

Purpose

I wish to display child windows in my windows based desktop applications which have appearance of rectangular or rounded cornered elements/buttons as seen on many websites.

I need a Win32 & MFC based VS 2015 project/solution.

Details

- Create a class derived from CWnd
- Create a border-less child window
- The class should support get/set methods for these properties:
 - border_left_color
 - border_top_color
 - border_right_color
 - border_bottom_color
 - border_left_radius
 - border_top_radius
 - border_right_radius
 - border_bottom_radius
 - border_left_width
 - border_top_width
 - border_right_width
 - border_bottom_width
 - border_left_style
 - border_top_style
 - border_right_style
 - border_bottom_style
 - background_color
- Create a structure/class to group together all the properties, and use object of this structure/class within the child window class
- The drawing code should:
 - draw border to cover entire child window area
 - draw rectangular or round-cornered border as defined by the properties
 - fill the window with background color as defined by the property
- Drawing should be flicker free. To achieve this proper coding in WM_ERASEBKGND and WM_PAINT will be required such that each pixel is drawn only once, rather than getting erased by default background color and then getting redrawn
- The borders should get painted as shown in the example image - especially notice how individual border & corners are drawn.

System attributes

- Use layered window functions so that visible area under the rounded corner gets painted by window underneath
- May use gdiplus drawing functions only where required
- all colors are RGB values
- wrap all code under "AlliedUI" namespace
- Use Visual Studio 2015 for creating the project/solution
- The code should build and run fine in debug and release build configurations