Subject: Re: How to achieve dynamic layout scaling ?
Posted by mingodad on Wed, 06 Jan 2021 16:26:14 GMT
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With this I'm getting resembling what I mean by "Dynamic Layout Scaling", still missing font scaling and is a bit hack.

Does Ultimate++ provide something like this or have anyone done something like this ?

- CalculatorDynLayout.h

```
#ifndef _CalculatorDynLayout_CalculatorDynLayout_h
#define _CalculatorDynLayout_CalculatorDynLayout_h

#include <CtrlLib/CtrlLib.h>

using namespace Upp;

#define LAYOUTFILE <CalculatorDynLayout/CalculatorDynLayout.lay>
#include <CtrlCore/lay.h>

class CalculatorDynLayout : public WithCalculatorDynLayoutLayout<TopWindow> {
 Rect initSize;
 Vector<Rect> childInitSizes;
public:
 CalculatorDynLayout();
 virtual void Layout();
};

#endif
```

- main.cpp

```
#include "CalculatorDynLayout.h"

CalculatorDynLayout::CalculatorDynLayout()
{
 CtrlLayout(*this, "Calculator");
}

void CalculatorDynLayout::Layout()
{
 if(childInitSizes.GetCount() == 0)
 {
  initSize = this->GetRect();
  for(int i=0, imax=this->GetChildCount(); i < imax; ++i)
  {
```

```
   childInitSizes.Add(this->GetIndexChild(i)->GetRect());
  }
 }
 else
 {
  Rect currSize = this->GetRect();
  double cxRatio = (currSize.right-currSize.left) / ((double)(initSize.right-initSize.left));
  double cyRatio = (currSize.bottom-currSize.top) / ((double)(initSize.bottom-initSize.top));
  entry.SetLabel(String() << initSize << "::" << currSize
   << "::" << cxRatio << "::" << cyRatio
   << "::" << childInitSizes.GetCount() << "::" << this->GetChildCount());

  for(int i=0, imax=this->GetChildCount(); i < imax; ++i)
  {
   Rect newSize, childSize;
   childSize = childInitSizes[i];
   Ctrl *childCtrl = this->GetIndexChild(i);
   newSize.left = childSize.left * cxRatio;
   newSize.top = childSize.top * cyRatio;
   newSize.right = childSize.right * cxRatio;
   newSize.bottom = childSize.bottom * cyRatio;
   childCtrl->SetRect(newSize);
  }
 }
}

GUI_APP_MAIN
{
 CalculatorDynLayout().Sizeable().Run();
}
```

- CalculatorDynLayout.lay

```
LAYOUT(CalculatorDynLayoutLayout, 160, 140)
 ITEM(Upp::Label, entry, SetFrame(BlackFrame()).LeftPosZ(12, 140).TopPosZ(8, 19))
 ITEM(Upp::Button, clear, SetLabel(t_("C")).LeftPosZ(68, 20).TopPosZ(36, 15))
 ITEM(Upp::Button, clearAll, SetLabel(t_("AC")).LeftPosZ(96, 20).TopPosZ(36, 15))
 ITEM(Upp::Button, bksp, SetLabel(t_("<-")).LeftPosZ(124, 28).TopPosZ(36, 15))
 ITEM(Upp::Button, b7, SetLabel(t_("7")).LeftPosZ(12, 20).TopPosZ(56, 15))
 ITEM(Upp::Button, b8, SetLabel(t_("8")).LeftPosZ(40, 20).TopPosZ(56, 15))
 ITEM(Upp::Button, b9, SetLabel(t_("9")).LeftPosZ(68, 20).TopPosZ(56, 15))
 ITEM(Upp::Button, bdiv, SetLabel(t_("/")).LeftPosZ(96, 20).TopPosZ(56, 15))
 ITEM(Upp::Button, bsqrt, SetLabel(t_("sqrt")).LeftPosZ(124, 28).TopPosZ(56, 15))
 ITEM(Upp::Button, b4, SetLabel(t_("4")).LeftPosZ(12, 20).TopPosZ(76, 15))
 ITEM(Upp::Button, b5, SetLabel(t_("5")).LeftPosZ(40, 20).TopPosZ(76, 15))
 ITEM(Upp::Button, b6, SetLabel(t_("6")).LeftPosZ(68, 20).TopPosZ(76, 15))
 ITEM(Upp::Button, bmul, SetLabel(t_("*")).LeftPosZ(96, 20).TopPosZ(76, 15))
```

```
 ITEM(Upp::Button, bpct, SetLabel(t_("%")).LeftPosZ(124, 28).TopPosZ(76, 15))
 ITEM(Upp::Button, b1, SetLabel(t_("1")).LeftPosZ(12, 20).TopPosZ(96, 15))
 ITEM(Upp::Button, b2, SetLabel(t_("2")).LeftPosZ(40, 20).TopPosZ(96, 15))
 ITEM(Upp::Button, b3, SetLabel(t_("3")).LeftPosZ(68, 20).TopPosZ(96, 15))
 ITEM(Upp::Button, bminus, SetLabel(t_("-")).LeftPosZ(96, 20).TopPosZ(96, 15))
 ITEM(Upp::Button, b0, SetLabel(t_("0")).LeftPosZ(12, 20).TopPosZ(116, 15))
 ITEM(Upp::Button, bsep, SetLabel(t_(".")).LeftPosZ(40, 20).TopPosZ(116, 15))
 ITEM(Upp::Button, blessplus, SetLabel(t_("-/+")).LeftPosZ(68, 20).TopPosZ(116, 15))
 ITEM(Upp::Button, bplus, SetLabel(t_("+")).LeftPosZ(96, 20).TopPosZ(116, 15))
 ITEM(Upp::Button, beq, SetLabel(t_("=")).LeftPosZ(124, 28).TopPosZ(96, 36))
END_LAYOUT
```