
Subject: Math equations in QTF
Posted by [koldo](#) on Thu, 05 Mar 2009 09:53:34 GMT
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Hello all

I would like to show math equations like this in Upp (this one is just an example):

What could I do?:

- Is it possible to do it using Qtf?
- Would I have to draw it in Painter?

Best regards
Koldo

File Attachments

1) [Formula.JPG](#), downloaded 2072 times

$$\int_{x=1}^{10} 23 \cdot \frac{\sqrt[3]{12 \cdot x^3}}{x^2} dx$$

Subject: Re: Math equations in QTF
Posted by [mirek](#) on Thu, 05 Mar 2009 18:27:00 GMT
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koldo wrote on Thu, 05 March 2009 04:53Hello all

I would like to show math equations like this in Upp (this one is just an example):

What could I do?:

- Is it possible to do it using Qtf?

No. You could embed it IMO.

Quote:

- Would I have to draw it in Painter?

Best regards
Koldo

Well, I think the correct would be to create some sort of RichObject for this...

Mirek

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Fri, 06 Mar 2009 08:47:10 GMT
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Hello luzr

From which class should I derive this "math object"?

Best regards
Koldo

Subject: Re: Math equations in QTF
Posted by [mirek](#) on Fri, 06 Mar 2009 17:34:38 GMT
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Actually, the process is a little bit different.

You need to find "binary representation" (because, after all, you will need to store such object in QTF...). Then you provide a class that "draws" such binary representation.

I recommend digging around RichText/RichImage.

Subject: Re: Math equations in QTF
Posted by [mirek](#) on Fri, 06 Mar 2009 17:37:16 GMT
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UPDATE:

Tom has already created some simple expressions rendering, it should be in TDraw formula.h / .cpp, and in TCtrlLib.

Mirek

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Fri, 06 Mar 2009 23:26:23 GMT
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Sorry luzr

I have tried to compile TDraw and the best that I have go is this error:
error LNK2019: unresolved external symbol _WinMain@16 referenced in function
___tmainCRTStartup

The more I touch the more errors I get.

To put void AppMain() or GUI_APP_MAIN is just the same.

These files use NAMESPACE_UPP instead of using namespace Upp.

Does it sound anything to you?

Best regards

Koldo

Subject: Re: Math equations in QTF

Posted by [mirek](#) on Sat, 07 Mar 2009 19:59:50 GMT

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koldo wrote on Fri, 06 March 2009 18:26 Sorry luzr

I have tried to compile TDraw and the best that I have go is this error:
error LNK2019: unresolved external symbol _WinMain@16 referenced in function
___tmainCRTStartup

The more I touch the more errors I get.

To put void AppMain() or GUI_APP_MAIN is just the same.

These files use NAMESPACE_UPP instead of using namespace Upp.

Does it sound anything to you?

Best regards

Koldo

TDraw is not the main package. It is Tom's Draw extension library.

Mirek

Subject: Re: Math equations in QTF

Posted by [koldo](#) on Mon, 09 Mar 2009 08:44:43 GMT

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Sorry again luzr

If TDraw is not the main package, I do not know which is the right one.

If you think that TDraw is obsolete or outside actual Upp standards I can begin something based in QtfDrawing sample, so creating DrawingDraw, inserting it into a QtfRichObject and that in a qtf String.

Berst regards
Koldo

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Wed, 25 Mar 2009 23:13:45 GMT
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Hello all

I have prepared a function to draw mathematical equations as this one:

The function is:

```
Drawing DrawEquation(String str);
```

And the viewed sample call is:

```
Drawing drw = DrawEquation("integral(sqrt(cos(phi_ini^2)) + i^2 + 6, i = 1, 10)*dx =  
cos((27+x^2)^3.25)/(PI*R_0^2)");
```

It parses the String passed and builds the equation Drawing object considering upper and lower greek alphabet and easy subscripts and superscripts.

I think that now is not enough big to do a new enter in Bazaar for it. If somebody is interested in it I can include the code.

Now I use it to insert equations in Qtf through QtfRichObject and CreateDrawingObject. If somebody thinks about a better function interface proposals are accepted.

Best regards
Koldo

File Attachments

1) [Equation.JPG](#), downloaded 1785 times

$$\int_{i=1}^{10} \sqrt{\cos(\varphi_{ini}^2)} + i^2 + 6 \, dx = \frac{\cos\left(\left(27+x^2\right)^{3.25}\right)}{\Pi R_0^2}$$

Subject: Re: Math equations in QTF

Posted by [gridem](#) on Thu, 26 Mar 2009 06:41:19 GMT

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koldo wrote on Thu, 26 March 2009 02:13| think that now is not enough big to do a new enter in Bazaar for it. If somebody is interested in it I can include the code.

Yes, please. I'm very interesting in it. Thank you in advance.

Subject: Re: Math equations in QTF

Posted by [koldo](#) on Thu, 26 Mar 2009 22:44:54 GMT

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Hello gridem

Here I enclose you the package.

Now the calling function is QtfRichObject QtfEquation(String str) so that to get it into Qtf is as simple as GUI_APP_MAIN

```
{  
    String qtfText;  
  
    QtfRichObject qtEq = QtfEquation("integral(sqrt(cos(phi_ini^2)) + i^2 + 6, i = 1, 10)*dx =  
cos((27+x^2)^3.25)/(PI*R_0^2)");
```

```
    qtfText << "[R3 This is a formula in QTF:&" << qtEq;
```

```
    PromptOK(qtfText);  
}
```

ToDo list:

- Improve appearance mainly in Linux
- Change font size
- (Perhaps) Improve expression parser

Best regards

Koldo

File Attachments

1) [QtfEquation.zip](#), downloaded 623 times

Subject: Re: Math equations in QTF

Posted by [gridem](#) on Mon, 30 Mar 2009 09:39:46 GMT

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koldo wrote on Fri, 27 March 2009 01:44>Hello gridem

Here I enclose you the package.

Best regards

Koldo

Thank you very much! It's useful package for me.

Subject: Re: Math equations in QTF

Posted by [koldo](#) on Mon, 30 Mar 2009 13:53:31 GMT

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Hello gridem

You are welcome.

If you find any problem or any improvement oportunity please let me know.

Best regards

Koldo

Subject: Re: Math equations in QTF

Posted by [mdelfede](#) on Tue, 24 Aug 2010 13:03:45 GMT

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Hi Koldo

I missed that one.... I think it would be a very useful addon to QTF and to UWord !
What about embedding an equation editor in word control ? maybe just an aditstring with the equation preview in real time ?

Ciao

Max

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Tue, 24 Aug 2010 13:54:41 GMT
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Hello Massimo

Now QtfEquation only renders equations (and I have to polish it a little bit).

An equation editor is something completely different...

Subject: Re: Math equations in QTF
Posted by [mdelfede](#) on Tue, 24 Aug 2010 14:46:03 GMT
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koldo wrote on Tue, 24 August 2010 15:54Hello Massimo

Now QtfEquation only renders equations (and I have to polish it a little bit).

An equation editor is something completely different...

Hi Koldo,

I usually hated M\$ equation editor, the version I used were very fancy to look but quite uncomfortable to use.

I think that something like your is better, it's quite simple to enter an equation as a string and looking its correctness in real time in a control.... IMHO a better way to edit equations.

Max

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Tue, 24 Aug 2010 20:13:40 GMT
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mdelfede wrote on Tue, 24 August 2010 16:46koldo wrote on Tue, 24 August 2010 15:54Hello Massimo

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Hi Koldo,

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looking its correctness in real time in a control.... IMHO a better way to edit equations.

Max

Hello Massimo

Your focus is very easy. Just subclassing RichObjectType and that is all.

See sample Reference/RichTextObject. You will like it...

Subject: Re: Math equations in QTF
Posted by [mdelfede](#) on Wed, 25 Aug 2010 07:14:55 GMT
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Thank you Koldo

I'll test it on these days. Btw, I think if it works as expected I'll add to my app... Is a structural analysis app, with an UWord module too to be able to handle external stuffs, and an equation editor there would be great.

Ciao

Max

Subject: Re: Math equations in QTF
Posted by [koldo](#) on Wed, 25 Aug 2010 09:37:20 GMT
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Hello Massimo

I promise to do it soon. (I am stuck now with the media player)
