Subject: Any function to draw gradient color?
Posted by mobilehunter on Mon, 12 Feb 2007 08:53:30 GMT
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Does Ultimate++ have direct function to draw gradient colour inside shape?

Thanks

Subject: Re: Any function to draw gradient color?
Posted by mirek on Mon, 12 Feb 2007 09:43:52 GMT
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No.

The simple way how to achieve that is using Image (generate gradient inside Image, then draw Image).

If you want shape, use ImageDraw to draw shape into alpha channel of Image.

Mirek

Subject: Re: Any function to draw gradient color?
Posted by mobilehunter on Sat, 17 Feb 2007 14:24:24 GMT
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Hi Mirek,
This is my code modified from msdn examples. Hope i did the correct way. Btw where do you use GradientColor function?
edited: Ah sorry my code only fill to rectangular shape

```
void DrawRect(Draw& w,Rect rectClient,Color fromColor,Color toColor,int level)
{
  Rect rectFill;       // Rectangle for filling band
  float fStep;         // How large is each band?

  int iOnBand;  // Loop index
// Determine how large each band should be in order to cover the
// client with 256 bands (one for every color intensity level)

  fStep = (float)rectClient.bottom / level*1.0f;

// Start filling bands
  for (iOnBand = 0; iOnBand < level; iOnBand++)
  {
```

```
  // Set the location of the current band
 rectFill.Set(rectClient.left,rectClient.top+(int)(iOnBand * fStep),
rectClient.right,rectClient.top+(int)((iOnBand+1) * fStep));
 w.DrawRect(rectFill, GradientColor(fromColor,toColor,iOnBand,level));
  }
}
```

example usage:

```
  DrawRect(w,Rect(10,10,70,80),Yellow(),Black(),256);
```

Subject: Re: Any function to draw gradient color?
Posted by piratalp on Mon, 10 Sep 2007 17:07:16 GMT

mobilehunter wrote on Sat, 17 February 2007 11:24Hi Mirek,
This is my code modified from msdn examples. Hope i did the correct way. Btw where do you use
GradientColor function?
edited: Ah sorry my code only fill to rectangular shape

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// Start filling bands
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rectClient.right,rectClient.top+(int)((iOnBand+1) * fStep));
 w.DrawRect(rectFill, GradientColor(fromColor,toColor,iOnBand,level));
  }
}
```

example usage:

```
  DrawRect(w,Rect(10,10,70,80),Yellow(),Black(),256);
```

There is a much easier way for drawing a gradient:

```
void DrawGradient(Draw &w, Rect r, Color c1, Color c2)
{
int i;

  for (i = r.top; i <= r.bottom; i++)
    w.DrawLine(i, r.left, i, r.right, GradientColor(c1, c2, i - r.Top, r.Height()));
}
```

That's all

NOTE: I've just wrote it in seconds from what's in my mind, I've done a Ribbon Chameleon Skin for Ultimate++ that can render both Office 2003 and Office 2007 styles with any combination of colors, I would like to contribute it to Ultimate++ but I'll have to add some code to Chameleon to support very basic things like Palettes and also change some widgets that have no ChPaint calls, how can I stay in synch with development version (uvs?)? Mirek?

Regards, Mauricio

Subject: Re: Any function to draw gradient color?
Posted by nixnixnix on Tue, 09 Oct 2007 12:13:34 GMT
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Hi Mirek,

I'm very interested in the idea of being able to draw to the alpha channel. How is this accomplished please? Obviously, my preference would be to be able to specify a Color as Color(R,G,B,A) and then draw shapes with varying transparency.

You say that it is possible to draw a shape into the alpha channel using ImageDraw. Do you mean ImageMaskDraw and even then, how is this done please?

It would be great to be able to use your drawing functions such as DrawPolyPolygon() with varying transparency. Failing that, if one could specify an ImageDraw object as entirely transparent and then draw shapes using Colors of varying transparencies, that would be just as good.

Nick

Subject: Re: Any function to draw gradient color?
Posted by mrjt on Tue, 09 Oct 2007 13:23:54 GMT
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I obviously don't know as much about this as Mirek, but in the interests of a quick answer I'll tell you what I know and he can correct me later

As I understand the only way of drawing to the alpha channel is using DrawImage. You can create an image in the usual ways or, if you want to draw primitives with an alpha channel Mirek suggests something like:

```
 virtual void Paint(Draw& draw)
 {
  draw.DrawRect(GetSize(), SColorFace());

  ImageDraw img(200, 100);
  img.Alpha().DrawRect(0, 0, 200, 100, Color(128, 0, 0));
  img.Alpha().DrawText(0, 0, "This is the alpha channel", StdFont(), Color(0, 0, 0));
  img.DrawRect(0, 0, 200, 100, Red());

  draw.DrawImage(1, 1, img);
 }
```
Note that:
- The alpha channel is initially all 0 (hence the first DrawRect above)
- When drawing to Alpha(), only the red channel is used for the alpha value.

If you only want alpha gradients you may want to look at CreateHorzFadeOut/HorzFadeOut (I believe the second caches the created image).

James

Subject: Re: Any function to draw gradient color?
Posted by mirek on Tue, 09 Oct 2007 13:27:25 GMT
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Well, no, Color is considerd a color only, no alpha involved (besides Null value).

Anyway, pixels of images are always RGBA structs - all you need is there...

Usually, you use ImageBuffer to make alpha things.

You can however use ImageDraw as well. The trick is that Alpha() method returns you another draw; everything you draw into R channel will become alpha of final Image. A little bit dirty, but cheap to implement and quite easy to use.

(But keep in mind that ImageDraw is generally just cheap solution for simple problems...)

Mirek

Subject: Re: Any function to draw gradient color?
Posted by nixnixnix on Tue, 16 Oct 2007 21:22:30 GMT

Thanks JT and Mirek,

Not had time to try this yet but it all seems straight forward.

Cheers,

Nick