int y = 200;
    String text = "(200, 200)";

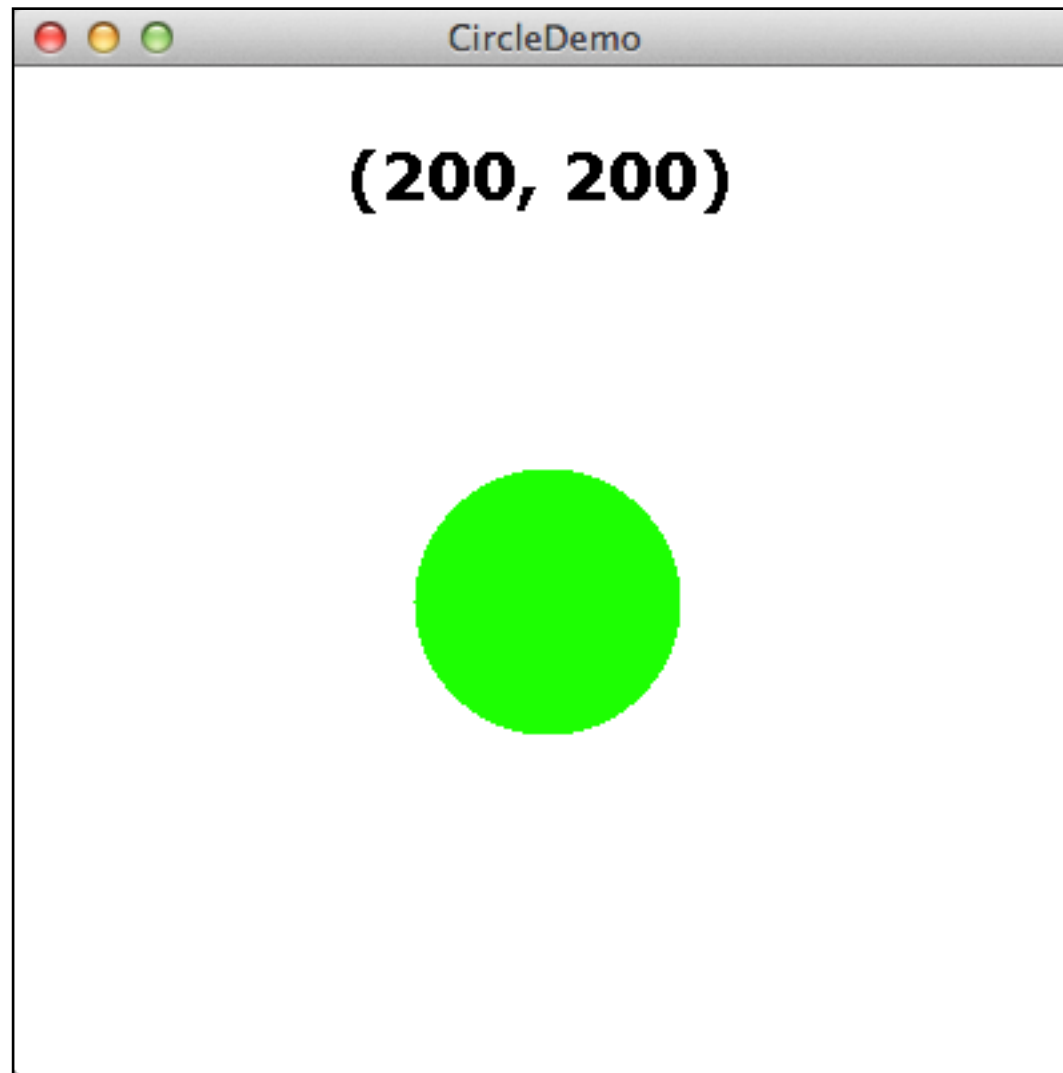
    public CircleDemo() {
        //
    }

    public void paintComponent(Graphics g) {
        g.setColor(Color.WHITE);
        g.fillRect(0, 0, this.getWidth(), this.getHeight());

        g.setColor(Color.GREEN);
        g.fillOval(x - 50, y - 50, 100, 100);

        g.setColor(Color.BLACK);
        g.setFont(new Font("Verdana", Font.BOLD, 24));
        g.drawString(text, 125, 50);
    }

    // main method and createAndShowGUI
    // frame.setSize(400, 400); instead of frame.pack();
}
```



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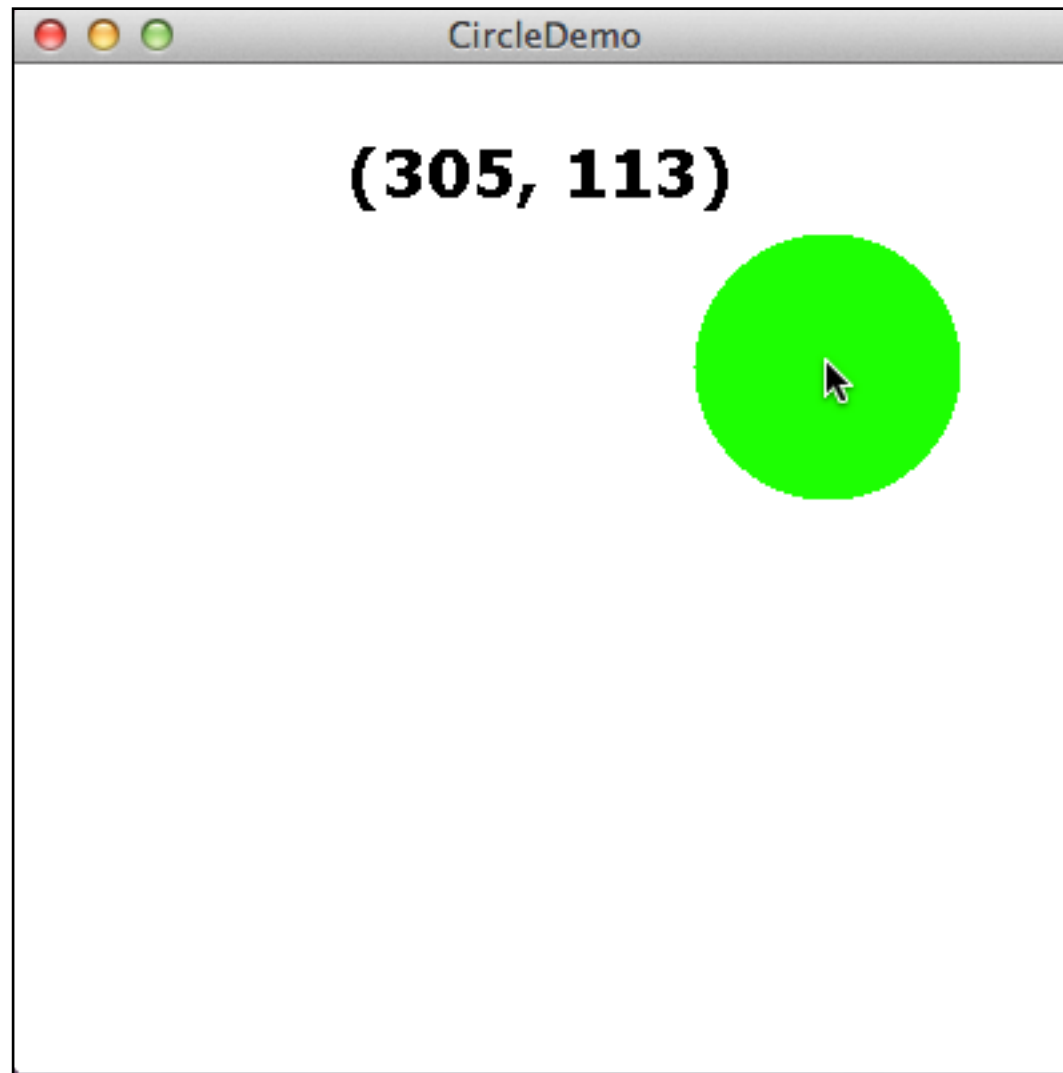
```
public class CircleDemo extends JPanel implements MouseListener {
    int x = 200;
    int y = 200;
    String text = "(200, 200)";

    public CircleDemo() {
        addMouseListener(this);
    }

    // paintComponent method ...

    void eventOutput(String eventDescription, MouseEvent e) { }
    public void mousePressed(MouseEvent e) { }
    public void mouseReleased(MouseEvent e) { }
    public void mouseEntered(MouseEvent e) { }
    public void mouseExited(MouseEvent e) { }

    public void mouseClicked(MouseEvent e) {
        x = e.getX();
        y = e.getY();
        text = "(" + x + ", " + y + ")";
        repaint();
    }
}
```



Circle Demo

```
public class CircleDemo extends JPanel implements MouseListener {
    int x = 200;
    int y = 200;
    String text = "(200, 200)";

    class SpaceAction extends AbstractAction {
        public void actionPerformed(ActionEvent e) {
            x = 200;
            y = 200;
            text = "(200, 200)";
            repaint();
        }
    }
    SpaceAction spaceAction;

    public CircleDemo() {
        addMouseListener(this);
        getInputMap().put(KeyStroke.getKeyStroke(' '), "doSpaceAction");
        getActionMap().put("doSpaceAction", spaceAction);
    }

    // paintComponent method ...
    // Mouse event handlers ...
}
```

Circle Demo

```
public class CircleDemo extends JPanel implements MouseListener {
    int x = 200;
    int y = 200;
    String text = "(200, 200)";
    Action spaceAction;

    public CircleDemo() {
        addMouseListener(this);

        spaceAction = new AbstractAction() {
            public void actionPerformed(ActionEvent e) {
                x = 200;
                y = 200;
                text = "(200, 200)";
                repaint();
            }
        };
        getInputMap().put(KeyStroke.getKeyStroke(' '), "doSpaceAction");
        getActionMap().put("doSpaceAction", spaceAction);
    }

    // paintComponent method ...
    // Mouse event handlers ...
}
```

