Subject: I propose to include function PropRescale.
Posted by sergeynikitin on Tue, 22 Dec 2009 14:06:30 GMT
View Forum Message <> Reply to Message

I propose to include in the base package in addition to the functions Rescale function propRescale.

commonfucnc.h:

```
Image PropRescale(const Image& im, const Size res_size);
Image PropRescale(const Image& im, const int cx, const int cy);
Image PropRescale(const Image& im, const ImageCtrl& imc);
void PropRescale(const Image& im, ImageCtrl& imc ,const bool setimage);
```

commonfunc.cpp:

```
Image PropRescale(const Image& im, const Size res_size){
 Size imsize,ressize=res_size;
 imsize = im.GetSize();
 if (imsize.cx > 0 && imsize.cy > 0) {
  double ixy = double(imsize.cx)/imsize.cy;
  double rxy = double(ressize.cx)/ressize.cy;
  if (rxy>ixy) {
   ressize.cx = ressize.cy*imsize.cx/imsize.cy;
  } else {
   ressize.cy = ressize.cx*imsize.cy/imsize.cx;
  }
  return Rescale(im,ressize);
 }
}

Image PropRescale(const Image& im,const int cx,const int cy) {
 Size ressize;
 ressize.cx = cx;
 ressize.cy = cy;
 return PropRescale(im,ressize);
}

Image PropRescale(const Image& im, const ImageCtrl& imc) {
 Image i = PropRescale(im,imc.GetSize());
 return i;
}

void PropRescale(const Image& im, ImageCtrl& imc ,const bool setimage) {
 Image i = PropRescale(im,imc.GetSize());
 if (setimage) imc.SetImage(i);
 return;
```

}

I use it to display images in ImageCtrl, therefore, as a parameter to some of the call option is ImageCtrl.

The function uses real arithmetic. I was going to transfer all of integer arithmetic, but so far not done so.

Another point. I do not quite understand CacheRescale, so long and did not interface to CacheRescale.

PS.
Perhaps there is a solution makes it unnecessary to my exercises. If so, could you tell. And then I may be wrong, to reinvent the wheel?

Subject: Re: I propose to include function PropRescale.
Posted by koldo on Tue, 22 Dec 2009 14:57:51 GMT
View Forum Message <> Reply to Message

Hello Sergey

I think your proposal is similar to this in Functions4U:

```
template <class T>
Rect_<T> FitInFrame(const Size_<T> &frame, const Size_<T> &object)
{
 double frameAspect  = frame.cx/(double)frame.cy;
 double objectAspect = object.cx/(double)object.cy;

 if (frameAspect > objectAspect) {
  double x = (frame.cx - objectAspect*frame.cy)/2.;
  return Rect_<T>((T)x, 0, (T)(x + objectAspect*frame.cy), frame.cy);
 } else {
  double y = (frame.cy - frame.cx/objectAspect)/2.;
  return Rect_<T>(0, (T)y, frame.cx, (T)(y + frame.cx/objectAspect));
 }
}
```

From Functions4U documentation:

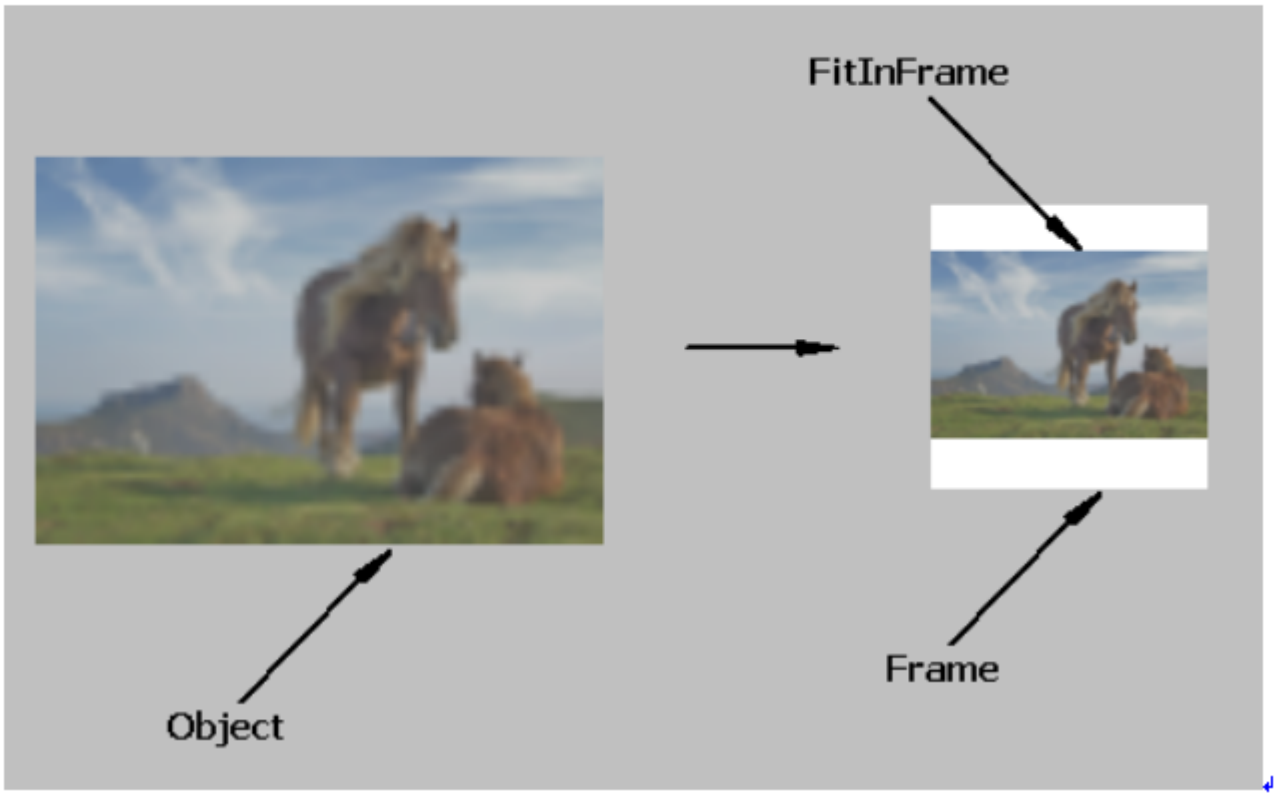
Best regards
Koldo

File Attachments

1) Screen.PNG, downloaded 1251 times

```
template <class T> Rect_<T> FitInFrame(const Size_<T>& frame,
                                       const Size_<T>& object)
```

Returns the rectangle in a Rect to fit inside **frame** the **object** maintaining the aspect ratio.



Subject: Re: I propose to include function PropRescale.
Posted by sergeynikitin on Tue, 22 Dec 2009 17:49:17 GMT
View Forum Message <> Reply to Message

Could you give an example of use this template?

I still think that the task to display the picture in any Control, and while it fit in the Control are standard, and would be better off just when you display a control would have been just any flag.

Finally, I have these functions in a separate package. But the task of manipulating the images so often and that you want to include the output function as standard. I just tried to make calls to these functions as possible similar to the original functions.

By the way, I think that is proportional to output images is used much more often than not proportional, and should at least include it in the base system. Better yet, make a proportional output images - by default.

Subject: Re: I propose to include function PropRescale.
Posted by koldo on Tue, 22 Dec 2009 20:33:54 GMT
View Forum Message <> Reply to Message

Hello Sergey

Quote:Could you give an example of use this template?

If MyImage contains an image member:

```
void MyImage::Paint(Draw& w) {
 w.DrawImage(FitInFrame(GetSize(), image->GetSize()), image);
}
```

Best regards
Koldo

Subject: Re: I propose to include function PropRescale.
Posted by sergeynikitin on Tue, 22 Dec 2009 20:36:43 GMT
View Forum Message <> Reply to Message

Yes, decision looks beautifully.

Subject: Re: I propose to include function PropRescale.
Posted by sergeynikitin on Tue, 22 Dec 2009 20:40:30 GMT
View Forum Message <> Reply to Message

Do I need for these actions to create a class?

Subject: Re: I propose to include function PropRescale.
Posted by koldo on Tue, 22 Dec 2009 21:09:40 GMT
View Forum Message <> Reply to Message

Hello Sergey

This sample has been extracted from StaticImage class in Controls4U.

As I did not find in documentation a control to view an image I created one. After that I discover a control for that.

In this class what I called "BestFit" option is default as I also think that this is the more useful one.
In addition to that this class permit:
- to include a background image for the window
- to enclose the control in the layout designer

I think that these are simple to implement lightweight options to be included in a basic image control. If it is possible to include them in any way in the official image control I would be glad to remove StaticImage control.

Best regards
Koldo

Subject: Re: I propose to include function PropRescale.
Posted by Didier on Wed, 23 Dec 2009 17:44:28 GMT
View Forum Message <> Reply to Message

Hello Koldo,

what is the official StaticImage control ??

Subject: Re: I propose to include function PropRescale.
Posted by koldo on Wed, 23 Dec 2009 20:11:30 GMT
View Forum Message <> Reply to Message

Didier wrote on Wed, 23 December 2009 18:44Hello Koldo,

what is the official StaticImage control ??

Hello Didier

Oh no!. StaticImage is in Controls4U Bazaar package so it is not official at all .

If you want to try it run the Controls4U_Demo package.

Best regards
Koldo

Subject: Re: I propose to include function PropRescale.
Posted by Didier on Wed, 23 Dec 2009 22:52:29 GMT
View Forum Message <> Reply to Message

Oups ...

I misunderstood when you said:
Quote: .... view an image I created one. After that I discover a control for that

And I had already tested the Controls4U_Demo package (works fine) and the StaticImage ctrl is VERY welcome : it's kind of a basic ctrl but a VERY important one.

Thanks

Subject: Re: I propose to include function PropRescale.
Posted by mirek on Thu, 24 Dec 2009 10:06:20 GMT
View Forum Message <> Reply to Message

BTW, since the dawn of U++, there is GetFitSize function and Rect::CenterPos method....

Mirek

Subject: Re: I propose to include function PropRescale.
Posted by koldo on Thu, 24 Dec 2009 15:55:10 GMT
View Forum Message <> Reply to Message

luzr wrote on Thu, 24 December 2009 11:06BTW, since the dawn of U++, there is GetFitSize function and Rect::CenterPos method....

Mirek

Hello Mirek

I think it is really important to document all the functions and classes that are lost around the code. Many times we are reinventing the wheel spending time in it.

In addition it would be fundamental to have all the documentation linked and in one file (pdf). Unfortunately it is easier to find documentation this way instead of using our help system or browsing the web.

Best regards
Koldo

Subject: Re: I propose to include function PropRescale.
Posted by sergeynikitin on Thu, 24 Dec 2009 18:32:44 GMT

View Forum Message <> Reply to Message

Hello Mirek.

Thank you for GetFitSize. GetFitSize - this is what I need.

Pity there is no Help topic on Image Processing.

Say pls. where the module (or, where .h file), where I can see all this wealth?

Subject: Re: I propose to include function PropRescale.
Posted by mirek on Fri, 25 Dec 2009 10:54:21 GMT
View Forum Message <> Reply to Message

koldo wrote on Thu, 24 December 2009 10:55luzr wrote on Thu, 24 December 2009 11:06BTW, since the dawn of U++, there is GetFitSize function and Rect::CenterPos method....

Mirek

Hello Mirek

I think it is really important to document all the functions and classes that are lost around the code. Many times we are reinventing the wheel spending time in it.

In addition it would be fundamental to have all the documentation linked and in one file (pdf). Unfortunately it is easier to find documentation this way instead of using our help system or browsing the web.

Best regards
Koldo

I keep trying...

That said, the process is completely open. Everybody with access to primary svn can submit documentation. Almost everybody has access to uppbox and can submit changes to website. There is no fundamental problem converting documentation to pdf, except perhaps the fact that you will need to generate or write some Content summary.

Mirek

Subject: Re: I propose to include function PropRescale.
Posted by mirek on Fri, 25 Dec 2009 10:55:57 GMT
View Forum Message <> Reply to Message

sergeynikitin wrote on Thu, 24 December 2009 13:32Hello Mirek.

Thank you for GetFitSize. GetFitSize - this is what I need.

Pity there is no Help topic on Image Processing.

Say pls. where the module (or, where .h file), where I can see all this wealth?

Actually, they are not really Image specific - these are Rect/Size functions. That is why they are in Core/GTypes.h

Mirek
