Subject: U++ needs sockets examples and documentation
Posted by lectus on Tue, 13 Dec 2011 15:19:08 GMT
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In my opinion the GUI examples provided with U++ are enough, but it really lacks examples for sockets and web packages.

Yeah, there are a few simple examples using Http. But there's no big example, for example a GUI chat program.
So, it doesn't show how the Web packages work when using the GUI framework.

Subject: Re: U++ needs sockets examples and documentation
Posted by Wolfgang on Wed, 14 Dec 2011 16:35:02 GMT
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yes, i think you're right!
some examples how to use the web package and what is possible with it would be great

and maybe it isn't a bad idea to have a look at the examples / reference already avaiable if they are still correct?!

(http://www.ultimatepp.org/forum/index.php?t=msg&goto=34765&S=c7bff5e21e848aa8f653eab654b5f371#msg_34765)

Subject: Re: U++ needs sockets examples and documentation
Posted by mirek on Thu, 15 Dec 2011 07:22:57 GMT
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The thing here is that we are now developing "web framework", which will probably result in major overhaul. I guess it makes more sense to enhance docs after this is finished...

Subject: Re: U++ needs sockets examples and documentation
Posted by nlneilson on Sat, 24 Dec 2011 01:31:43 GMT
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mirek wrote on Wed, 14 December 2011 23:22I guess it makes more sense to enhance docs ...

Good idea, the docs are much better now than a year or so ago.

lectus: The concept of sockets are simple and straight forward (perhaps if you have used simple examples).
server/client: client contacts server then server can respond.

I have not gotten into the web stuff much but an IP along with a port # should do it.

Do a google search for "socket chat python".
Python usually has very simple examples with good explanations.
Once you understand the concepts and the basics you can port that to U++.

Try also changing your search to the Java language.
If you can find something to fit your needs in C++ then it should work in U++.

If not just post the code you are having a problem with (ie: put a bit of effort into it first, you will learn more, understand the concepts better and may/should be able to get something working).

Subject: Re: U++ needs sockets examples and documentation
Posted by lectus on Wed, 28 Dec 2011 16:09:20 GMT
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I know the socket API is simple, but what I really mean is how sockets are used with GUI apps.

For example: Do we need threads? How do make the sockets not block the GUI.
Lots of these questions could be answered with docs and examples (of sockets with GUI).

Also, I'd like to propose something to the U++ Dev Team, if it's not already been done.
In Tcl programming language I can use event-driven programming with sockets and it makes it really simple to not block the GUI and also handle multiple requests.
Here's a sample Tcl code that ilustrates that:

Server.tcl

```
# Read below to understand these 2 functions
proc readit {chan} {
    gets $chan data
    puts "We read $data from the socket."
}

proc writeit {chan} {
    # Now we can write something to the socket safely.
    puts $chan "Some data"
}

proc Serve {chan host port} {
   puts "IP $host connected through port $port on channel $chan."
   # Here is the interesting part. We set an event to the socket, and when it's readbale it'll execute the readit function and pass the channel as arg.
   fileevent $chan readable {readit $chan}
   fileevent $chan writable {writeit $chan}
}
```

```
# The line below creates a socket server and transfers control to the callback function
socket -server Serve 1234
# The line below waits in a infinite loop (only needed for console app)
vwait forever
```

Now this code could be used in a GUI app and it would not block the GUI through the use of events. It also handle multiples connects without the use of threads.
I don't know if U++ has anything like this, but it's a good feature to have.

Subject: Re: U++ needs sockets examples and documentation
Posted by tojocky on Thu, 29 Dec 2011 14:47:45 GMT
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A good solution (tested on nodejs) can be libuv library. Exists other events library like zeromq but those does not have native cross compilation.
