**Desktop GUI Automation**

* The main idea of this script is to automate interaction with GUI depending on the identifiers of each UI element by using pywinauto library.
* This code is portable to work on any device.
* To install this library you need the command:
* **pip install pywinauto**
* There’s two ways to get the identifiers:

1. by using ( print\_control\_identifiers() ) which print all identifiers in the current window

(e.g. app.New1Notepad.print\_control\_identifiers() )

1. By using third-party tool like UIAVerify which is a tool provided by Microsoft Windows SDK.

* To get identifiers using UIAVerify just activate Hover mode drag your mouse on the desired UI element and press Ctrl.

A computer screen shot of a computer

Description automatically generated

**Here's some additional information about the code:**

1. The code utilizes the pywinauto library, which is a Python package for automating Windows GUI applications. It provides a set of functions and classes to interact with windows, controls, and menus of Windows applications.
2. The Application class from pywinauto.application is used to start and connect to the Notepad++ application. The backend='uia' parameter specifies the UI Automation backend for interacting with the application.
3. The start() method is called to launch the Notepad++ application, providing the file path (r"C:\Program Files (x86)\Notepad++\notepad++.exe"). This path may need to be modified based on the actual installation location of Notepad++ on your system.
4. The connect() method is used to connect to the Notepad++ window. It takes the window title (title="new 1 - Notepad++") as an argument and a timeout value of 100 milliseconds.
5. The print() function is used to display informative messages in the console for each step of the automation process.
6. The click\_input() method is called on various control objects to simulate mouse clicks on specific elements within the Notepad++ window.
7. The wrapper\_object() method is used to retrieve a wrapper object for a control. It allows interaction with the control using its properties and methods.
8. The type\_keys() method is used to simulate keyboard input. In this case, it is used to enter the new file name in the "New Name:" text box.
9. The code demonstrates how to automate common tasks in Notepad++, such as maximizing the window, accessing menus, renaming files, and performing actions within the menus.

**Conclusion :**

* The code automate interaction with GUI elements Using pywinauto library and UI identifiers.
* Also by using Task Scheduler we can automate running of this script at the desired time