Subject: Clock small scale
Posted by cbpporter on Wed, 02 Apr 2008 15:12:16 GMT
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I've noticed that Clock does not scale too well with small sizes. Clock probably wasn't designed with this in mind so it is probably Ok to leave it like this. Still, at small sizes the clock needles are drawn on top of the header with the 4 buttons. This looks very ugly. I would propose to change the order of the drawing so at least the header will be drawn on top of everything when the size is too small, like this:

```
void Clock::Paint(Draw& w)
{
 const Style &st = style ? *style : StyleDefault();

 CalcSizes();

 w.DrawRect(sz, st.bgmain);

 if(colon)
  PaintCenteredText(w, sz.cx / 2, hs / 2 - 1, " : ", StdFont().Bold(), SColorHighlightText());

 //w.DrawEllipse(cm.x - r / 2, cm.y - r / 2, cf.x, cf.x, Blend(st.header, White, 250), PEN_NULL,
Black);

 Font fnt = st.font;

 if (sz.cy < hs * 4)
  fnt.Height(8);
 else if (sz.cy < hs * 5)
  fnt.Height(10);
 else if (sz.cy < hs * 6)
  fnt.Height(11);

 for(int i = 1; i <= 12; i++) {
  PaintCenteredText(w,
                    cm.x + int(0.8 * sin(i * M_PI / 6.0) * cf.x),
                    cm.y - int(0.8 * cos(i * M_PI / 6.0) * cf.y),
                    AsString(i), fnt.Bold(i % 3 == 0), SBlack());
 }

 int cp = cur_point;
 for(int i = 1; i <= 60; i++) {
  int x = cm.x + int(0.95 * sin(i * M_PI / 30.0) * cf.x);
  int y = cm.y - int(0.95 * cos(i * M_PI / 30.0) * cf.y);
  PaintCenteredImage(w, x, y,
                     cur_point == i ? CtrlImg::BigDotH()
                                    : i % 5 == 0 ? CtrlImg::BigDot() : CtrlImg::SmallDot());
```

```
 }

 PaintPtr(0, w, cm, cur_time / 3600.0 / 12, 0.5, 5, cur_line == 0 ? st.arrowhl : st.arrowhour, cf);
 PaintPtr(1, w, cm, cur_time / 3600.0, 0.6, 3, cur_line == 1 ? st.arrowhl : st.arrowminute, cf);
 if(seconds)
  PaintPtr(2, w, cm, cur_time / 60.0, 0.75, 2, cur_line == 2 ? st.arrowhl : st.arrowsecond, cf);

 DrawBg(w, 0, 0, sz.cx, hs, st.header);
}
```

And another strange behavior: you have the buttons to adjust minutes and hour, but you can also drag the needles. Dragging needles results in a smooth progression, but using buttons, especially the decrease buttons gives strange results when decreasing under zero, even increasing the time. Would you like me to fix this?

Subject: Re: Clock small scale
Posted by cbpporter on Fri, 13 Mar 2009 04:25:49 GMT
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Also fixed the issue with decreasing minutes under zero by button push. The problem occurred because of the use of increment/decrement operators on byte values and passing those values to functions that expected int values. Mixing signed/unsigned is yet again not a great idea, and by using binary operators we get implicit int conversion:

```
void Clock::SetHourLeft()
{
 sel.hour = SetMinMax(sel.hour - 1, 0, 23).value;
 UpdateTime();
}

void Clock::SetHourRight()
{
 sel.hour = SetMinMax(sel.hour + 1, 0, 23).value;
 UpdateTime();
}

void Clock::SetMinuteLeft()
{
 MinMax mm = SetMinMax(sel.minute - 1, 0, 59);
 sel.minute = mm.value;
 sel.hour = SetMinMax(sel.hour + mm.diff, 0, 23).value;
 UpdateTime();
}

void Clock::SetMinuteRight()
{
 MinMax mm = SetMinMax(sel.minute + 1, 0, 59);
```

```
 sel.minute = mm.value;
 sel.hour = SetMinMax(sel.hour + mm.diff, 0, 23).value;
 UpdateTime();
}
```

Subject: Re: Clock small scale
Posted by unodgs on Fri, 13 Mar 2009 08:09:42 GMT
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Thanks -> in svn I always wondered why time values are not ints? Just to save memory?
I think also that datetime picker must have ok and cancel button. I found unintuitive for users cliking in the center of clock to accept time change only.

Subject: Re: Clock small scale
Posted by cbpporter on Fri, 13 Mar 2009 09:15:14 GMT
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unodgs wrote on Fri, 13 March 2009 10:09Thanks -> in svn
Thanks!

cbpporter issue #016: Clock minute buttons bug
Fixed.

Could you apply the patch from first post (Paint) too?

Quote:
I always wondered why time values are not ints? Just to save memory?

Wasn't there when that happened, but my guess: yes!

Quote:
I think also that datetime picker must have ok and cancel button. I found unintuitive for users cliking in the center of clock to accept time change only.

Never tried datetime picker. I'll look over it and tell you what I think.

Subject: Re: Clock small scale
Posted by unodgs on Fri, 13 Mar 2009 09:50:35 GMT
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Quote:Could you apply the patch from first post (Paint) too?
Somehow I missed this post. I'll take a look at this.

Subject: Re: Clock small scale
Posted by unodgs on Fri, 13 Mar 2009 12:14:03 GMT
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Ok, I commited some changes for better clock scaling. Please see if it works for you.

Subject: Re: Clock small scale
Posted by cbpporter on Fri, 13 Mar 2009 17:05:29 GMT
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unodgs wrote on Fri, 13 March 2009 14:14Ok, I commited some changes for better clock scaling. Please see if it works for you.
Thanks! You went farther than I did, since is just wanted it to not look incredibly ugly with small sizes.

cbpporter Issue #015: Clock small scale
Fixed.
