File upload POP Up

What is file upload pop up?

- The pop up which is used to browser and select the required file which is to be uploaded is called as file upload pop up.

Characteristics of file upload pop up

- File upload pop up is created by the below HTML code.

```
<input type="file" name="datafile">
```

- We cannot inspect the file upload pop up.
- We can move the pop up.

How to handle the file upload pop up

- There are different ways to handle the file upload pop ups.

First solution:

The First and the Easy way is simple case of just finding the element and typing the absolute path of the document into it.

Sample HTML code for file upload pop up:

```html
<html lang="en">
    <head>
        <Title>File Upload</Title>
    </head>
    <body>
        <center>
            <!--Content will go inside here.-->
            <form target="uploadfiles.php" method="post" enctype="multipart/form-data">
                <!--Content will go inside here.-->
                <input name="file1" type="file">
                <input type="submit" value="Upload Now">
            </form>
        </center>
    </body>
</html>
```

Write a program to handle the file upload pop up?

```java
package popup_file_upload;

import java.util.concurrent.TimeUnit;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class Upload_File {
    public static void main(String[] args)
    {
        System.setProperty("webdriver.chrome.driver","D:/Softwares/Drivers/chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
        driver.manage().window().maximize();
        driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML%20Pages/Practice/file_upload_widget/File_upload_ex.html");

        WebElement element = driver.findElement(By.name("file1"));
        element.sendKeys("C:\\Users\\PriyaPramod\\Desktop\\Sample.txt");

        driver.close();
    }
}
```
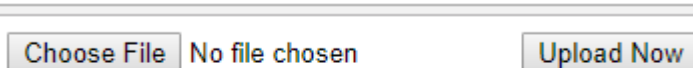
NOTE: This works only when the textbox is enabled. So please make sure that the input element is visible.
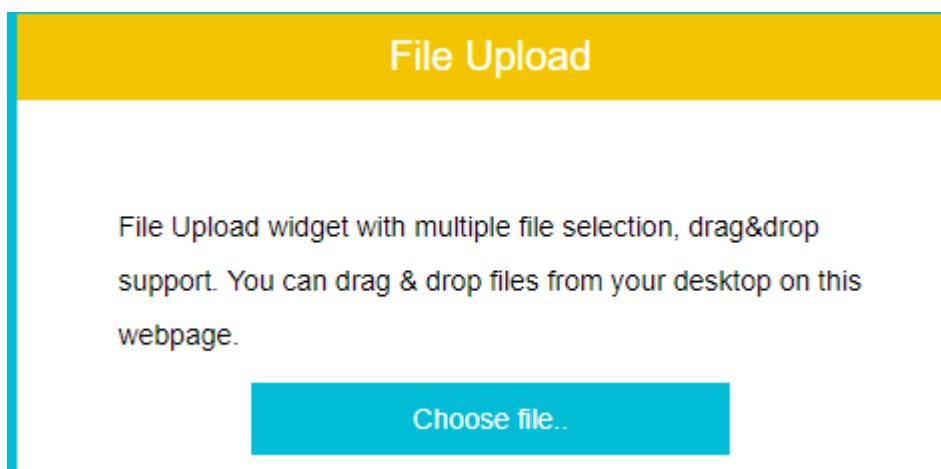
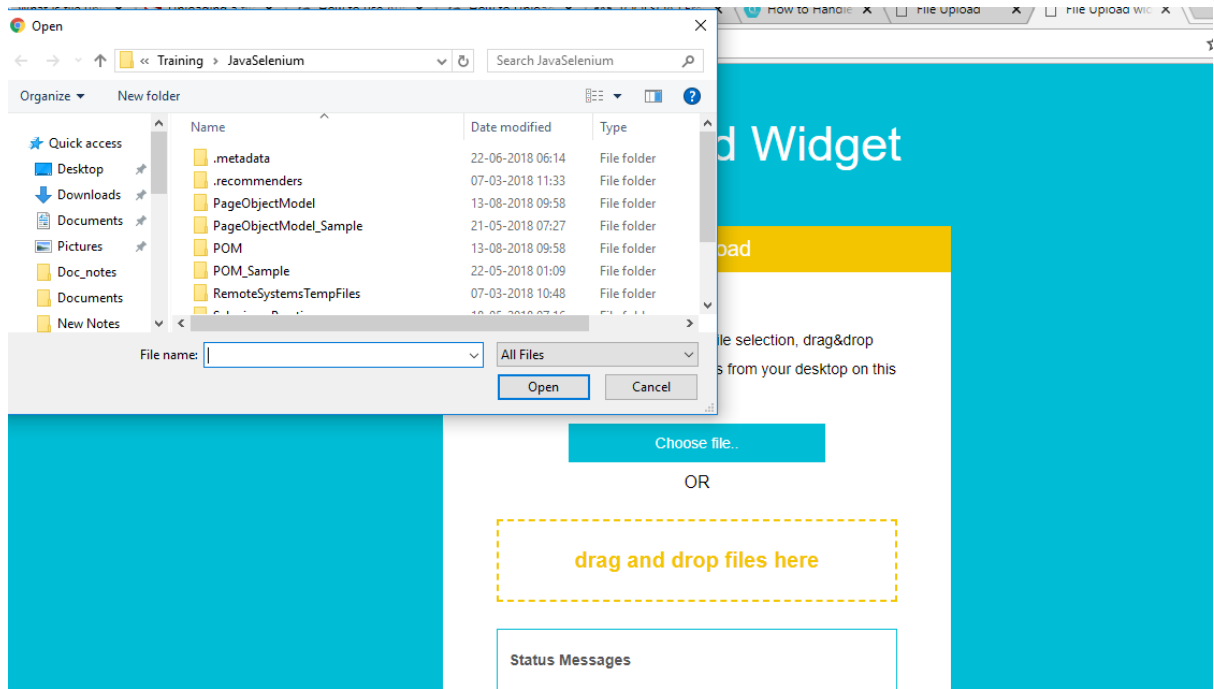And the UI should look like below, than only we can handle it using the sendKeys method.

The OTHER WAY to Handle File Upload

What If there is no text box / input tag to send the file path using SendKeys method????

You will have only a button (Customized button) and when click on that button, browser opens a window popup and to select the file from windows, And as we know selenium will not support non html pop up.

- If we click on the choose file button, it will through the file upload pop up.

- Since this kind of pop up cannot be handled by the selenium (Because these pop ups are non HTML pop up. Selenium can handle only HTML).
- We go for using the third party tool called as AUTOIT for handling the file upload pop up.

AUTOIT

- Selenium is an open source tool that is designed to automate web-based applications on different browsers but to handle window GUI and non HTML popups in application. AutoIT is required as these window based activity are not handled by Selenium.
- **AUTOIT** is also freeware. It uses a combination of mouse movement, keystrokes and window control manipulation to automate a task which is not possible by selenium webdriver.

Moving ahead we will learn how to upload a file in selenium web driver using **AUTOIT**. Here we need following tools in order to this.

- AutoIT editor and
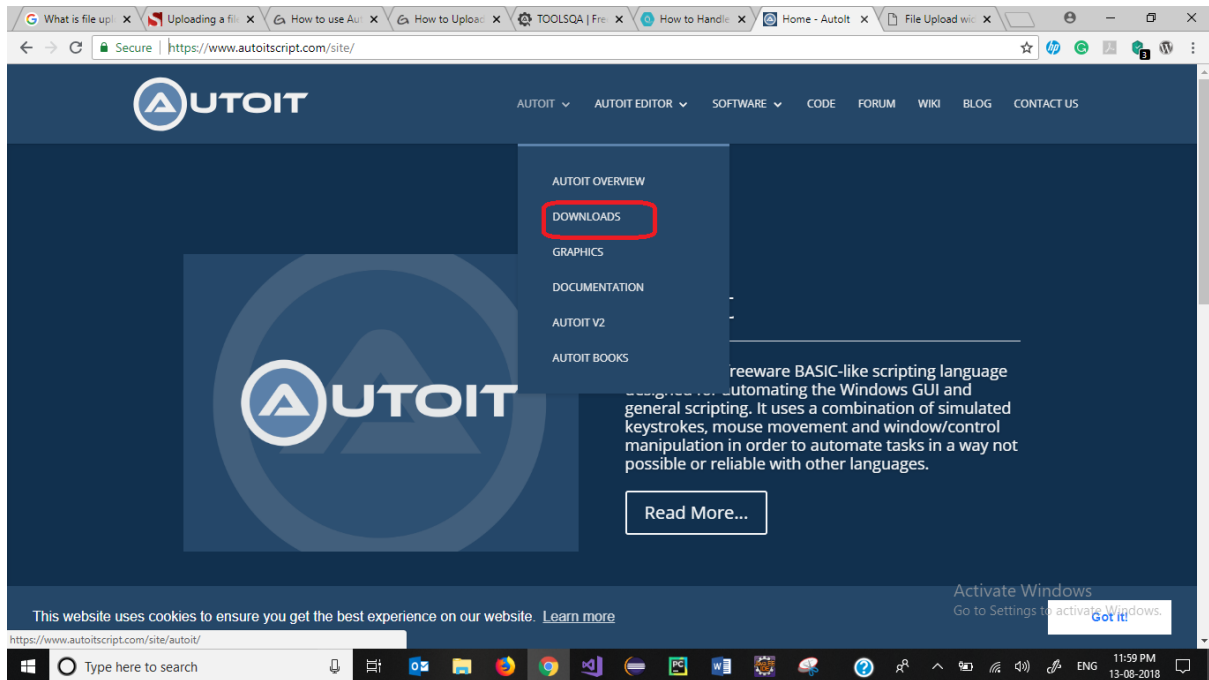- Element identifier.

Note: In order to get the above tools, first we need to install the AUTOIT.

Below are the steps to install the AUTOIT.

Step 1: Navigate to the below website.
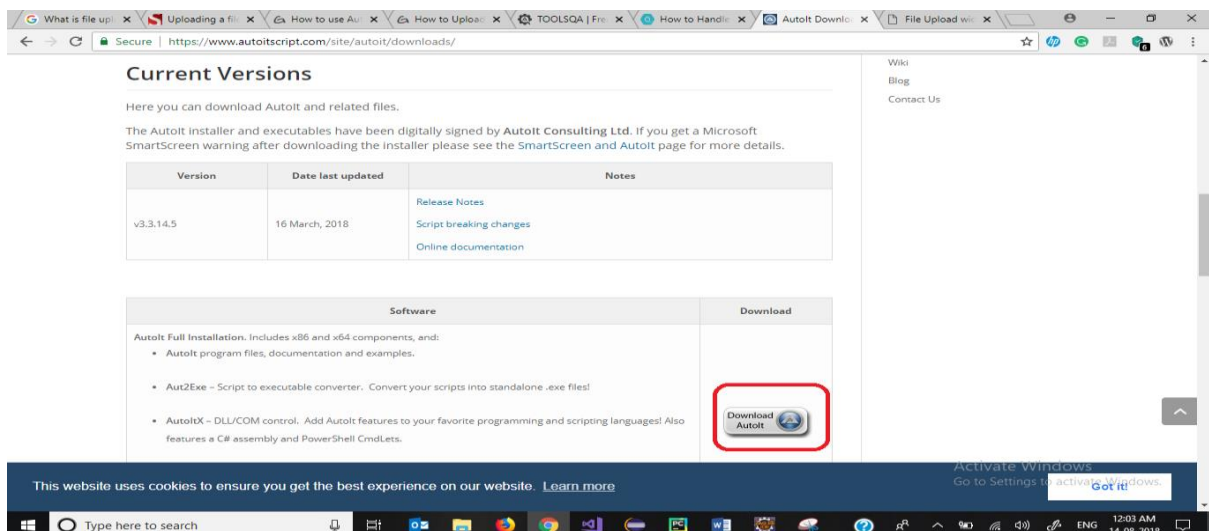
https://www.autoitscript.com/

Step 2: Mouse over on AUTOIT and click on the Downloads from the drop down.

Step 3: It navigates to the download page. Scroll down in the download page till the current versions sections.

Below the current version section, click on "Download AutoIT"
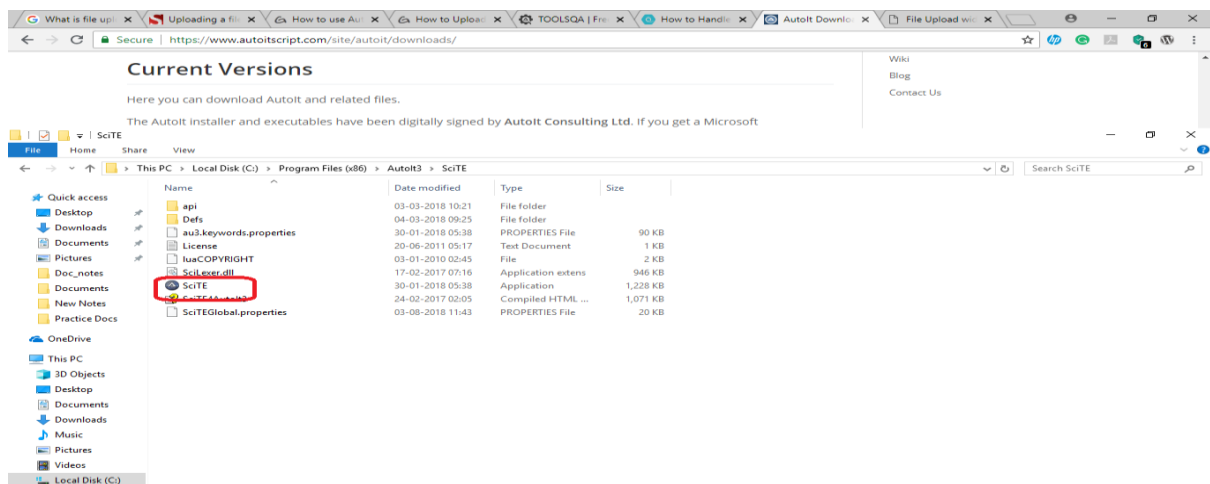

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Step 4: autoit-v3-setup.exe file will download.

Step 5: double click on the exe file and follow the instruction by clicking on next buttons. (Don't change any settings while installing)
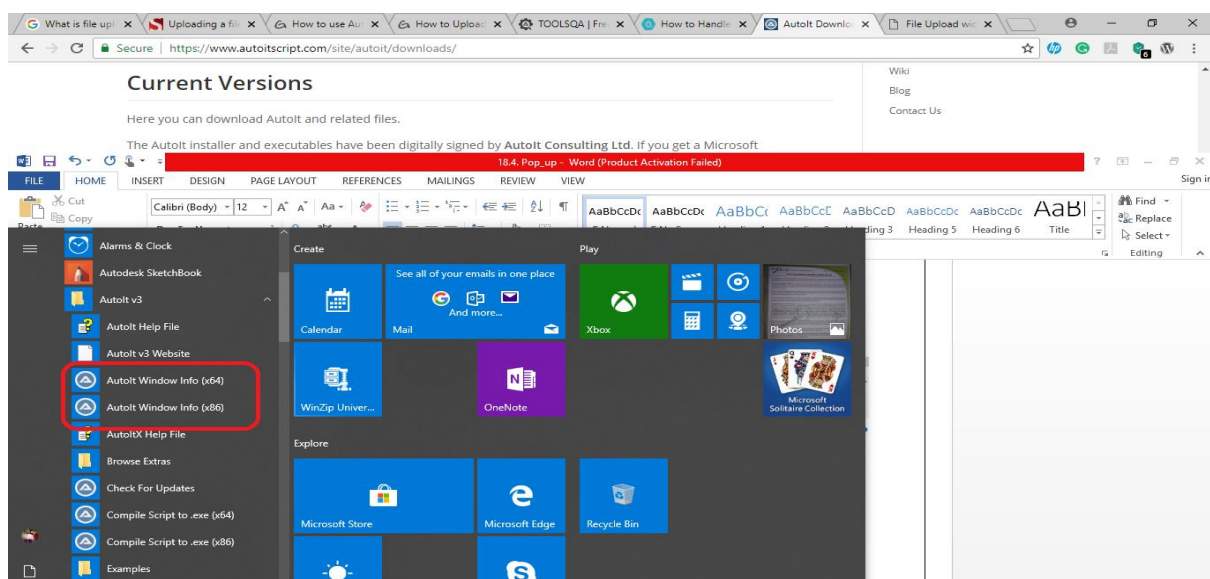
Step 6: After the installation, make sure auto it script editor and element finder is installed.

To check auto it script editor is installed.

Go to the following path **"C:\Program Files (x86)\AutoIt3\SciTE"**, check **"SciTE.exe"** is present or not. (SciTE is the auto it editor, where we write the auto it scripts to handle window GUI).

Go to window start to check the element identifier (We use window info tool or

Element identifier to identify the element on the window GUI or non HTML pop ups).

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Note: If both are present than we can start writing the auto it script to handle the file upload pop up.

Following are the functions of AUTOIT which we use to handle file upload pop up.

- There are lots of method available which we can use in a script according to the requirement, but right now we will focus on the below methods as these methods are required for writing file upload script:

WinActive:

- Sets the focus to a given control on a window.

   Syntax:

   WinActive ("title", "text")

   - This method takes two arguments: title of the window dialog and the optional string argument.

WinWaitActive:

- This function pauses execution of the script until the specified window appears and is active.

   Syntax:

   WinWaitActive ("Title", "text", time out)

- This method takes 3 parameters,

Parameters

title	The title/hWnd/class of the window to check. See Title special definition.
text	[optional] The text of the window to check. Default is an empty string. See Text special definition.
timeout	[optional] Timeout in seconds if the window is not active. Default is 0 (no timeout).

ControlSetText
- This method is used to enter the text into the edit box.

Syntax:

   ControlSetText ("title", "text", Control ID, "text to enter")

- It takes 4 parameters

Title: title of the pop up

Text: Optional string to check the window.

Control ID: is a combination of combination of **"class"** and **"instance"**.

Text to enter: Value you want to enter into the edit box.

ControlClick

- This method is used to click on the element present on the window GUI.

Syntax:

ControlSetText ("Title", "text", Control ID)

ControlSend

- Sends a string of characters to a control and sends the key strokes to the controls.

Syntax:

ControlSend (("Title", "text", Control ID, String/KeyStroke)

Send

- Sends simulated keystrokes to the active window.

Syntax:

Send ("{KeyStroke}")

Note: Key strokes is nothing but the keyboard button and key strokes has to be passed as a string, keys should be with in flower brackets and keys should be in upper case.
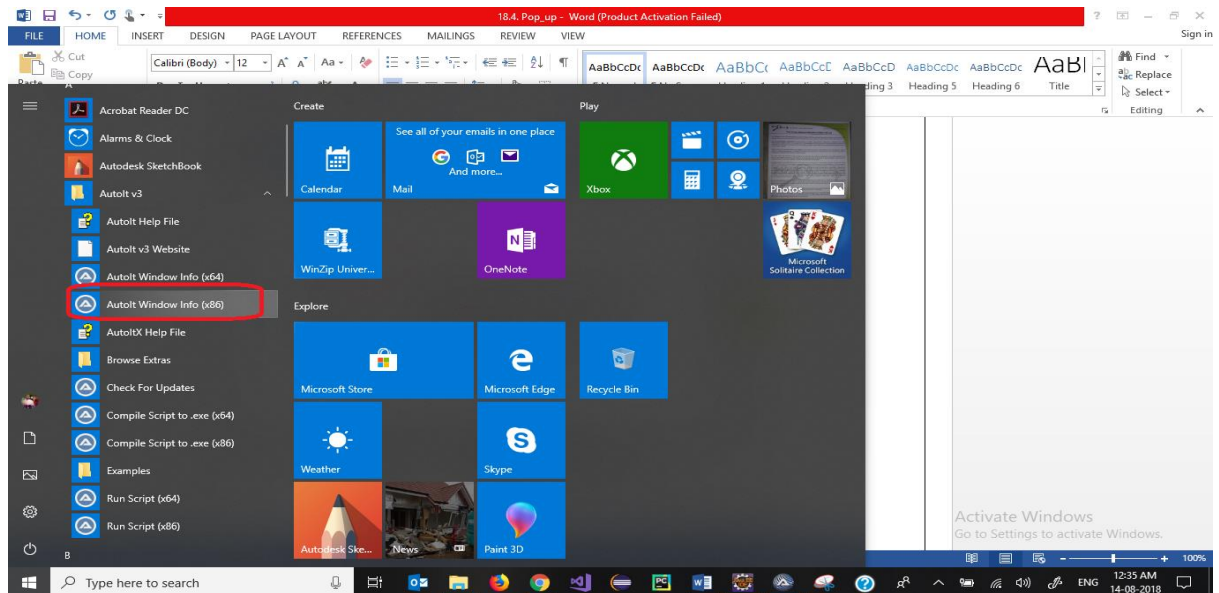
Example: Send ("{ENTER}")
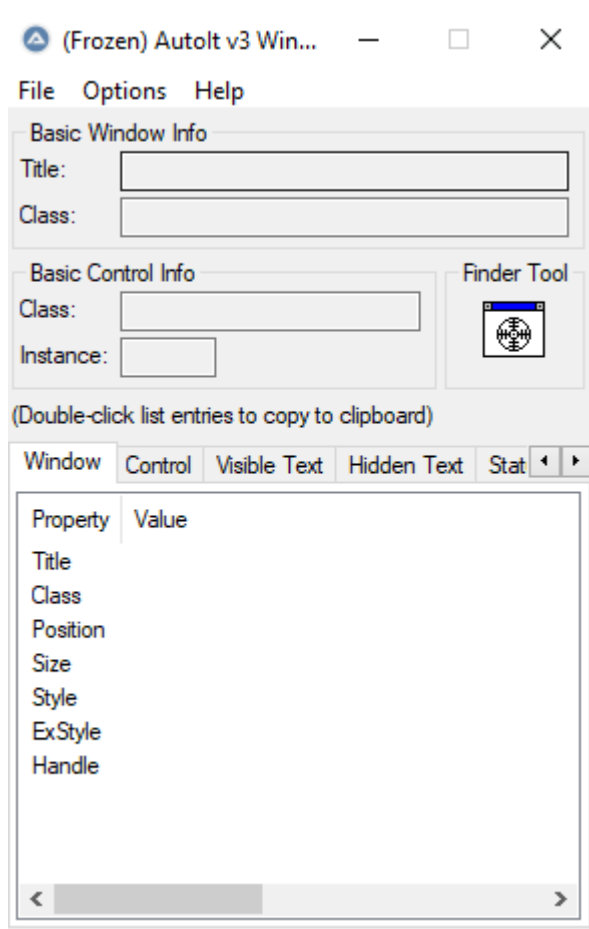
Sleep

- Pause script execution.

Syntax: Sleep (delay) -> delay should be in milli seconds

Following are the steps to identify the elements on the non HTML pop up using AUTOIT.
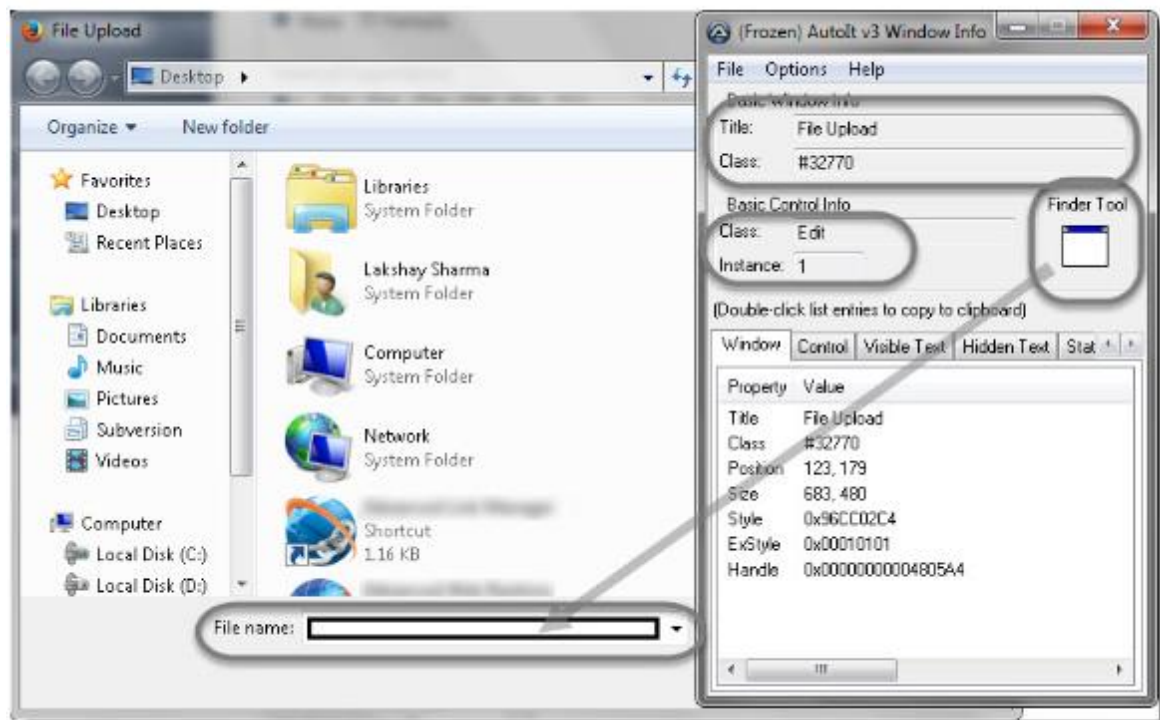
Step 1: Open the "autoit window info"

It opens the window info tool.

Now **drag** the '**Finder Tool**box' to the object in which you want to identify.
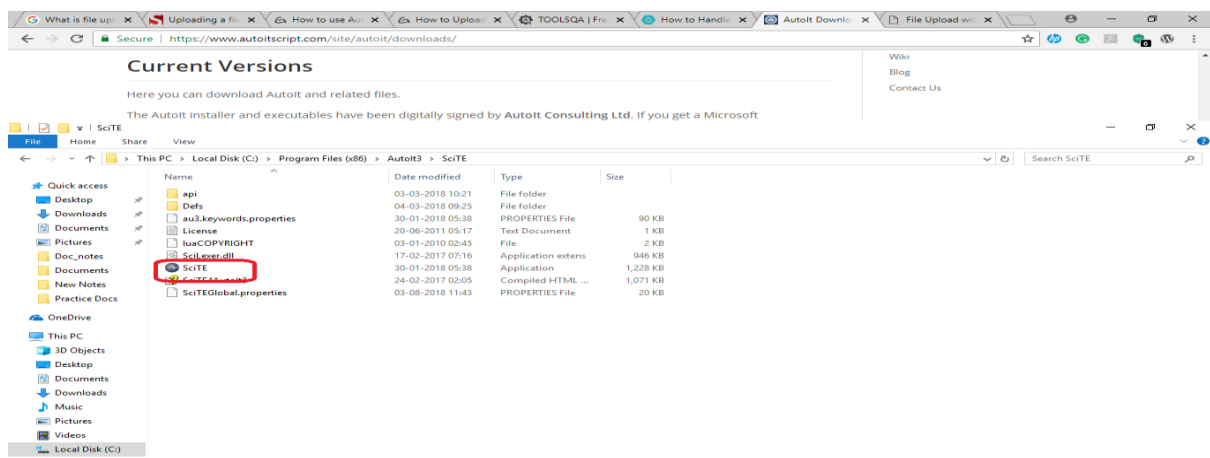

- This will give the title of the pop up, class and instance of the element. Using this we are going to identify the elements on the file download pop up and performs the operations.
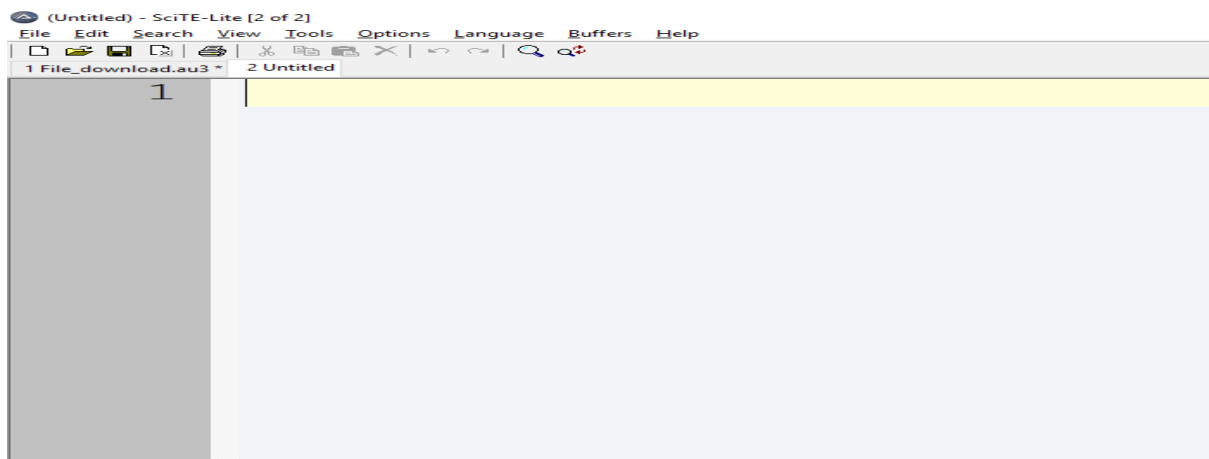
Now, we are all set to automate the file download pop up using the AUTOIT.

Step 1: open the SciTE from the below location.

"C:\Program Files (x86)\AutoIt3\SciTE", and click "**SciTE.exe**".

Step 2: Script editor window will open now.

Step 3: After clicking on 'Upload/Choose file' button, the cursor will move to the Window popup.

The below step should be the first line in the script. 'File Upload' is the name of the window popup when opened with Mozilla. The name changes depending on the browser.

Mozilla - File Upload
Chrome - Open
and for IE - Choose File to Upload

```
WinWaitActive("Open", "", 5)
```

Step 4: Once the window popup is active, we should send the path of the document which need to be uploaded.

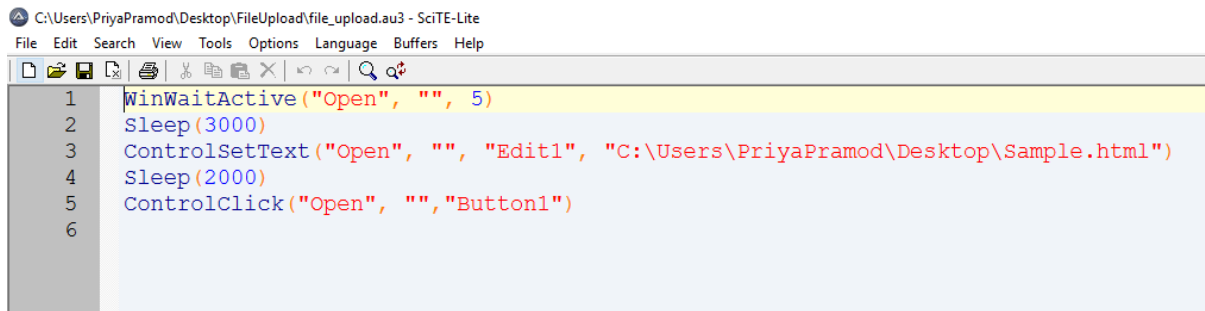Note: To enter the text we can use the "ControlSetText ()" method.

```
ControlSetText("Open", "", "Edit1", "C:\Users\PriyaPramod\Desktc
```

Step 5: After that we need to click on Open button which will upload the document.

Note: To click on the open button, use "ControlClick ()" method.

```
ControlClick("Open", "","Button1")
```
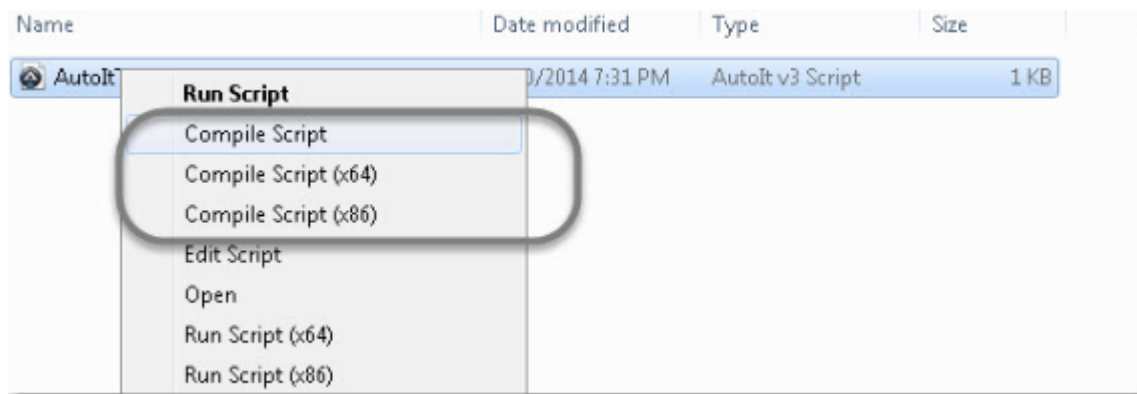
Below is the complete script

```
C:\Users\PriyaPramod\Desktop\FileUpload\file_upload.au3 - SciTE-Lite
File  Edit  Search  View  Tools  Options  Language  Buffers  Help
  1  WinWaitActive("Open", "", 5)
  2  Sleep(3000)
  3  ControlSetText("Open", "", "Edit1", "C:\Users\PriyaPramod\Desktop\Sample.html")
  4  Sleep(2000)
  5  ControlClick("Open", "","Button1")
  6
```

Step 6: Now, after writing this script. Save the file, while saving the file. Save the file with ".AU3" extension.

Step 7: Compile the .au3 script and convert it in to .exe file.

Note:

- To convert that, you need to right click on the .au3 file and select "**Compile Script**".
- Make sure that you select 'Compile Script' as per your machine configuration. Select normal version if you are on 32 bits, and select x64 or x86 if you are on 64 bits.

```
Name                    Date modified    Type              Size
AutoIt                  0/2014 7:31 PM   AutoIt v3 Script  1 KB
        Run Script
        Compile Script
        Compile Script (x64)
        Compile Script (x86)
        Edit Script
        Open
        Run Script (x64)
        Run Script (x86)
```

Step 8: Call the .exe file in to the Selenium test case

Once you done with the compiling, it will create the '.exe' file with the same name under the same folder and that '.exe' file will be called in the Selenium Test Script by using the following script:

```
Runtime.getRuntime().exec("C:\\Users\\PriyaPramod\\Desktop\\FileUpload\\file_upload.exe");
```

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```
package popup_file_upload;

import java.io.IOException;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class Upload_file_popup {
    public static void main(String[] args) throws IOException {
        System.setProperty("webdriver.chrome.driver", "D:/Softwares/Drivers/chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("file:///D:/HTML%20Pages/Practice/file_upload_widget/web/index.html");

        driver.findElement(By.id("fileselect")).click();

        Runtime.getRuntime().exec("C:\\Users\\PriyaPramod\\Desktop\\FileUpload\\file_upload.exe");

        driver.close();
    }
}
```

Sharing the web.zip file. Unzip it and click on the index.html file. Use this web page for getting the file download pop up.

web

Note: Navigate to https://www.naukri.com/ website, and click on the upload CV. You will get the file upload pop up.

Please do automate that.

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