
Subject: How to blur a Ctrl

Posted by [koldo](#) on Wed, 13 Sep 2017 16:35:50 GMT

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Hello all

I wanted to blur an area of a Ctrl, so that user can distinguish but cannot realize the details under the blurred area.

Do you know if it is possible?

A possible way would be to "mask" the Ctrl by painting small squares in void Paint(), but maybe it would be possible a more professional blurring effect.

File Attachments

1) [Captura.JPG](#), downloaded 473 times

Subject: Re: How to blur a Ctrl

Posted by [mirek](#) on Wed, 13 Sep 2017 17:13:24 GMT

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koldo wrote on Wed, 13 September 2017 18:35Hello all

I wanted to blur an area of a Ctrl, so that user can distinguish but cannot realize the details under the blurred area.

Do you know if it is possible?

A possible way would be to "mask" the Ctrl by painting small squares in void Paint(), but maybe it would be possible a more professional blurring effect.

Relatively easy way is to go through Image...

This is far from good, but to give the idea:

```
#include <CtrlLib/CtrlLib.h>
```

```
using namespace Upp;
```

```
struct MyApp : TopWindow {  
    virtual void Paint(Draw& w) {  
        ImageDraw iw(GetSize());  
    }  
};
```

```
iw.DrawRect(GetSize(), White());
iw.DrawText(10, 10, "Hello World!", Arial(20));
Image m = iw;
m = Sharpen(m, -200);
w.DrawImage(0, 0, m);
}
};
```

```
GUI_APP_MAIN
{
  MyApp().Run();
}
```

Subject: Re: How to blur a Ctrl
Posted by [koldo](#) on Sun, 24 Sep 2017 06:51:18 GMT
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Thank you Mirek

However this solution only blurs itself, but it does not blur but hides the Ctrl under it.

Subject: Re: How to blur a Ctrl
Posted by [mirek](#) on Sun, 24 Sep 2017 07:41:15 GMT
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koldo wrote on Sun, 24 September 2017 08:51 Thank you Mirek

However this solution only blurs itself, but it does not blur but hides the Ctrl under it.

I see. Now that one would be tricky, depending on circumstances.

If "blurred" widgets are not active, I would try to implement that by drawing the whole thing into Image and then use that Image as background.

Another option would be to use something in host OS.

Mirek

Subject: Re: How to blur a Ctrl
Posted by [mirek](#) on Sun, 24 Sep 2017 07:45:14 GMT
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Something like

[https://msdn.microsoft.com/en-us/library/windows/desktop/aa969524\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/aa969524(v=vs.85).aspx)

Subject: Re: How to blur a Ctrl
Posted by [koldo](#) on Sun, 24 Sep 2017 14:27:30 GMT
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Thank you Mirek

I have tried it with `DwmEnableBlurBehindWindow()`. However I can only blur all `TopWindow` and not simply a region.

As this feature is not too important for me, I will maintain this:

```
void Paint(Draw& w) {
    Size sz = GetSize();

    for (double x = 0; x < sz.cx; x += (visible + hidden))
        for (double y = 0; y < sz.cy; y += (visible + hidden))
            w.DrawRect(int(x), int(y), int(hidden), int(hidden), SColorFace);
}

void Layout() {
    Font f = parent->GetFont();
    int q = f.GetHeight();
    visible = 0.1*q;
    hidden = 0.3*q;
}
```

Subject: Re: How to blur a Ctrl
Posted by [Didier](#) on Mon, 25 Sep 2017 18:00:48 GMT
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Hi,

Maybe something like this could do the trick:

```
template <class T>
class BlurringDecorator : public T {

private:
    bool doBlur;

    void blurImage(Image& m) {
```

```
m = Sharpen(m, -200);
}
```

public:

```
BlurringDecorator() : doBlur(true) {}
virtual ~BlurringDecorator() {}
void setBlur(bool blur = true) { doBlur = blur; }
```

```
virtual void Paint(Draw& w) {
```

```
    if (doBlur) {
        ImageDraw dw(T::GetSize());
        T::Paint(dw);
        Image im = dw;
        blurImage(im);
        w.DrawImage(0, 0, im);
    }
    else {
        T::Paint(w);
    }
}
```

```
};
```

In layout

```
BlurringDecorator<CtrlToBlur> myCtrl;
```

EDIT: just tried, works fine (but only blurs the current Ctrl ... not what is under it !!!)

Subject: Re: How to blur a Ctrl
Posted by [koldo](#) on Thu, 28 Sep 2017 06:12:56 GMT
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Excellent! That's it!

Thank you.
