Automation Testing

Introduction to AutoIt

A Day in the Life of an Automation Test Engineer

Joel, an Automation Test Engineer, wants to automate web applications.

As an Automation Test Engineer, we sometimes encounter a challenge to automate browser windows in scenarios, like downloading or uploading an image. Selenium cannot interact with browser windows. In such scenarios, we use another test automation tool called AutoIt.

To know more about it, let us go through this lesson.

Learning Objectives

By the end of this lesson, you will be able to:

- Explain AutoIT tool

- Comprehend the features of AutoIt

- Create and upload files using AutoIt Extension

- Execute files using AutoIt Script

Introduction to AutoIt

Introduction to AutoIt

AutoIt is a freeware scripting language designed for automating windows GUI and general scripting.

It uses a combination of simulated keystrokes, mouse movement, and window or control manipulation to automate tasks in a way not possible or reliable with other languages (or even not possible via Selenium).

Features of AutoIt

The features of the AutoIt tool are as follows:

Easy to learn BASIC-like syntax

Simulates keystrokes and mouse movements

Manipulates windows and processes

Interacts with all standard windows controls

Compiles the scripts into standalone executables

Features of AutoIt

Creates Graphical User Interfaces (GUIs)

Provides regular expression support

Directly call external DLL and Windows API functions

Provides scriptable RunAs functions

Provides detailed helpfile and large community-based support forums

Download AutoIt and Script Editor

Steps are as follows:

Download

Take me to the downloads page!

Download AutoIt

- Navigate to the official homepage of AutoIt (https://www.autoitscript.com/site/autoit/).

- Click on the Download link as shown below. This will start the download of an executable file.

- Double-click the executable file, and click on Next multiple times to install it as normal Windows software.

Handling File Uploads With AutoIt

Uploading File in Selenium Using AutoIt

Uploading a file is a four steps process:

Step 1
Step 2
Step 3
Step 4

Identify the windows control
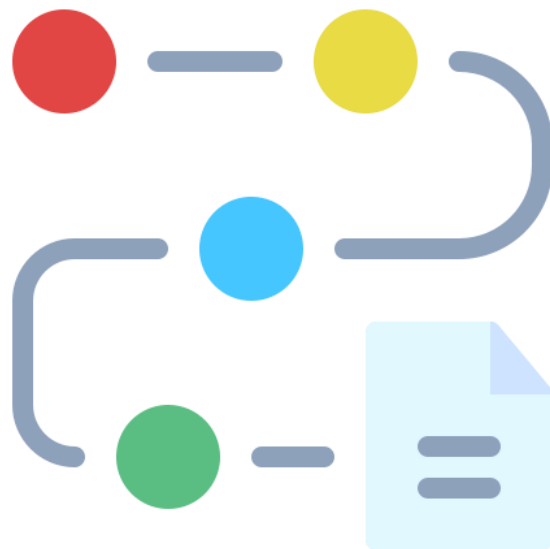
Build an AutoIt script using identified windows control

Compile the .au3 script and convert it into a .exe file

Call the .exe file into the Selenium test case

Uploading File in Selenium Using AutoIt

Upload an image on Google images:

**Steps to perform
in this scenario:**

- Navigate to https://images.google.com.
- Click the Upload an image button and Select File Upload. This opens a windows screen.
- Enter the path of the image file to upload.
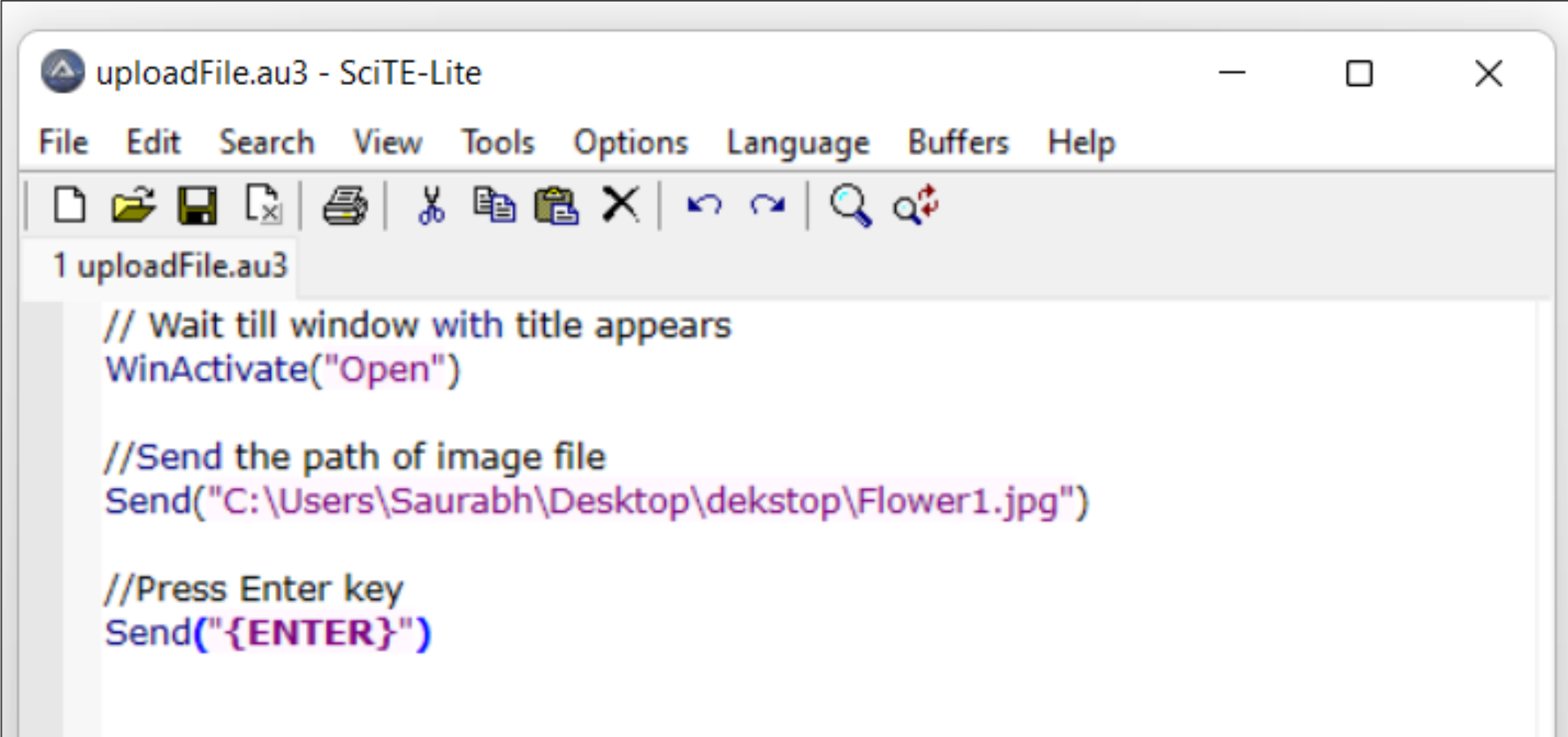- Press Enter, this will upload the file.

Uploading File in Selenium Using AutoIt

- Steps 1 to 3 can be performed via Selenium WebDriver.
- From step 4 onwards, a window screen opens. This window screen cannot be handled via Selenium.
- AutoIt will be used in this scenario to interact with windows screen.
- AutoIt script editor can be used to write the scripts and create an executable file.
- This executable file can then be called via **RunTime.getRuntime()** method provided by Java.

Uploading File in Selenium Using AutoIt

The following script can enter text to the File Upload window and press Enter:


```
// Wait till window with title appears
WinActivate("Open")

//Send the path of image file
Send("C:\Users\Saurabh\Desktop\dekstop\Flower1.jpg")

//Press Enter key
Send("{ENTER}")
```
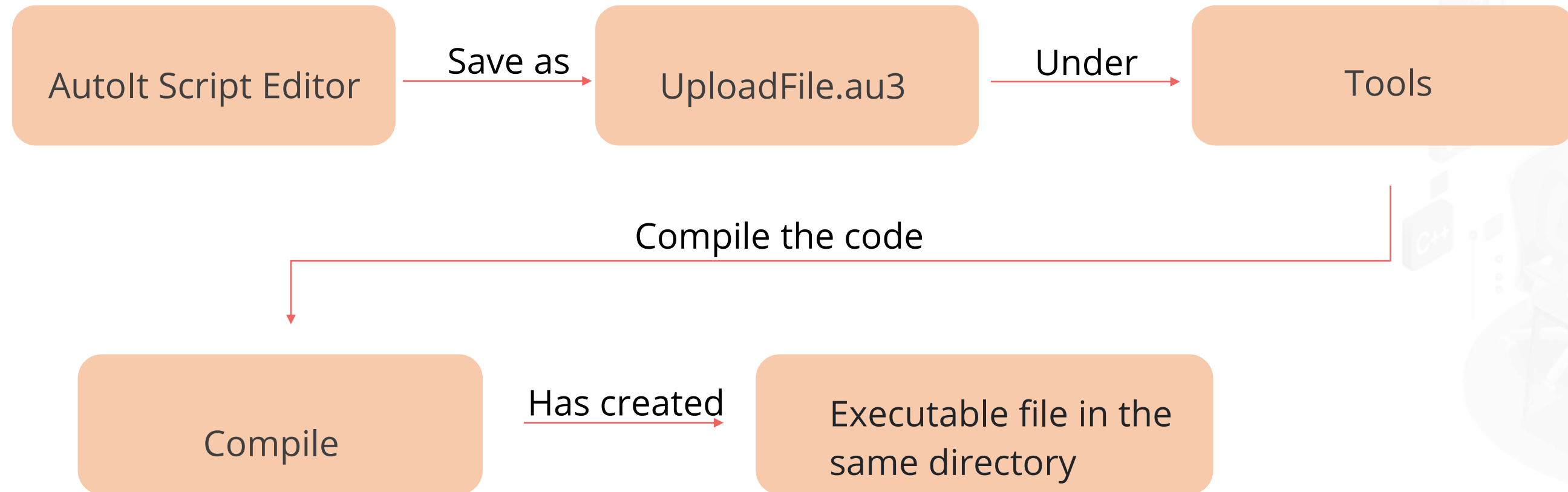
Executable File From the AutoIt Script

Creating an executable file from the AutoIt script is as follows:

AutoIt Script Editor	→ Save as	UploadFile.au3	→ Under	Tools

Compile the code

Compile	→ Has created	Executable file in the same directory

Call the .exe File Into the Selenium Test Case

The following code refers to calling the executable file from the Java code:

```java
public class ImageUploadScenario {

    public static void main(String[] args) throws IOException {
        ChromeDriver driver;
        String url = "https://images.google.com";

            System.setProperty("webdriver.chrome.driver",
                        "C:\\Users\\test\\workspace\\libs\\chromeDriver36\\chromedriver.exe");

            // \n \t -- escape character
            driver = new ChromeDriver();

            driver.manage().window().maximize();

            driver.manage().deleteAllCookies();

            driver.manage().timeouts().pageLoadTimeout(90, TimeUnit.SECONDS);

            driver.manage().timeouts().implicitlyWait(6, TimeUnit.SECONDS);

            driver.get(url);

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

            driver.findElement(By.linkText("Upload an image")).click();

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

            Runtime.getRuntime().exec("C:\\Users\\test\\workspace\\SimpliLearn\\scripts\\upload.exe");
    }

}
```

Key Takeaways

- AutoIt is a freeware scripting language designed for automating windows GUI and general scripting.

- AutoIt is another test automation tool used for automating desktop applications.

- AutoIt is required as Selenium cannot interact with browser window elements.

- AutoIt Script Editor is used to write, compile, and execute scripts written for the AutoIt tool.

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Thank You