

Myro

Class MyroCanvas

java.lang.Object

Myro.MyroCanvas

```
public class MyroCanvas extends java.lang.Object
```

Instances of MyroCanvas provide Myro/Java programs a canvas on which to draw MyroShape objects. If the canvas is visible, a window appears on the screen.

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Constructor Summary

[MyroCanvas](#) ()

Construct a default 200x200 white canvas titled "Myro Canvas".

[MyroCanvas](#) (java.lang.String title, int width, int height)

Construct a new MyroCanvas with a specified title and size.

Method Summary

java.lang.Object	addShape (java.awt.Shape shape, boolean filled, java.awt.Color fillColor, java.awt.Color outlineColor, int outlineWidth) Add a new shape to this canvas.
java.awt.Color	getBackgroundColor () Returns the current background color of this canvas
int	getHeight () Returns the height of this canvas
int	getWidth () Returns the width of this canvas
void	removeShape (java.lang.Object o) Remove an object from this canvas.
void	repaint () repaint all objects on this canvas.
java.lang.Object	replaceShape (java.lang.Object oldShape, java.awt.Shape shape, boolean filled, java.awt.Color fillColor, java.awt.Color outlineColor, int outlineWidth) Replace a shape with a new one.
void	setAutoRepaint (boolean autoRepaint) Sets whether or not to automatically repaint the canvas everytime an object changes.
void	setBackground (java.awt.Color newColor) Set the baackground color of this canvas.

void	setVisible (boolean isVisible) Makes the canvas visible or invisible
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Methods inherited from class java.lang.Object

`equals`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructor Detail

MyroCanvas

```
public MyroCanvas()  
    Construct a default 200x200 white canvas titled "Myro Canvas".
```

MyroCanvas

```
public MyroCanvas(java.lang.String title,  
                  int width,  
                  int height)  
    Construct a new MyroCanvas with a specified title and size. The background color will be white and the canvas will initially be visible.  
Precondition:  
    0 < width and 0 < height
```

Method Detail

addShape

```
public java.lang.Object addShape(java.awt.Shape shape,  
                                   boolean filled,  
                                   java.awt.Color fillColor,  
                                   java.awt.Color outlineColor,  
                                   int outlineWidth)  
    Add a new shape to this canvas. Users should not invoke this method.
```

getBackgroundColor

```
public java.awt.Color getBackgroundColor()  
    Returns the current background color of this canvas
```

getHeight

```
public int getHeight()  
    Returns the height of this canvas  
Returns:  
    The height of this canvas
```

getWidth

```
public int getWidth()
```

Returns the width of this canvas

Returns:
The width of this canvas

removeShape

```
public void removeShape(java.lang.Object o)
```

Remove an object from this canvas. Users should not invoke this method.

repaint

```
public void repaint()
```

repaint all objects on this canvas. Users will only need to call this if they've disabled `autoRepaint` and want to repaint all objects on the canvas.

replaceShape

```
public java.lang.Object replaceShape(java.lang.Object oldShape,  
                                       java.awt.Shape shape,  
                                       boolean filled,  
                                       java.awt.Color fillColor,  
                                       java.awt.Color outlineColor,  
                                       int outlineWidth)
```

Replace a shape with a new one. Users should not invoke this method.

setAutoRepaint

```
public void setAutoRepaint(boolean autoRepaint)
```

Sets whether or not to automatically repaint the canvas everytime an object changes. If this is set to false, then the user should invoke `repaint()` in order to have all changes appear on the canvas.

setBackground-color

```
public void setBackground-color(java.awt.Color newColor)
```

Set the background color of this canvas.

Parameters:
`newColor` - The new background color of this canvas

setVisible

```
public void setVisible(boolean isVisible)
```

Makes the canvas visible or invisible

Parameters:
`isVisible` - true will make the window appear, false will make it disappear

