

Java2D – Moving Shapes – Three Traces

Use Concept Trace Slicing

Supporting Applications : [JHotDraw, GeoSoft, GTEditor]

```
import java.awt.color.ColorSpace;
import java.awt.GraphicsConfiguration;
import java.util.EventObject;
import java.awt.Frame;
import java.awt.Color;
import java.awt.event.MouseMotionListener;
import java.awt.BorderLayout;
import java.awt.Component;
import java.awt.event.MouseListener;
import java.awt.event.MouseEvent;
import java.awt.Graphics;
import java.awt.Container;
import java.awt.Dimension;

public class AppouseMotionListener
implements MouseMotionListener {

    public void mouseDragged(MouseEvent) {
        int app_int1 = MouseEvent.getX();
        int app_int = MouseEvent.getY();
    }

    public void mouseMoved(MouseEvent) {
        int app_int1 = MouseEvent.getX();
        int app_int = MouseEvent.getY();
    }
}

public class AppouseListener
implements MouseListener {

    public void mousePressed(MouseEvent) {
    }

    public void mouseReleased(MouseEvent) {
    }
}

public class SomeClass {

    public void someMethod() {
        Container container = new Container(); // MAY REPEAT!
        BorderLayout borderLayout = new BorderLayout(int,int)(); // MAY REPEAT!
        Container.setLayout(borderLayout); // MAY REPEAT!
        container.addComponent(); // MAY REPEAT!
        Object object = EventObject.getSource(); // MAY REPEAT!
        Color color = new Color(float,float,float,float)|(int)|(int,int,int)|(int,int,int,int)|
            (ColorSpace,float[],float)|(int,boolean)|(float,float,float); // MAY REPEAT!
        Graphics.setColor(color); // REPEATED!
        AppouseListener appouseListener = new AppouseListener();
        container.addMouseListener(appouseListener);
        AppouseMotionListener appouseMotionListener = new AppouseMotionListener();
        container.addMouseMotionListener(appouseMotionListener);
    }
}
```

Description of False Negatives:

The instructions for setting the new location of the component are missing since the sample applications used different commands for this purpose: `container.getComponent().setLocation()` or `container.getComponent().setBound()`. So, two false negatives are counted.