

Reviewer Approved



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Here is a J2ME class for gradients drawing, supporting both horizontal and vertical gradients.



This could be useful to substitute background gradient images with graphics drawn by code.

```
package com.jappit.wiki.gradientrect.graphics;

import javax.microedition.lcdui.Graphics;

public class Gradient
{
    public static final int VERTICAL = 0;
    public static final int HORIZONTAL = 1;

    public static void gradientBox(Graphics g, int color1, int color2, int left, int top, int width,
    {
        int max = orientation == VERTICAL ? height : width;

        for(int i = 0; i < max; i++)
        {
            int color = midColor(color1, color2, max * (max - 1 - i) / (max - 1), max);

            setColor(color);      g.

            if(orientation == VERTICAL)
                drawLine(left, top + i, left + gwidth - 1, top + i);
            else
                drawLine(left + i, top, left + gi, top + height - 1);
        }
    }

    static int midColor(int color1, int color2, int prop, int max)
    {
        int red =
            (((color1 >> 16) & 0xff) * prop +
            ((color2 >> 16) & 0xff) * (max - prop)) / max;

        int green =
            (((color1 >> 8) & 0xff) * prop +
            ((color2 >> 8) & 0xff) * (max - prop)) / max;

        int blue =
            (((color1 >> 0) & 0xff) * prop +
            ((color2 >> 0) & 0xff) * (max - prop)) / max;
    }
}
```

Draw_Gradient_in_Java_ME

```
int color = red << 16 | green << 8 | blue;

return color;
}
}
```

and here is a sample Canvas using the `gradientBox` method (the final effect is shown in the screenshot at beginning of this article):

```
package com.jappit.wiki.gradientrect.display;

import javax.microedition.lcdui.Canvas;
import javax.microedition.lcdui.Graphics;

import com.jappit.wiki.gradientrect.graphics.Gradient;

public class GradientRectCanvas extends Canvas {

    protected void paint(Graphics g)
    {
        int halfWidth = getWidth() / 2;
        int halfHeight = getHeight() / 2;

        gradientBox(0xfffff, 0xff0000, 0, 0, halfWidth, halfHeight, Gradient.HORIZONTAL);
        gradientBox(0xff0000, 0xffffffff, halfWidth, 0, halfWidth, halfHeight, Gradient.VERTICAL);
        gradientBox(0xffff00, 0x00ffff, 0, halfHeight, halfWidth, halfHeight, Gradient.VERTICAL);
        gradientBox(0x00ff00, 0x0000ff, halfWidth, halfHeight, halfWidth, halfHeight, Gradient.VERTICAL);
    }
}
```