



CSA 2150 – Fundamentals of Network Programming (Windows Programming) Course Assignment 2007

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Win32 Programming

- The mark carried by this assignment can be found in the course booklet.
- Basic requirements:
 - A Windows DLL (not COM or .NET) written using low-level Win32 API calls.
 - A .NET front-end to the application (e.g. written in C#).
- The library (DLL) must expose two functions:
 - `int Author(title, icons, buttons)` where:
 - The function displays a message box whose message text (not title) is the author's (your) name.
 - The 'title' argument is a string that should be the title of the message box.
 - The 'icons' argument is an integer denoting the icon to use in the message box (exclamation, information, error, ...).
 - The 'buttons' argument is an integer denoting the buttons to display on the message box (OK, OK/Cancel, Abort/Retry/Ignore, ...).
 - The function should return an integer denoting which message box button was pressed.
 - `void BoxWindow(title, innerText)` where:
 - The function displays a window. The window should paint 5 concentric rectangles in its client area. It should be noted that concentric rectangles should be resized whenever the window itself is resized.
 - The window should be resizable and have maximise/minimise buttons in its caption bar.
 - The text contained in the 'innerText' string argument should be rendered at the centre of the window – this text should be rendered in point size 16, any font face will do.
 - The 'title' string argument is the text in the caption bar of the window.
 - The function has no return value (void).

- The .NET front-end:
 - The front-end could be a window-based application but a console-mode application will also do.
 - Irrespective of whether a window-based or console-mode application is written, the application should allow the user to execute the functions in the DLL allowing the user to try out the various combinations of arguments each function can take. For example, if the user chooses to try out the 'Author' function, the user should be prompted to enter what title, icons and buttons to use. Finally any values returned by the functions should be displayed to the user.
- The program must be accompanied by a **short** technical report describing any implementation details and techniques used to complete the assignment.
- PLAGIARISM WILL NOT BE TOLERATED.
- Refer to the assignment instructions at

<http://webster.cs.um.edu.mt/kguil/assignment.html>