Subject: [Closed] Get size and position of widget
Posted by rafiwui on Wed, 13 Sep 2017 07:05:37 GMT
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I try to write an auto resizing app and so I need to know how to get the position and size of all widgets correct, because the solution I worked out has kind of a bug/problem:

This is how it looks

This is how it should look
And here is the Layout file:

```
LAYOUT(TestSimpleLayout, 400, 200)
 ITEM(Clock, m_widget, LeftPosZ(16, 368).TopPosZ(20, 156))
END_LAYOUT
```

The code of the resizing is shown here:

```
void TestWindow::Layout()
{
 float sizeXChange = (float)GetSize().cx / (float)m_startSize.cx;
 float sizeYChange = (float)GetSize().cy / (float)m_startSize.cy;

 Ctrl* child = GetFirstChild();
 while(child != NULL)
 {
  String temp;
  temp << child->GetSize().cx << " | " << child->GetSize().cy;
  temp << " @ " << child->GetRect().TopLeft().x << " | " << child->GetRect().TopLeft().y;
  Title(temp);

  child->LeftPosZ(child->GetRect().TopLeft().x * sizeXChange, child->GetSize().cx *
sizeXChange);
  child->TopPosZ(child->GetRect().TopLeft().y * sizeYChange, child->GetSize().cy *
sizeYChange);

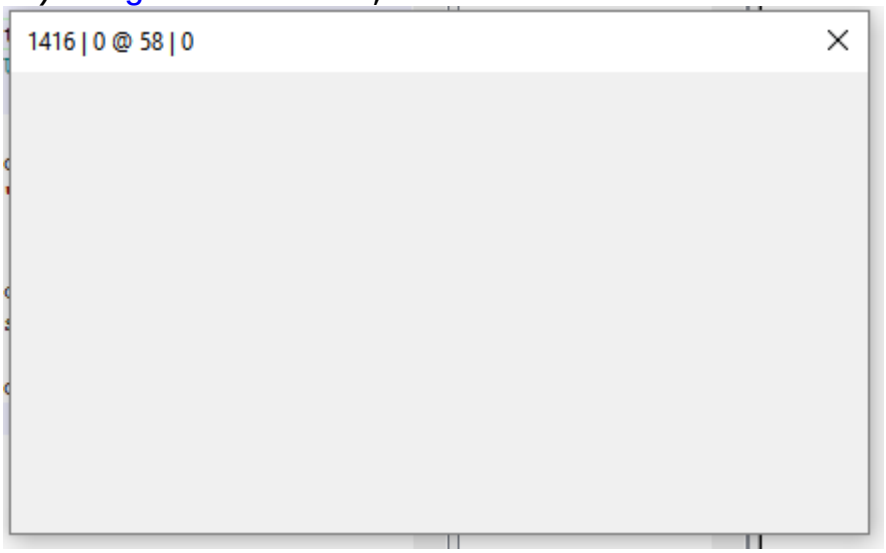
  child = child->GetNext();
 }
}
```

So like you can see there is sth wrong with the size/position gathering because it is sth completely different to the values I set in the layout file.

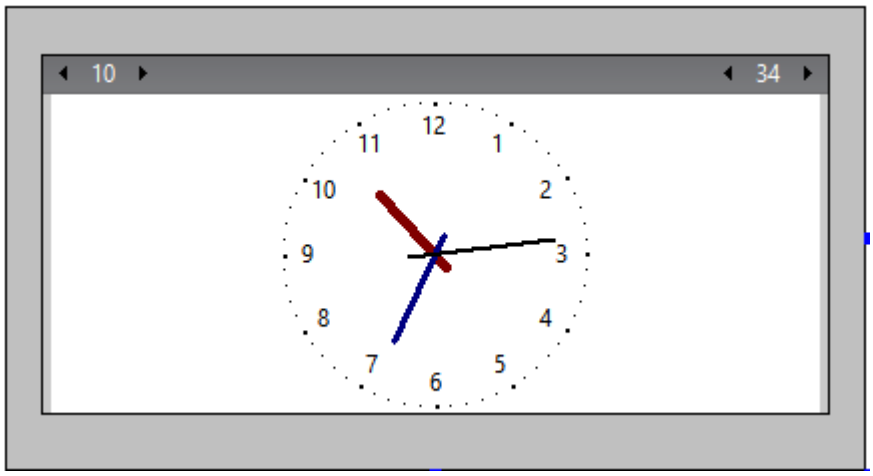
I will add the complete testprogram as well if you want to check it out.

File Attachments

1) Bugtester.PNG, downloaded 887 times



2) Bugtester2.PNG, downloaded 927 times



3) Bugtester.7z, downloaded 387 times

Subject: Re: Get size and position of widget
Posted by rafiwui on Wed, 13 Sep 2017 11:37:45 GMT
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Going through some testing I made it so a least at the beginning the widget is shown correct but when it should resize it gets resized in an not intended way (but not that far from what I want.
The main problem seems to be the positioning, because the position never changes when making the window bigger but changes when making the window smaller. The sizing of the widget is does need a fast change of the window size to rescale and I have the feeling that it is too less when upscaling and too much when downscaling but I have no idea why.
See the attached package to check it out

File Attachments

1) Bugtester.7z, downloaded 375 times

Subject: Re: Get size and position of widget
Posted by rafiwui on Wed, 13 Sep 2017 13:45:21 GMT
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Ok I solved the problem and if anyone else want to use the AutResizeTopWindow feel free to copy the code below or download the header.

```
#ifndef _AutoResizeTopWindow_h_
#define _AutoResizeTopWindow_h_

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

class AutoResizeTopWindow : public virtual TopWindow
{
public:
 virtual void Layout()
 {
  Size currentSize = GetSize();
  if(firstSizing)
   startSize = currentSize;

  float sizeXChange = (float)currentSize.cx / (float)startSize.cx;
  float sizeYChange = (float)currentSize.cy / (float)startSize.cy;

  Ctrl* pChild = GetFirstChild();
  for(int i = 0; pChild != NULL; i++)
  {
   if(firstSizing)
    startRects.Add(pChild->GetRect());

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

   pChild->SetRect(rectLeft, rectTop,
       rectSizeX, rectSizeY);

   pChild = pChild->GetNext();
  }
  firstSizing = false;
 }

private:
 bool firstSizing = true;
 Size startSize;
 Vector<Rect> startRects;
};
```

```
#endif
```

File Attachments

1) AutoResizeTopWindow.h, downloaded 356 times