
Subject: Re: [Feature request] Relative positioning
Posted by [rafiwui](#) on Thu, 14 Sep 2017 10:27:30 GMT
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Working with my code I realized that there is a big weak point: No widget that is not a direct child of the TopWindow is getting resized.
So I reworked my script and came up with this (IMO better) solution:

```
#ifndef _AutoResizeCtrl_h_
#define _AutoResizeCtrl_h_

#include <CtrlLib/CtrlLib.h>
using namespace Upp;

#include <type_traits>

template<typename T>
class AutoResizeCtrl : public T
{
    // Make sure the base class inherits or is Ctrl
    static_assert(std::is_base_of<Ctrl, T>::value, "T must inherit from Ctrl");

private:
    bool initialization;
    bool addedChildren;
    Rect initializationRect;
    Vector<Rect> childrenInitializationRects;

public:
    AutoResizeCtrl<T>()
        : T()
    {
        initialization = true;
        addedChildren = false;
    }

    virtual void Layout()
    {
        Rect currentRect = GetRect();
        if(initialization)
            initializationRect = currentRect;

        float sizeXChange = (float)currentRect.Width() / (float)initializationRect.Width();
        float sizeYChange = (float)currentRect.Height() / (float)initializationRect.Height();

        Ctrl* pChild = GetFirstChild();
        for(int i = 0; pChild != NULL; i++)
        {
```

```

        if(initialization)
        {
childrenInitializationRects.Add(pChild->GetRect());
addedChildren = true;
        }

        float rectLeft = childrenInitializationRects[i].left * sizeXChange;
        float rectTop = childrenInitializationRects[i].top * sizeYChange;
        float rectSizeX = childrenInitializationRects[i].Width() * sizeXChange;
        float rectSizeY = childrenInitializationRects[i].Height() * sizeYChange;

        pChild->SetRect(rectLeft, rectTop,
            rectSizeX, rectSizeY);
        pChild->Layout();
        pChild = pChild->GetNext();
    }
    initialization = !addedChildren;
}
};

#endif

```

For an example how to use it please check the attached package.

File Attachments

1) [AutoResizeExample.7z](#), downloaded 58 times
