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Subject: Missing Functions for Layouter

Posted by [Zardos](#) on Wed, 25 Jul 2007 08:34:14 GMT

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Hello,

because I'm more productive if I use layout manager and automatic gui layouting functions instead of moving widgets on the screen I started to programm some simple layouting stuff.

But soon I ran into problems. What I would need is a "GetOptSize()" functions for controls. This function should return the "optimum size" of a control. For example for a button it should take into account:

- the used font
- the label
- the image
- default margin

... Because there is nothing like a GetOptSize() for Ctrls I started to make my own outside of the class like this:

```
Size GetOptSize(Ctrl &c) {  
    Button *b = dynamic_cast<Button *>(&c);  
    if(b) {  
        Size s;  
  
        s = GetTLTextSize(WString(b->GetDesc()), StdFont());  
        s.cx += GUI_MARGIN * 2;  
  
        return s;  
    } else  
        return c.GetStdSize();  
}
```

... well not nice, but it should work.

What I'm really missing are a function to get the used font for ctrls and for buttons a GetImage:

If I would start adding the following functions to button (and other controls):

```
GetFont();  
GetImage();
```

...and create a patch would you accept it?

Or even better would you like to have a "virtual GetOptSize()" for Ctrls?

Or do you have any other suggestions?

- Ralf

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Subject: Re: Missing Functions for Layouter  
Posted by [mirek](#) on Wed, 25 Jul 2007 08:40:02 GMT  
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Actually, there is GetStdSize.

Unfortunately, for many widgets, it is not implemented correctly...

In fact, there are three of kind:

GetMinSize (minimal size)  
GetStdSize (optimal size)  
GetMaxSize (maximal size)

Default implementation of GetStdSize calls GetMinsSize (at least, this does make sense...)

Mirek

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Subject: Re: Missing Functions for Layouter  
Posted by [Zardos](#) on Wed, 25 Jul 2007 08:47:30 GMT  
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Yes, thanks.

I have found this functions. But as you wrote some of them are not correct.

Especially for buttons: It allways returns the same size regardless of the label and use image, font, etc...

So,

if I would start "fixing" the GetStdSize functions. Starting with the buttons, you would accept it?

I thought GetStdSize is made this way by itension (always return a "default" size - independent of the content). ...But of course if GetSdtSize means something like "optimum size" then we could start fixing the functions.

Edit:

Anyway, I could get around an "incorrect" GetStdSize with my own function. It would just be very helpful to have access to the used lamge and the used font for a button. If I miss more for other

controls I will mention it again in the forum.

- Ralf

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Subject: Re: Missing Functions for Layouter  
Posted by [mirek](#) on Wed, 25 Jul 2007 08:57:10 GMT  
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Zardos wrote on Wed, 25 July 2007 04:47

if I would start "fixing" the GetStdSize functions. Starting with the buttons, you would accept it?

- Ralf

Yes. Just will need a bit of thinking how min and std values should look like.

OTOH, you seem to be the main user, so I guess you will get it right

Mirek

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Subject: Re: Missing Functions for Layouter  
Posted by [Zardos](#) on Wed, 25 Jul 2007 09:05:22 GMT  
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[quote title=luzr wrote on Wed, 25 July 2007 10:57][quote Yes. Just will need a bit of thinking how min and std values should look like.

OTOH, you seem to be the main user, so I guess you will get it right

Ok thanks.

I will start with the button and submit the patch here. if I encounter more I will submit the additional patches again.

- Ralf

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Subject: Re: Missing Functions for Layouter  
Posted by [Zardos](#) on Wed, 25 Jul 2007 09:37:45 GMT  
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OK,

here comes the patch for the button

- Ralf

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## File Attachments

1) [Button\\_GetStdSize.patch](#), downloaded 343 times

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Subject: Re: Missing Functions for Layouter  
Posted by [mirek](#) on Fri, 27 Jul 2007 11:19:26 GMT  
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Should not these constants rather be chameleon variables?

Why Pusher::GetStdSize?

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Subject: Re: Missing Functions for Layouter  
Posted by [Zardos](#) on Fri, 27 Jul 2007 13:26:00 GMT  
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luzr wrote on Fri, 27 July 2007 13:19 Should not these constants rather be chameleon variables?

Why Pusher::GetStdSize?

Ok, I will move necessary constants to chameleon. I will also reduce the new constants to a minimum and remove all constants related to Layout engines.

Pusher: GetStdSize:

I thought if someone derives from it, there would be a - hopefully - usable GetStdSize.  
But no problem I will remove it.

Additional changes I discovered useful while programming my layouter:

I will more concentrate on GetMinSize(), because here it is relative clear what is meant: The minimum size which will not truncate an information (labels, text, ...).

For some controls - like buttons - I will supply GetStdSize().

For example I will add a small margin to the left and right of the button and make sure the button has a minimum default size.

Since my layouter is nearly complete I will soon start with checking and implementing GetMinSize(), GetStdSize() for some other controls and post the new patch for review.

I leave out GetMaxSize completely, because currently I have no clue what could be useful values

for it.

Thanks,  
Ralf

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Subject: Re: Missing Functions for Layouter  
Posted by [mirek](#) on Fri, 27 Jul 2007 20:39:02 GMT  
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Pusher: Well, derived classes have to implement Paint, so it is doubtful GetMinSize is relevant for it...

GetMinSize vs GetStdSize -> that is exactly how we meant it

GetMaxSize use is meant for top-level windows.

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