Subject: HTML viewer

Posted by forlano on Mon, 10 Jul 2023 19:39:16 GMT

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Hello,

I found litebrowser https://github.com/litehtml/litebrowser

that in turn is based on litehtml https://github.com/litehtml/litehtml that is a rendering engine not able to paint.

If I decide to ruin my summer time vacation trying to create a U++ ctrl for litehtml, where should I start from?

Do we have some Ctrl that potentially can accomodate such HTML viewer?

Best regards, Luigi

Subject: Re: HTML viewer

Posted by Klugier on Mon, 10 Jul 2023 20:29:20 GMT

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Hello Luigi,

The true thing is that HTML view control is one of the most important think we need at the moment. Please noticed that sometime ago Zbych implemented ChromiumBrowser. Currently, it is available only in upp/archieve repository, not UppHub. It is basing on CEF (Chromium Embedded Framework), Personally, I would do not go for lite-browser, because the whole library looks like a niche for me with poor support. It means that security norms will not be meet, which are crucial in context of applications that renders HTML and executes JavaScript.

If, we look for our competitors such as QT, the have QTWebEngine that is basing on CEF. We should aim for similar thing.

Since the implementation is not trivial and the maintenance cost will be high. Providing this functionality for U++ is a challenge not for one person, but for a group of people. So, before starting working on that it would be good if you will find somebody that will help you!:)

Klugier

Subject: Re: HTML viewer

Posted by mirek on Tue, 11 Jul 2023 09:57:07 GMT

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Klugier wrote on Mon, 10 July 2023 22:29Hello Luigi,

The true thing is that HTML view control is one of the most important think we need at the moment. Please noticed that sometime ago Zbych implemented ChromiumBrowser. Currently, it is available only in upp/archieve repository, not UppHub. It is basing on CEF (Chromium Embedded Framework), Personally, I would do not go for lite-browser, because the whole library looks like a niche for me with poor support. It means that security norms will not be meet, which are crucial in context of applications that renders HTML and executes JavaScript.

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## Klugier

Accidentally, I was forced to implement limited support for RichEdit accepting HTML clipboard format.

While definitely not the same thing as HTML viewer, it now understand most of style formatting that is applicable to RichText. I plan to enrich it a bit more (to actually understand CSS, add support for tables and maybe some sort of support for importing images).

https://github.com/ultimatepp/ultimatepp/blob/master/uppsrc/ RichText/ParseHTML.cpp

(That is not meant to distract us from CEF, ParseHTML is not even meant to be complete HTML viewer, just a bridge that allows some HTML->RichText/QTF conversion)

Mirek

Subject: Re: HTML viewer

Posted by Oblivion on Tue, 11 Jul 2023 10:37:20 GMT

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Hi,

In case you've missed it, we already have a fully functional html-5 parser (and sanitizer/prettifier as a bonus) now.

(Of course, I am aware that Mirek's code serves another purpose, but a fully-fledged HTML->QTF converter, using HtmlTools package would too be very easy to implement.)

Best regards, Oblivion Subject: Re: HTML viewer

Posted by mirek on Tue, 11 Jul 2023 11:14:13 GMT

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Oblivion wrote on Tue, 11 July 2023 12:37Hi,

In case you've missed it, we already have a fully functional html-5 parser (and sanitizer/prettifier as a bonus) now.

(Of course, I am aware that Mirek's code serves another purpose, but a fully-fledged HTML->QTF converter, using HtmlTools package would too be very easy to implement.)

Humor me:)

I have actually noticed this, but "It corrects and cleans up HTML and XML documents by fixing markup errors and upgrading legacy code to modern standards." does not seem like going too far into rendering stuff.

Parsing HTML is (relatively) easy. Where it gets hard IMO is where you have to interpret styles to have some meaningful rendering info. Font sizes, colors, line styles and width and such.. I have not checked too deeply, but few examples I have seen do not seem to deal with that stuff at all...

Mirek

Subject: Re: HTML viewer

Posted by forlano on Tue, 11 Jul 2023 11:21:06 GMT

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mirek wrote on Tue, 11 July 2023 11:57

Accidentally, I was forced to implement limited support for RichEdit accepting HTML clipboard format.

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(That is not meant to distract us from CEF, ParseHTML is not even meant to be complete HTML viewer, just a bridge that allows some HTML->RichText/QTF conversion)

Mirek

Hi Mirek,

even this may help a lot.

Is there an example package that shows how to use it or it should work as paste operation from clipboard?

Thanks, Luigi

Subject: Re: HTML viewer

Posted by forlano on Tue, 11 Jul 2023 11:26:19 GMT

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Oblivion wrote on Tue, 11 July 2023 12:37Hi,

In case you've missed it, we already have a fully functional html-5 parser (and sanitizer/prettifier as a bonus) now.

(Of course, I am aware that Mirek's code serves another purpose, but a fully-fledged HTML->QTF converter, using HtmlTools package would too be very easy to implement.)

Best regards, Oblivion

Yes, I missed it.

I downloaded the code and extracted HtmlTools and HtmlToolsExample package in MyApps folder, but theide (16879) doesn't list them :roll:

Do I need to do something else before to compile them?

Thanks, Luigi

Subject: Re: HTML viewer

Posted by mirek on Tue, 11 Jul 2023 11:38:50 GMT

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forlano wrote on Tue, 11 July 2023 13:21mirek wrote on Tue, 11 July 2023 11:57

Accidentally, I was forced to implement limited support for RichEdit accepting HTML clipboard format.

While definitely not the same thing as HTML viewer, it now understand most of style formatting that is applicable to RichText. I plan to enrich it a bit more (to actually understand CSS, add support for tables and maybe some sort of support for importing images).

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(That is not meant to distract us from CEF, ParseHTML is not even meant to be complete HTML viewer, just a bridge that allows some HTML->RichText/QTF conversion)

Mirek

Hi Mirek,

even this may help a lot.

Is there an example package that shows how to use it or it should work as paste operation from clipboard?

Thanks, Luigi

Right now it works as paste. But you can use it in the code as well, look for TrivialHtmlParse (really simple, String and base font on input, RichText as return value...)

Subject: Re: HTML viewer

Posted by Oblivion on Tue, 11 Jul 2023 11:45:37 GMT

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Hello Luigi

Quote:Yes, I missed it.

I downloaded the code and extracted HtmlTools and HtmlToolsExample package in MyApps folder, but theide (16879) doesn't list them Rolling Eyes Do I need to do something else before to compile them?

The package is a UppHub package, it is in UppHub. You can'tsee the HtmlTools package in default view because it is not a "main package". (choose non-main packages

And no, you don't need to do anything else to compile it. It "should" compile fine on Windows and Linux systems. The wrapped libtidy is statically linked; it's source is not huge, and I've also enabled Upp's allocators. (You can disable them if you like)

Best regards, Oblivion Subject: Re: HTML viewer

Posted by Oblivion on Tue, 11 Jul 2023 11:52:34 GMT

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Quote:Parsing HTML is (relatively) easy. Where it gets hard IMO is where you have to interpret styles to have some meaningful rendering info. Font sizes, colors, line styles and width and such.. I have not checked too deeply, but few examples I have seen do not seem to deal with that stuff at all...

Of course, you are right. It is not meant to build a web renderer and it does not parse CSS. But it let's you focus on everything else (i.e. in this case parsing CSS, without worrying too much about even colossal HTML pages.). And I can tell you from my experience with libtidy that it makes life so much easier if you are working with web pages. The parser part itself is very fast and is long battle-tested (after all, it is one of the "eldest" parsers).

Best regards, Oblivion

Subject: Re: HTML viewer

Posted by Oblivion on Sat, 16 Sep 2023 18:30:07 GMT

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Quote:Hello Luigi,

The true thing is that HTML view control is one of the most important think we need at the moment. Please noticed that sometime ago Zbych implemented ChromiumBrowser. Currently, it is available only in upp/archieve repository, not UppHub. It is basing on CEF (Chromium Embedded Framework), Personally, I would do not go for lite-browser, because the whole library looks like a niche for me with poor support. It means that security norms will not be meet, which are crucial in context of applications that renders HTML and executes JavaScript.

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Since the implementation is not trivial and the maintenance cost will be high. Providing this functionality for U++ is a challenge not for one person, but for a group of people. So, before starting working on that it would be good if you will find somebody that will help you! Smile

## Klugier

I think Servo is going to be a good alternative to chromium: https://servo.org/ Only downside is that it is in rust :roll:

Best regards,

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