

# Assignment 98: What would happen if we do not place WM\_QUIT message in the message queue when the user tries to close the window?

If you do not place the `WM_QUIT` message in the message queue when the user tries to close the window, the application will not properly exit when the user attempts to close the window. This can lead to several issues:

1. **Window Remains Open**: The window will remain open even though the user has attempted to close it. This can be confusing for users and may give the impression that the application has frozen or is unresponsive.
2. **Application Continues Running**: Without properly handling the close request and posting a `WM_QUIT` message to the message queue, the application's message loop will continue running. This means that the application's code will continue executing, potentially causing unexpected behavior or consuming unnecessary resources.
3. **Resource Leakage**: If the application is not properly shut down, it may not release resources or perform necessary cleanup tasks. This can lead to resource leakage, such as memory leaks, file handle leaks, or other resource leaks, which can degrade system performance and stability over time.
4. **User Experience Issues**: Failing to properly handle window close requests can result in a poor user experience. Users expect applications to respond appropriately when they attempt to close a window, and if the application fails to do so, it can lead to frustration and a negative perception of the software.

In summary, properly handling the `WM_CLOSE` message and posting a `WM_QUIT` message to the message queue is essential for ensuring that an application closes gracefully when the user attempts to close its window. Failure to do so can result in various issues related to application behavior, resource management, and user experience.