Subject: Re: A terminal emulator widget for U++
Posted by Oblivion on Sat, 20 Jul 2019 13:33:51 GMT
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Hello,

It is time to unleash the beast

The initial version of Terminal package is finally released.

I suggest you read the ReadMe.md on GitHub or the "Overview" doc (qtf) inluded in the package. It'll give you a better idea of what it is.

Github address of Terminal package:
https://github.com/ismail-yilmaz/upp-components/tree/master/ CtrlLib/Terminal

Examples are included in the Examples section of my git repo.

Yes, but what is it?

Excerpt form the ReadMe.md on github:

Terminal package is a flexible, easy-to-use yet powerful cross-platform virtual terminal emulation library written in C/C++ for Ultimate++.

It is designed from the ground up with modularity and maintainability in mind.
In this respect the package consists of several re-usable classes, only one being the Terminal widget.

Requirements

- Ultimate++ (ver. >= 2019.1)
- POSIX, Windows (and probably MacOS, though not tested.)
- A decent enough C/C++ compiler that supports at least C++11. (GCC/CLANG/MinGW/Msc)
- Snacks & beer.

Features

*Note that below list is only a summary of the currently supported features. Technical specifications and documentation will be available soon.

- Supports whatever platform Ultimate++ supports. (Linux, Windows, MacOS).
- Supports VT52/VT1xx/VT2xx, partial VT4XX/5XX, and xterm emulation modes.
- Supports user configurable device conformance levels (1, 2, 3, 4, and 0 as VT52 emulation).
- Supports both 7-bits and 8-bits I/O.
- Supports Unicode/UTF8.
- Supports user configurable, legacy "g-set" (G0/G1/G2/G3), and related shifting functions

(LS0/LS1/LS1R/LS2/LS2R/LS3/LS3R).
- Supports ANSI conformance levels.
- Supports various terminal state, device, and mode reports.
- Supports DEC VT52 graphics charset, VT1xx line-drawing charset, VT2xx multinational charset, and VT3xx technical charset.
- Supports VT52/VT1xx/VT2xx keyboard emulation with function keys.
- Supports UDK (DEC's user-defined function keys feature).
- Supports user configurable blinking text and blink interval.
- Supports ANSI colors (16 colors palette).
- Supports ISO colors (256 colors palette).
- Supports xterm dynamic colors (dynamic ink/paper/selection colors).
- Supports bright colors.
- Supports background color erase (BCE).
- Supports transparency (i.e. allows background images).
- Supports VT4xx rectangular area operations: copy, invert, fill. erase.
- Supports VT4xx rectangular area checksum calculation and reporting.
- Supports both DEC and ANSI style selective erases.
- Supports alternate screen buffer.
- Supports history/scrollback buffer.
- Has a user switchable scrollbar.
- Supports xterm style alternate scroll.
- Supports resize (and optional lazy resize to reduce flicker on network terminals such as SSH-based ones).
- Supports both immediate display refresh and delayed (buffered) display refresh.
- Supports xterm style mouse tracking: button, wheel, motion, focus in/out events.
- Supports user configurable cursor styles (block, beam, underscore, blinking/steady).
- Supports cursor locking.
- Supports clipboard operations (copy/paste/select all - including history buffer) and basic drag-and-drop ops.
- Supports bracketed paste mode.
- Has a predefined yet programmable context menu (left mouse button menu).
- Supports window titles.
- Supports bell notifications.
- Supports VT1xx LEDs.
- Supports size hint.
- Supports Ultimate++ style data serialization.
- Supports per-widget customization (i.e no global variables or properties are used).
- Includes a Terminal.usc file for TheIDE's layout editor.

Reviews, bug reports, patches, suggestions are welcome.

Best regards,
Oblivion