Subject: How to get pixels per millimeter for current screen?
Posted by slashupp on Fri, 20 Apr 2012 09:47:55 GMT
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I'm implementing some WYSIWYG functionality and need to calculate sizes specified in mm to the correct on-screen representation in pixels.

Where/how do I get the pixel-to-mm ratio?

[edit]
I'm trying:

```
void checkresolution::Paint(Draw &w)
{
 Size szpmm = w.GetPageMMs();
 Size szpp = w.GetPagePixels();

 double ppmmx = (double)szpp.cx/(double)szpmm.cx;
 double ppmmy = (double)szpp.cy/(double)szpmm.cy;
 //double dppmm = (ppmmx + ppmmy)/2;

 //int ppmm = (int)(dppmm + 0.5);
 int ppmm = (int)(ppmmx + 0.5);

 int cm3 = (int)(ppmm * 30.0);
 int cm7 = (int)(ppmm * 70.0);

 w.DrawLine(10,10,cm3,10,3,Black());
 w.DrawLine(10,15,cm7,15,3,Black());

}
```

The value I get is not quite correct, but seems that this is the best I can hope for? The error occurs with the rounding from double to int that Draw requires.

Subject: Re: How to get pixels per millimeter for current screen?
Posted by BioBytes on Fri, 20 Apr 2012 20:01:07 GMT
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Hi Slashupp,

Screens resolution is generally 72ppp (pixels per inch).As one inch is 25.4 mm we can calculate that 72/25.4 = 2.8 pixels in 1mm.

Hope it could be helpful.

Regards

Biobytes

Subject: Re: How to get pixels per millimeter for current screen?
Posted by slashupp on Sat, 21 Apr 2012 04:49:16 GMT
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"Screens resolution is generally 72ppp (pixels per inch). As one inch is 25.4 mm we can calculate that 72/25.4 = 2.8 pixels in 1mm."

That can't be right? It does not differentiate between say a 15-inch monitor and a 24-inch one...

Subject: Re: How to get pixels per millimeter for current screen?
Posted by omari on Sat, 21 Apr 2012 08:29:11 GMT
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Hello,

in the Paint(Draw&w) methode, you can use :

```
Size sz = w.GetPixelsPerInch();
```

then convert it from inch to mm.

Omari.

Subject: Re: How to get pixels per millimeter for current screen?
Posted by BioBytes on Sun, 22 Apr 2012 19:48:38 GMT
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Hi,

If you're using Windows, a call to WinAPI32 is possible using the following code:

```
HDC screen = GetDC(NULL);
int hSize=GetDeviceCaps(screen,HORZSIZE); int hRes=GetDeviceCaps
```

(screen,HORZRES); float PixelsPerMM=(float)hRes/hSize;// pixels per millimeter float

PixelsPerInch=PixelsPerMM*25.4; //dpi

GetDeviceCaps is a function that also gives information on printers resolution.

Regards

Biobytes
