

WT LAB EXTERNAL

1. VISUAL BEANS

Create a simple visual bean with a area filled with a colour.

The shape of the area depends on the property shape. If it is set to true then the shape of the area is square and it is circle if it is false.

The colour of the area should be changed dynamically for every mouse click. The colour also changed if we change the colour in the property window.

Code:

```
package sunw.demo.colors;
import java.awt.*;
import java.awt.event.*;
public class Colors extends Canvas
{
    transient private Color color;
    private boolean rectangular;
    public Colors()
    {
        addMouseListener(new MouseAdapter() {
            public void mousePressed(MouseEvent me) {
                change();
            }
        });
        rectangular = false;
        setSize(100, 100);
        change();
    }
    public boolean getRectangular()
    {
        return rectangular;
    }
}
```

```
public void setRectangular (boolean flag)
```

```
{ this.rectangular = flag;
```

```
repaint();
```

```
}
```

```
public void change()
```

```
{ color = randomColor();
```

```
repaint();
```

```
}
```

```
private Color randomColor()
```

```
{ int r = (int)(255 * Math.random());
```

```
int g = (int)(255 * Math.random());
```

```
int b = (int)(255 * Math.random());
```

```
return new Color(r, g, b);
```

```
}
```

```
public void paint (Graphics g)
```

```
{ Dimension d = getSize();
```

```
int h = d.height;
```

```
int w = d.width;
```

```
g.setColor (color);
```

```
if (rectangular)
```

```
{ g.fillRect (0, 0, w-1, h-1);
```

```
}
```

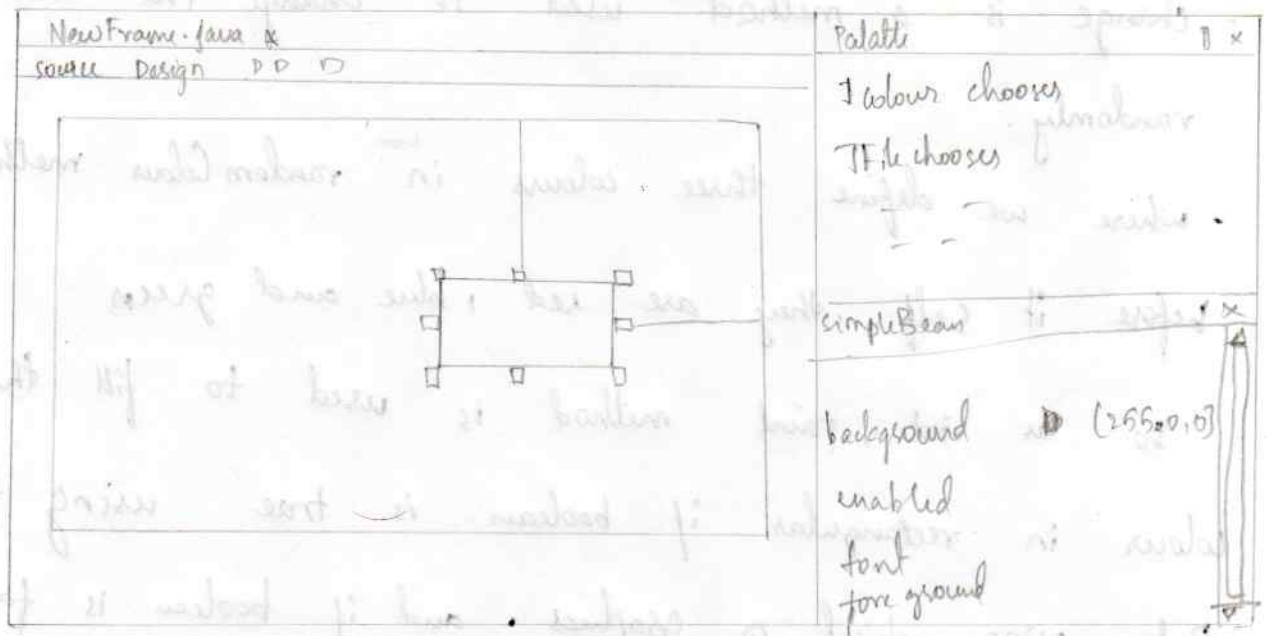
```
else
```

```
{ g.fillOval (0, 0, w-1, h-1);
```

```
}
```

```
}
```

Expected output:



Explanation

The main aim of this program is to create a bean with two shapes so that if the boolean value is set to true then shape of area is square and if it is false then shape of area is circle or oval. Then for every click of mouse the colour of the area changes dynamically.

We can also change using colour palette.

- First we import an package, we import event from event.awt.
- As for every mouse click we need to change the colour so we use mouse listener event so if we press the mouse then mouse listener event is executed and

change of ~~best~~ colours occur

- change is a method used to change the colour randomly.

- where we define three colours in randomColour method before it self they are red, blue and green

so as ~~the~~ paint method is used to fill the colour in rectangular if boolean is true using fillRect using object of graphics. and if boolean is false oval is filled with colour.

Design a web page using CSS which includes the following:

- 1) set a background image for both the page and single element on the page.

Code:

background.html

```
<html>
```

```
<head>
```

```
<style type="text/css">
```

```
body {
```

```
background-image: url (2.jpeg);
```

```
background-position: top right;
```

```
background-repeat: no-repeat;
```

```
background-attachment: no-fixed;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<center>
```

```
<h1> background</h1>
```

```
</center>
```

```
</body>
```

```
</html>
```



Explanation:

- The main aim of this program is to design a webpage with a background image.
- In body section background-image attribute is used to import image on to webpage where address on local system is given in url
- background-position, is used to position the image.
- These are written in style attribute which is used to customise any part of web page according to attributes