

```

/*****
/*
/*----- T A S K B A R . C -----*/
/*
/* Task      : Functions for Taskbar notification
/*-----*/
/* Authors    : Michael Tischer and Bruno Jennrich
/* developed on : 09/15/1995
/* last update  : 09/22/1995
/*****
#include <windows.h>
#include <shellapi.h>

/*****
/* TaskBarAddIcon : Function for adding a new Taskbar
/*
/* icon. (NIM_ADD)
/*-----*/
/* Parameters:   hControllingWnd - Handle of window where
/*                                     Taskbar messages are to
/*                                     be sent.
/*                                     uWMTaskbar      - Message used to send Taskbar
/*                                     icon messages to the
/*                                     window.
/*                                     uTaskBarID      - For distinguishing Taskbar
/*                                     icons, in case the window
/*                                     controls several icons.
/*                                     hTaskBarIcon    - Handle of icon to be displayed
/*                                     in the Taskbar.
/*                                     lpzTip         - ToolTip of Taskbar icon
/* Return value : Success of the operation
/*****
BOOL TaskBarAddIcon( HWND  hControllingWnd,
                    UINT  uWMTaskbar,
                    UINT  uTaskBarID,
                    HICON hTaskBarIcon,
                    LPSTR lpzTip )

{
    BOOL bRetVal;                                // For saving the return value
    NOTIFYICONDATA nd;

    // Fill fields of NOTIFYICONDATA structure -----
    nd.cbSize      = sizeof( nd );
    nd.hWnd        = hControllingWnd;
    nd.uCallbackMessage = uWMTaskbar;
    nd.uID         = uTaskBarID;
    nd.hIcon       = hTaskBarIcon;
    if( lpzTip )
        lstrcpyn( nd.szTip,
                  lpzTip,
                  min( strlen( lpzTip ) + 1, sizeof( nd.szTip ) ) );

    // Which structure fields are valid? -----
    nd.uFlags = NIF_MESSAGE |
                ( hTaskBarIcon ? NIF_ICON : 0 ) |
                ( lpzTip ? NIF_TIP : 0 );

    // Add new Taskbar icon to Taskbar -----
    bRetVal = Shell_NotifyIcon( NIM_ADD, &nd );

    // Return success of Shell_NotifyIcon() -----
    return bRetVal;
}

/*****
/* TaskBarDeleteIcon : : Delete Taskbar icon (NIM_DELETE)
/*-----*/
/* Parameters:   hControllingWnd - Handle of window where
/*                                     Taskbar messages are
/*                                     to be sent.
/*                                     uTaskBarID      - ID of Taskbar icon to
/*                                     be deleted
/* Return value : Success of the operation
/*****
BOOL TaskBarDeleteIcon( HWND  hControllingWnd,
                    UINT  uTaskBarID )

{

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NOTIFYICONDATA nd;

nd.cbSize = sizeof( nd );           // Initialize structure
nd.hWnd   = hControllingWnd;
nd.uID    = uTaskBarID;

return Shell_NotifyIcon( NIM_DELETE, &nd );
}

/*****
/* TaskBarSetToolTip : Set new ToolTip for Taskbar icon          */
/*                      (NIM_MODIFY)                             */
/*-----*/
/* Parameters:         hControllingWnd - Handle of window where  */
/*                      Taskbar messages are                     */
/*                      to be sent.                               */
/*                      uTaskBarID     - ID of Taskbar icon       */
/*                      lpszTip        - New ToolTip             */
/* Return value : Success of the operation                       */
*****/
BOOL TaskBarSetToolTip( HWND hControllingWnd,
                      UINT uTaskBarID,
                      LPSTR lpszTip )
{
    NOTIFYICONDATA nd;

    nd.cbSize = sizeof( nd );           // Initialize structure
    nd.hWnd   = hControllingWnd;
    nd.uID    = uTaskBarID;

    nd.uFlags = NIF_TIP;                // Change only ToolTip

    if( lpszTip )                       // Transfer ToolTip to structure
        lstrcpyn( nd.szTip,
                  lpszTip,
                  min( strlen( lpszTip ) + 1, sizeof( nd.szTip ) ) );
    else nd.szTip[0] = '\0';

    return Shell_NotifyIcon( NIM_MODIFY, &nd );           // Set ToolTip
}

/*****
/* TaskBarSetIcon : Set new icon for Taskbar Notification area */
/*                      (NIM_MODIFY)                             */
/*-----*/
/* Parameter :         hControllingWnd - Handle of window where  */
/*                      Taskbar messages are                     */
/*                      to be sent.                               */
/*                      uTaskBarID     - ID of Taskbar icon       */
/*                      hTaskBarIcon   - New icon                */
/* Return value : Success of the operation                       */
*****/
BOOL TaskBarSetIcon( HWND hControllingWnd,
                    UINT uTaskBarID,
                    HICON hTaskBarIcon )
{
    NOTIFYICONDATA nd;

    nd.cbSize = sizeof( nd );           // Initialize structure
    nd.hWnd   = hControllingWnd;
    nd.uID    = uTaskBarID;

    nd.uFlags = NIF_ICON;                // Change only icon
    nd.hIcon  = hTaskBarIcon;

    return Shell_NotifyIcon( NIM_MODIFY, &nd );           // Set ToolTip
}

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