**Application Programs using Windows API**

I am Alvin Alexander, eighth standard student of Salvation Army HSS, Kowdiar, Thiruvananthapuram.

In the previous session, we learned about one of the two ways to create the program that automatically types sentences in notepad. This time, we are attempting the development of a GUI in WinAPI by the graphics subsystem.

Let us ask the basic questions to learn more:

What is a GUI?

A GUI (Graphical User Interface) is a form of user interface that allows users to interact with the computer through graphical icons and other visual indicators.

What are the other types of UIs? How are they different from GUI?

The two basic UIs, used in Windows, are: CLI (Command-Line Interface) and GUI. CLIs prompt users to provide input by command strings through the keyboard and respond by outputting text to the monitor. An example of CLI in Windows is Command Prompt. CLI is much more difficult to achieve proficiency in, for non-technical individuals, but the concept is easy to grasp. Because of this, GUIs were introduced, which are much easier to work with. An example of GUI in Windows is Control Panel. Almost every application that we use today will have a GUI. Other than CLIs, there are many other types of UIs used in different electronic devices, each for different purposes.

Now, we move on to how we will create a GUI in Windows. A window is the beginning point of any GUI. So, we first make a window and then we add controls to this window, making it a GUI.

Creating a window with WinAPI:

Creating a window with WinAPI requires two function calls: RegisterClass(…) / RegisterClassEx(…) and then CreateWindow(…) / CreateWindowEx(…). We should use RegisterClass(…) because we do not need to specify additional parameters in window class creation and we can use either CreateWindowEx(…) or CreateWindow(…) , depending on if we need to use extended window styles like Right-To-Left character arrangement for some languages.

In the next session, we will go into more detail about creating a working window.