



We are on a mission to address the digital skills gap for 10 Million+ young professionals, train and empower them to forge a career path into future tech

Auto IT & Methods

21ST AUG, 2023



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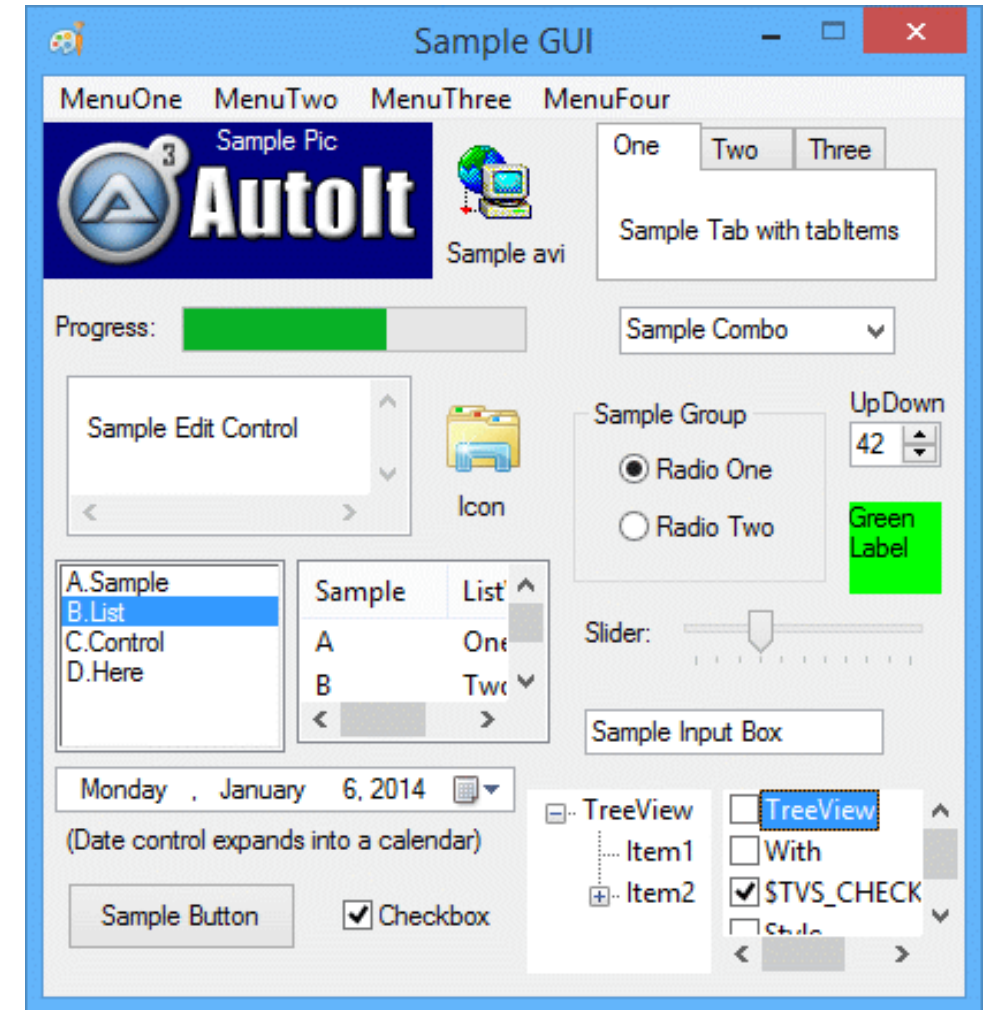
What is Auto IT?



What is Auto IT?

Auto IT

- Auto It is a freeware scripting language designed for automating windows GUI and general scripting.
- It uses a combination of mouse movement, keystrokes and window control manipulation to automate a task which is not possible by selenium web driver.
- 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.



What is Auto IT?

Auto IT

- AutoIt in Selenium is required as these window-based activity are not handled by Selenium.

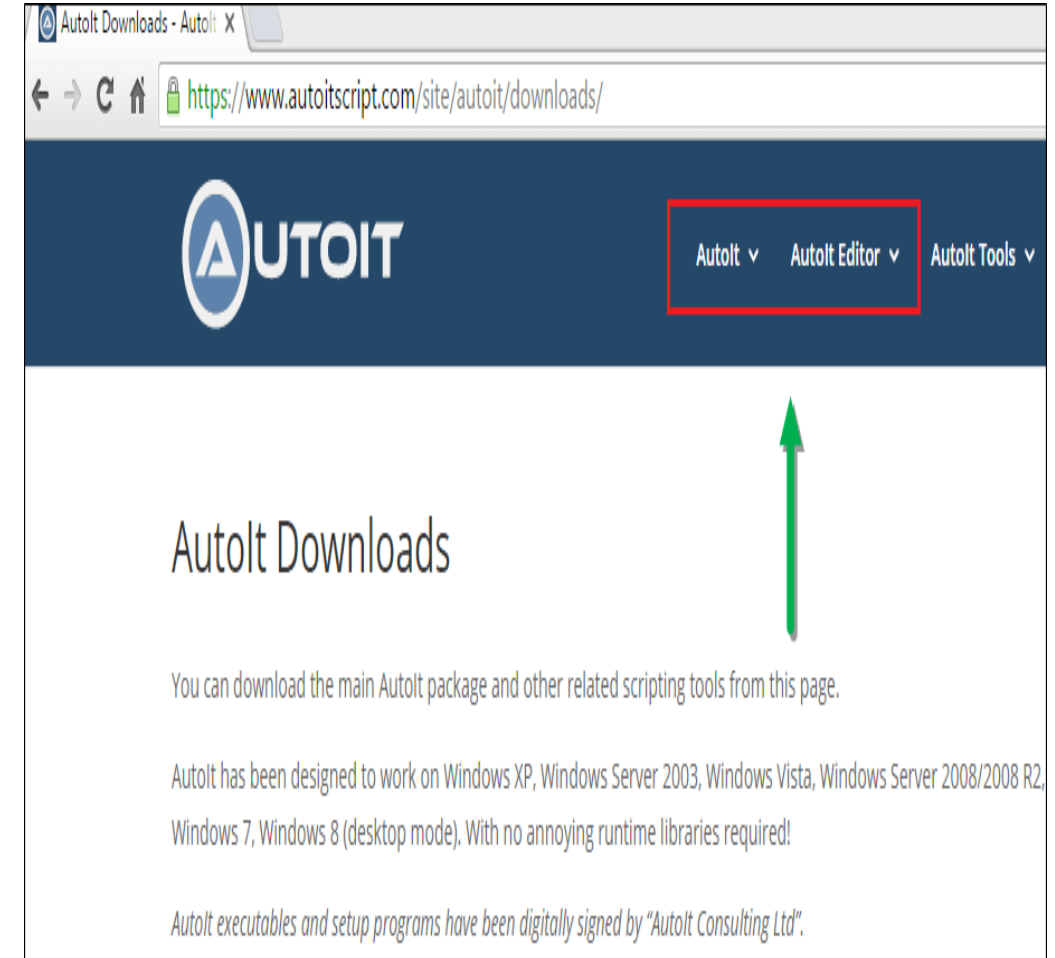
Auto IT Installation



Auto IT Installation

How to download & Install AutoIT?


- Go to the URL –
<https://www.autoitscript.com/site/autoit/downloads/>
- Hover on 'Autoit' and 'Autoit' Editor dropdown.

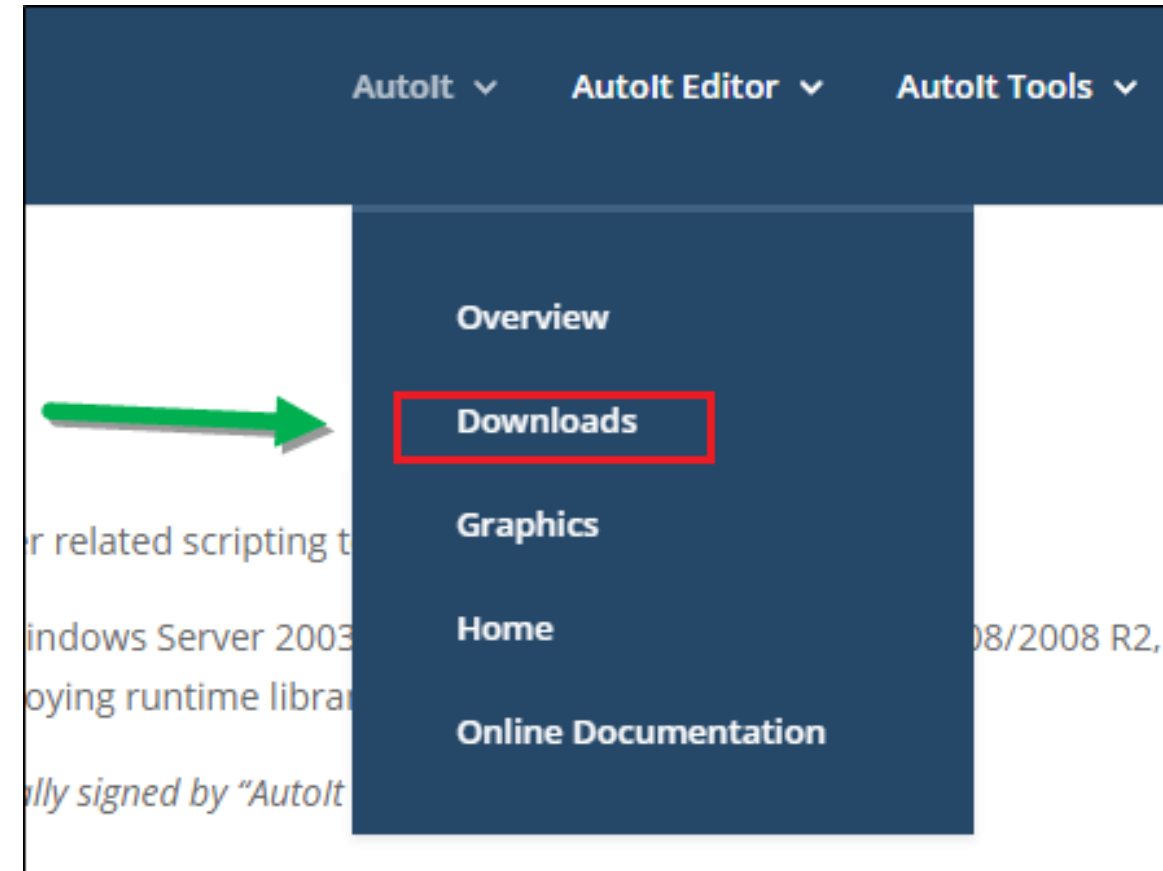


Auto IT Installation

How to download & Install AutoIT? (Contd.)

- Click on 'AutoIT' Downloads option.
- Download "Autoit" by clicking on 'Download Autoit' button .

Software	Download
<p>AutoIt Full Installation. Includes x86 and x64 components, and:</p> <ul style="list-style-type: none"> • AutoIt program files, documentation and examples. • Aut2Exe – Script to executable converter. Convert your scripts into standalone .exe files! • AutoItX – DLL/COM control. Add AutoIt features to your favorite programming and scripting languages! Also features a C# assembly and PowerShell CmdLets. • Editor – A cut down version of the SciTE script editor package to get started. Download the package below for the full version! 	



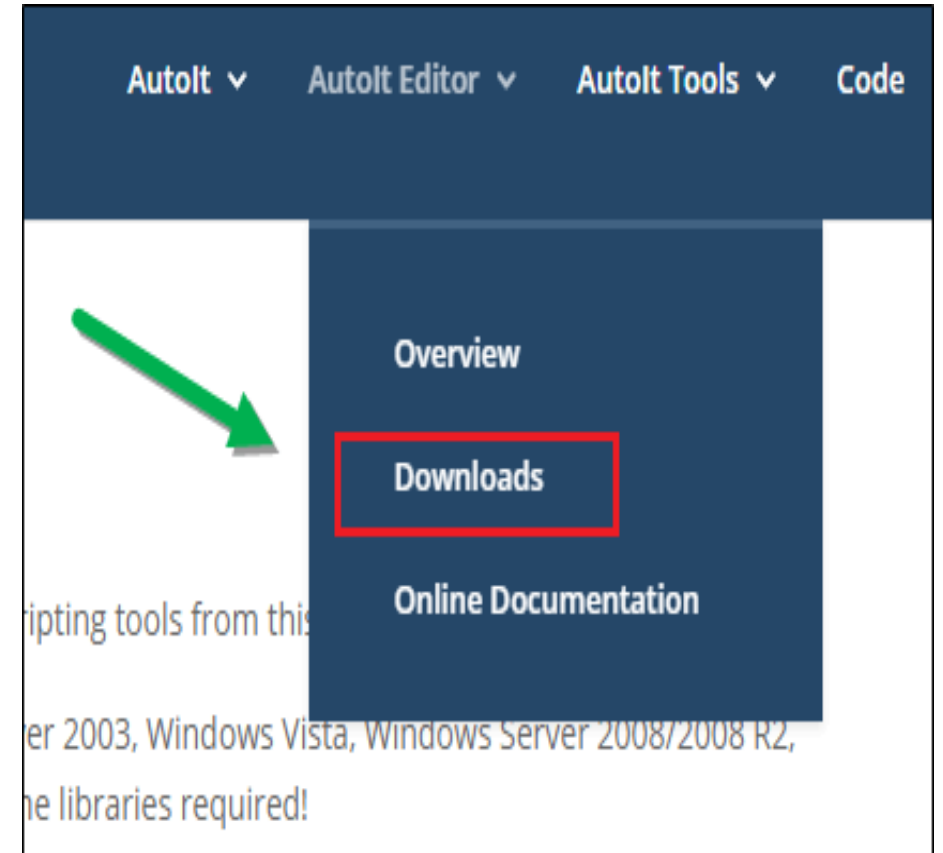
Auto IT Installation

How to download & Install AutoIT? (Contd.)

- Now download "Autoit editor" by clicking on 'Downloads' button .
- Click on the link as shown below.

Current Versions

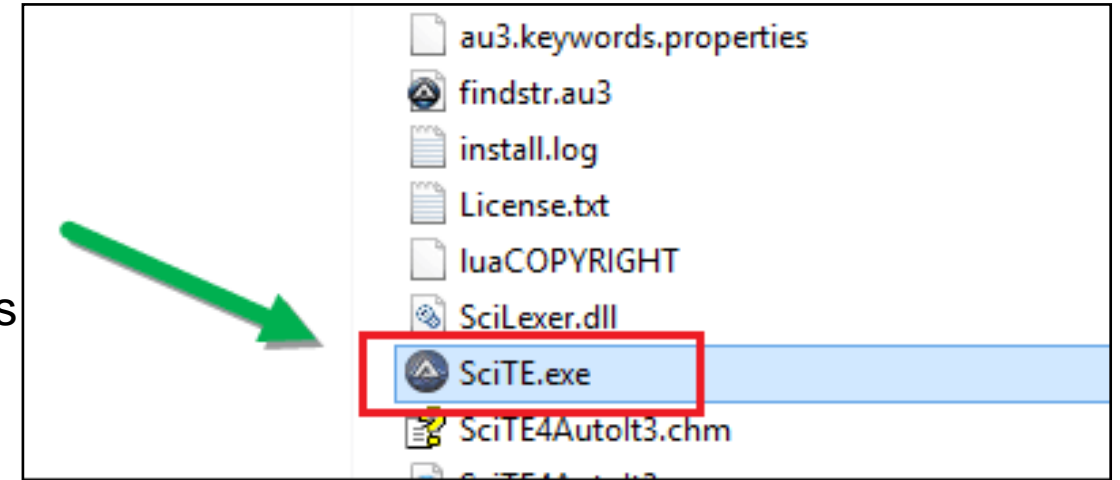
File	Date updated	Notes
SciTE4AutoIt3.exe (5439Kb)	16-3-2021	Installer containing SciTE and all configuration files plus utilities. Update History . Definition files included: AutoIt v3.3.14.5 and BETA v3.3.15.3



Auto IT Installation

How to download & Install AutoIT? (Contd.)

- After successful installation open up AutoIT.
- Go to 'C:\Program Files (x86)\AutoIt3\SciTE'
- Click on 'SciTE.exe' file, the AutoIT editor opens as shown



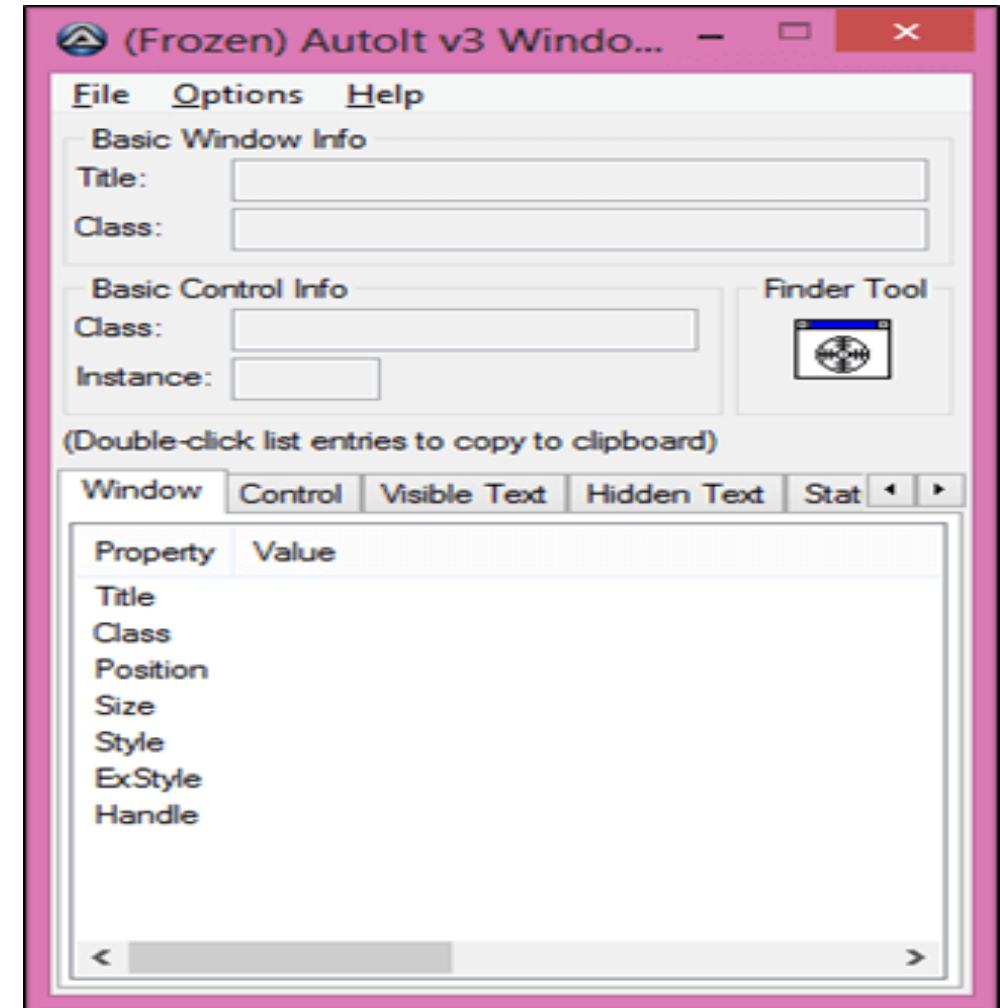
Find element using Element Identifier



Finding element using Element Identifier

Finding Element with Element Identifier

- Now open element Identifier- Go to 'C:\Program Files (x86)\Autolt3' and click on 'Au3Info.exe' file



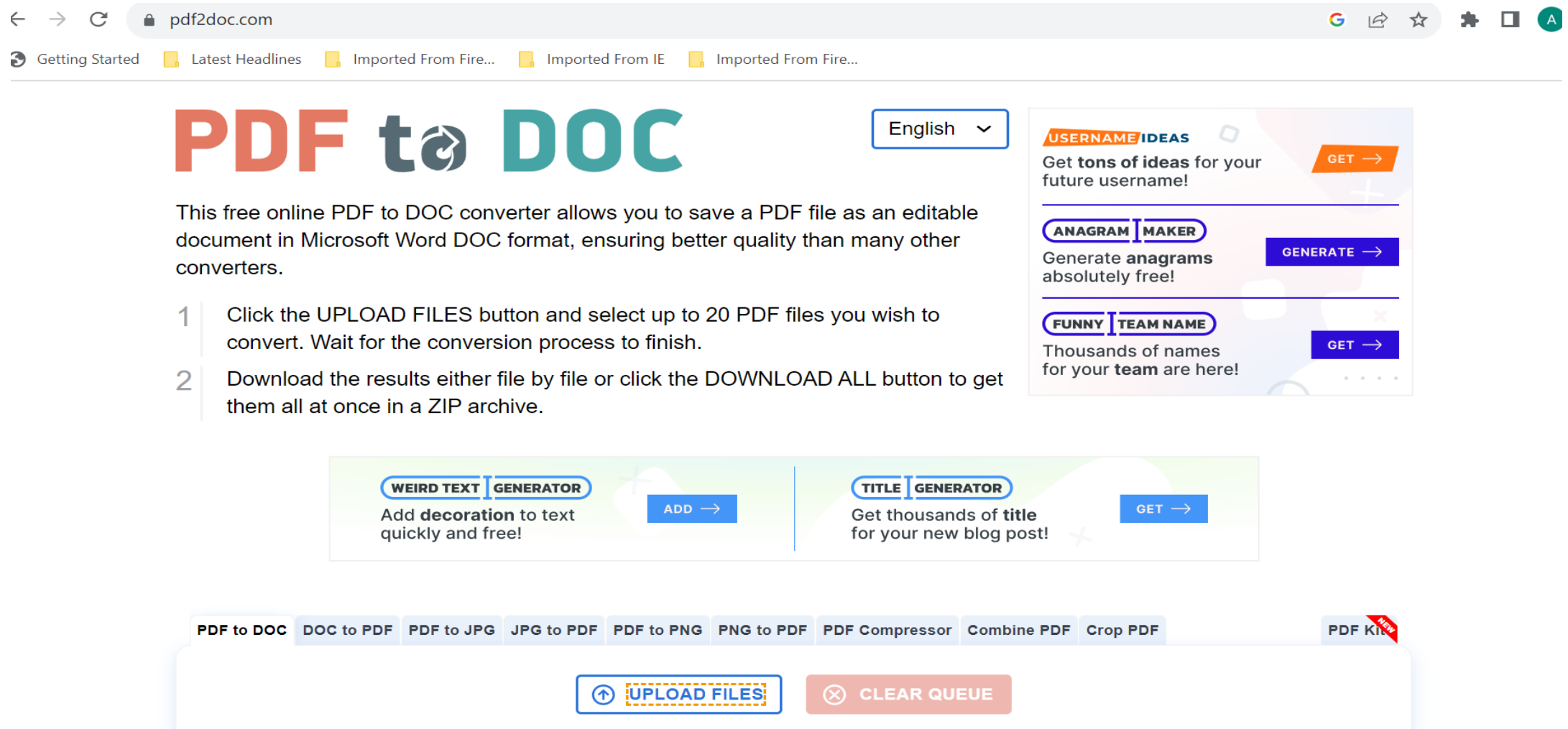
Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

- Launch the following Web Application : <https://pdf2doc.com>
- Now open file uploader window by clicking on 'UPLOAD FILES' which is windows activity.

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

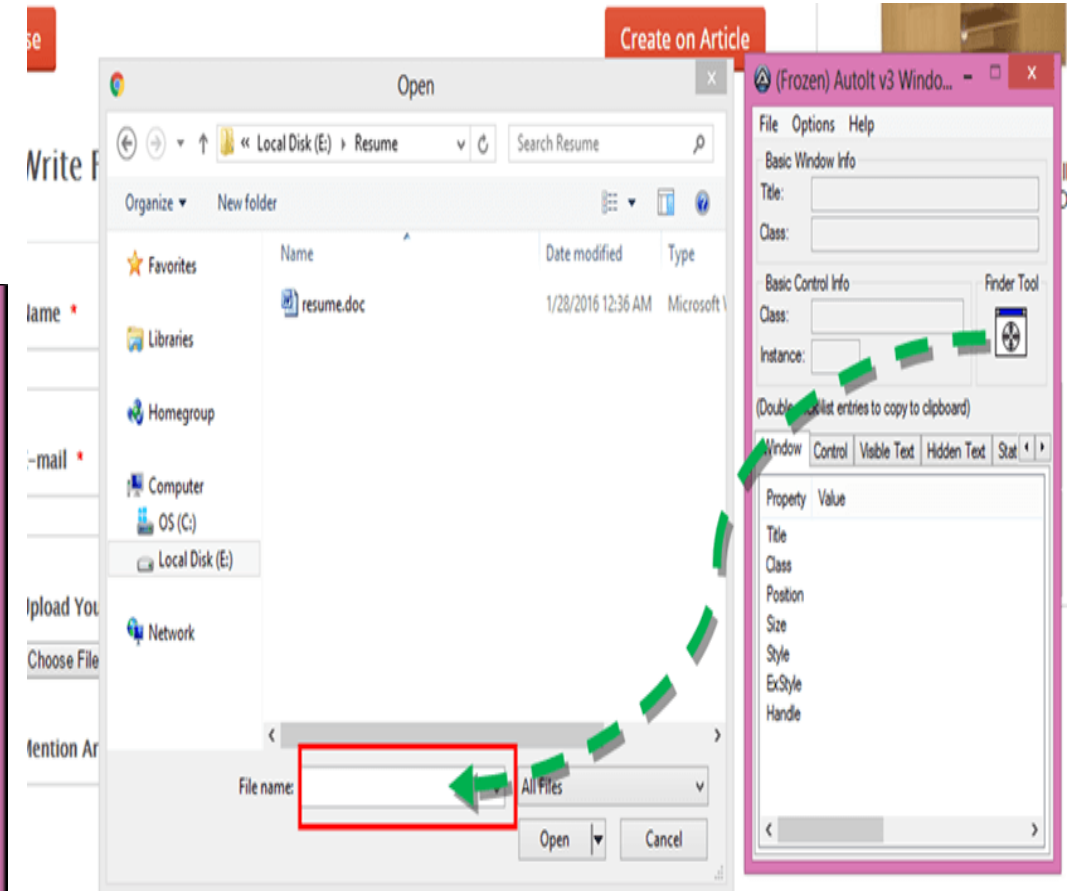
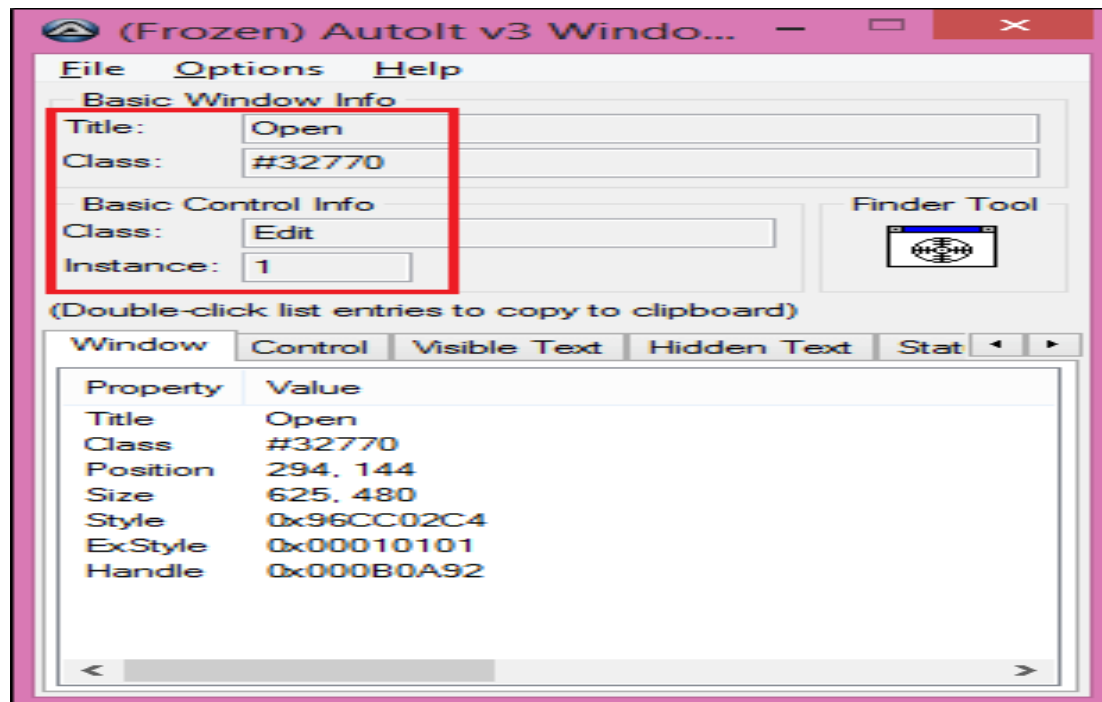


The screenshot shows the pdf2doc.com website. The browser address bar displays 'pdf2doc.com'. The website header includes a navigation menu with links: 'Getting Started', 'Latest Headlines', 'Imported From Fire...', 'Imported From IE', and 'Imported From Fire...'. The main content area features the 'PDF to DOC' logo and a description: 'This free online PDF to DOC converter allows you to save a PDF file as an editable document in Microsoft Word DOC format, ensuring better quality than many other converters.' Below this, there are two numbered steps: 1. 'Click the UPLOAD FILES button and select up to 20 PDF files you wish to convert. Wait for the conversion process to finish.' 2. 'Download the results either file by file or click the DOWNLOAD ALL button to get them all at once in a ZIP archive.' To the right of the main content, there are several utility tools: 'USERNAME IDEAS' (Get tons of ideas for your future username!), 'ANAGRAM MAKER' (Generate anagrams absolutely free!), 'FUNNY TEAM NAME' (Thousands of names for your team are here!), 'WEIRD TEXT GENERATOR' (Add decoration to text quickly and free!), and 'TITLE GENERATOR' (Get thousands of title for your new blog post!). At the bottom, there is a row of buttons for different file formats: 'PDF to DOC', 'DOC to PDF', 'PDF to JPG', 'JPG to PDF', 'PDF to PNG', 'PNG to PDF', 'PDF Compressor', 'Combine PDF', 'Crop PDF', and 'PDF KIL'. Below this row, there are two buttons: 'UPLOAD FILES' and 'CLEAR QUEUE'.

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

- Drag the finder tool on the " File Name" box element of file uploader window to find the basic attributes.



Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

Let's write scripts using AutoIT editor

Methods are required for writing file upload script:

Sets input focus to a given control on a window

ControlFocus(" title "," text ",controlID)

Sets text of a control

ControlSetText(" title "," text ",controlID ," File path which need to upload ")

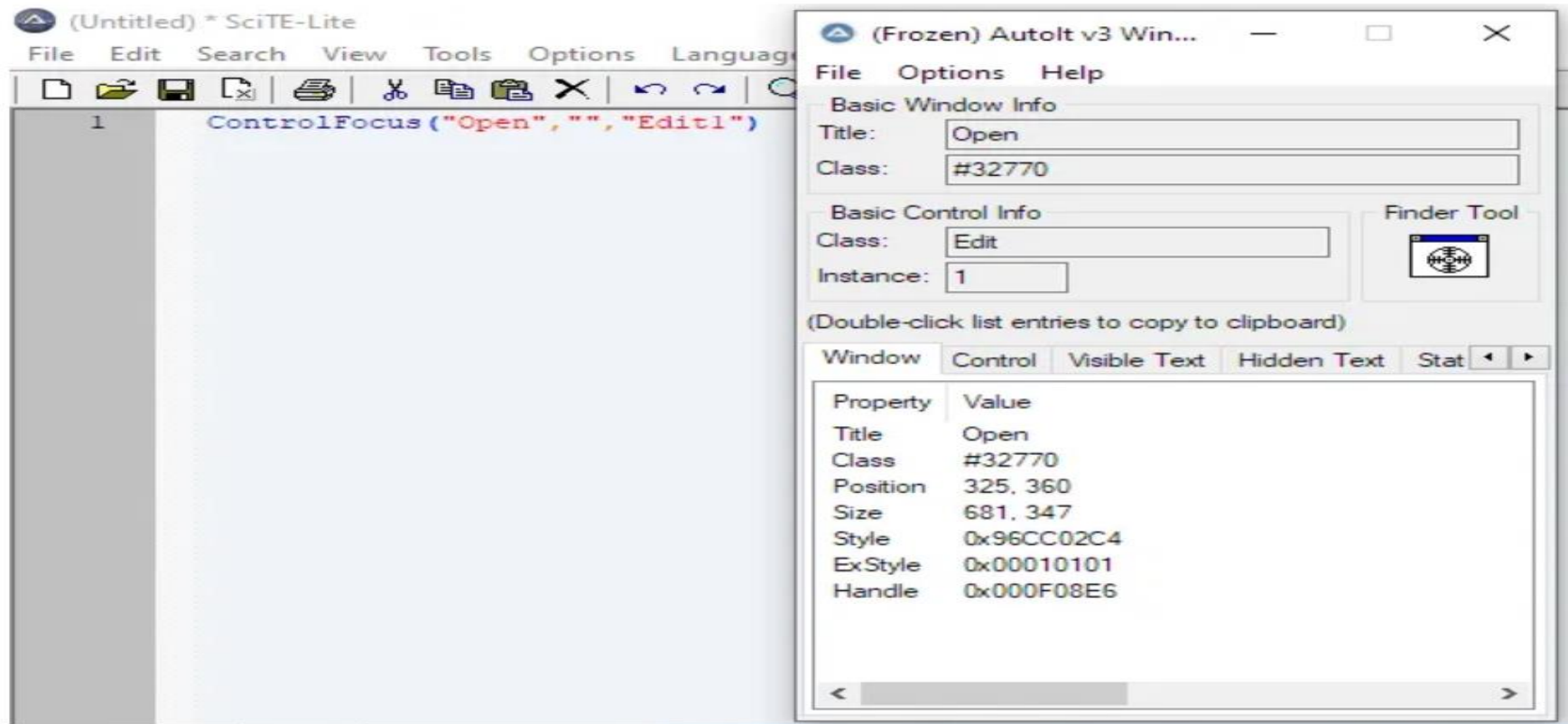
Sends a mouse click command to a given control

ControlClick(" title "," text ",controlID)

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

ControlFocus method: focus to the 'file name' text box of the file uploader



Finding Element with Element Identifier (Contd.)

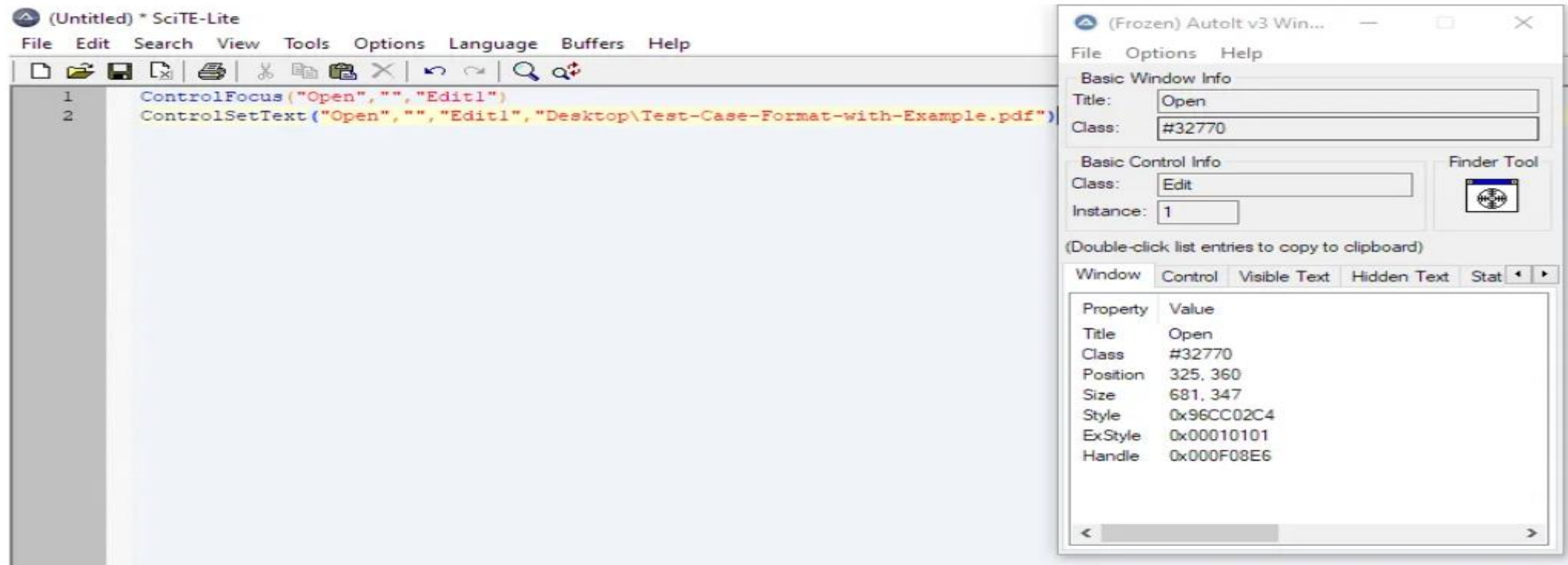
- **title** — “Open”
- **text** is not required.
- **controlID** — “Edit1” (combination of class='Edit' and Instance='1')

```
ControlFocus("Open","", "Edit1")
```

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

ControlSetText method :input file path of a control



ControlSetText method

Finding Element with Element Identifier (Contd.)

- **title** — “Open”
- **text** is not required.
- **controlID** — “Edit1”
- **new text** — pass the path of the file which we need to upload.

```
ControlSetText(“Open”,”,”,”Edit1”,”Desktop\Test-Case-Format-with-Example.pdf”)
```

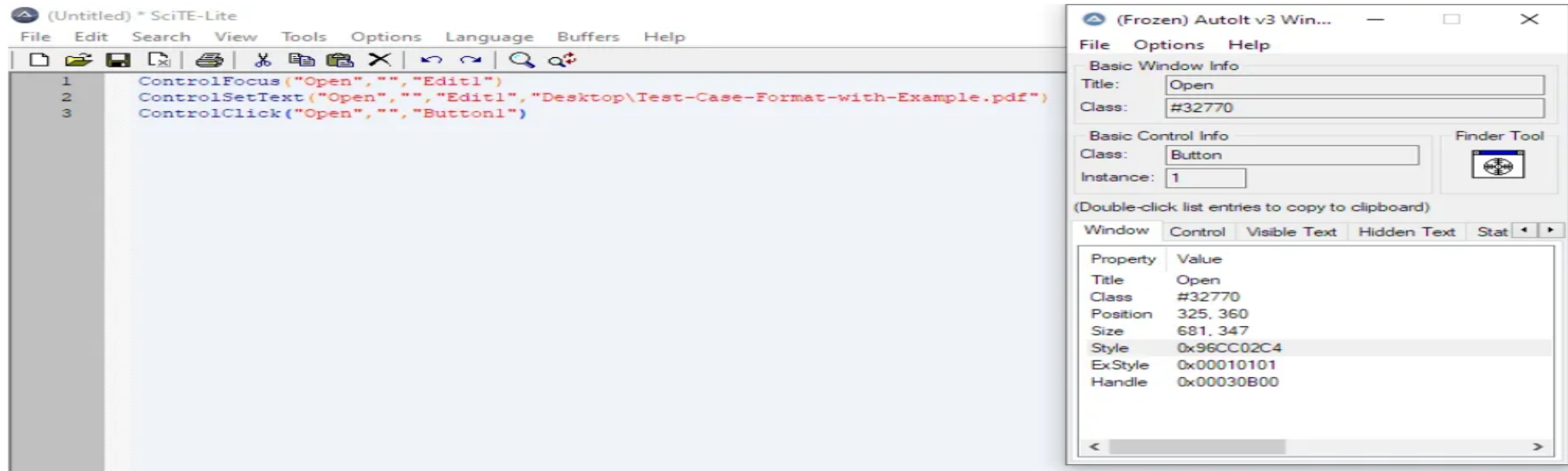
Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

Step 4: Drag the finder tool on the “Open” button element of file uploader to find the attributes.

Attributes are **title='Open'**, **class='Button'** and **instance='1'**.

ControlClick method: click on ‘Open’ button of file uploader.



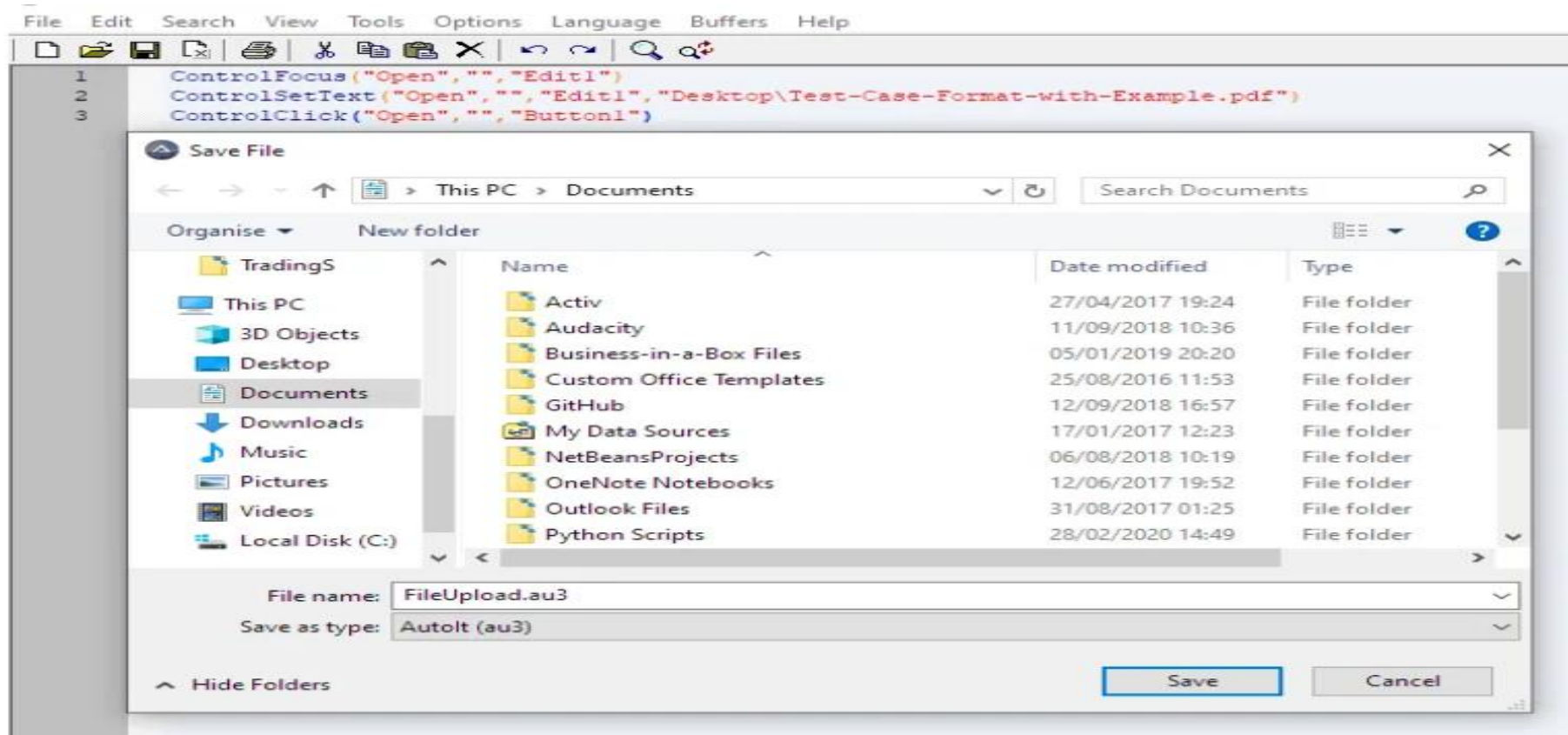
Finding Element with Element Identifier (Contd.)

- **title** — “ Open “
- **text** is not required.
- **controlID** — “ Button1 “ (combination of class and Instance)

```
ControlClick("Open","", "Button1")
```

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)

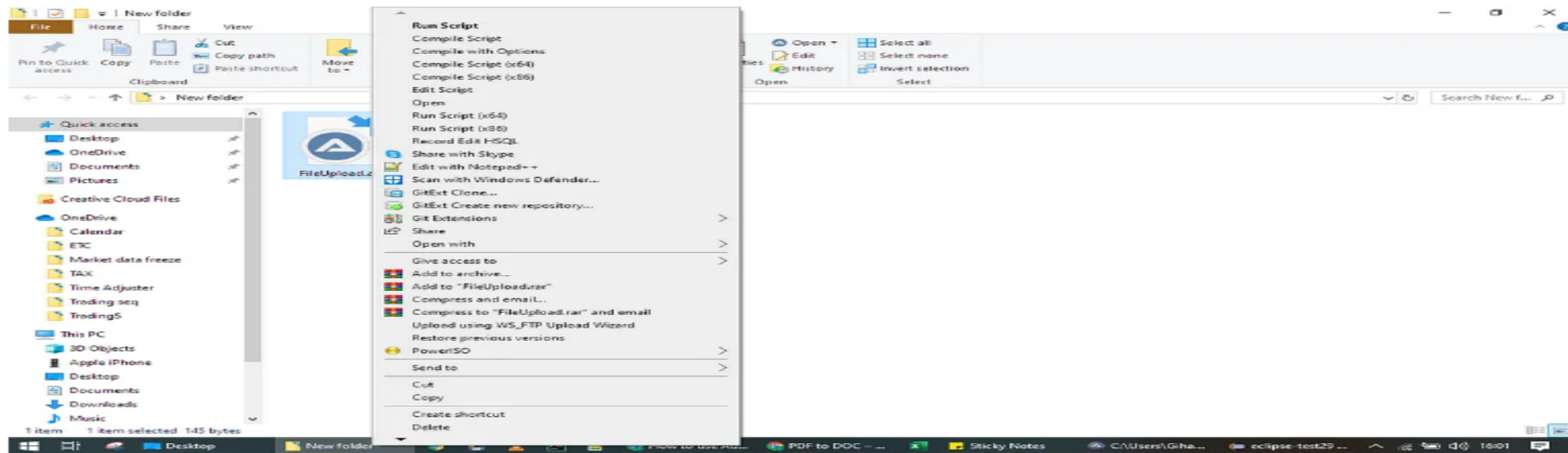


Save the script

Step 5: Save the script as “ FileUpload “.

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)



Compile the script

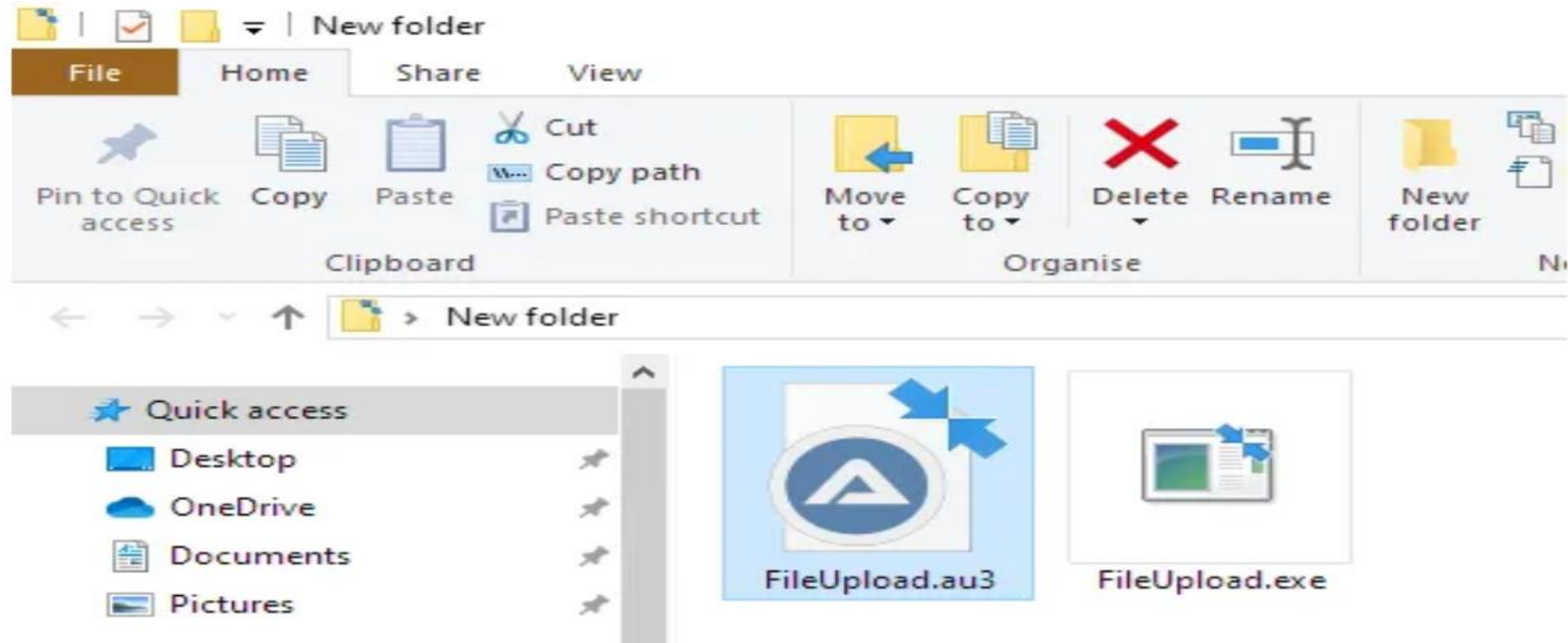
We can't execute this script directly, we need to compile this script. For compiling this script, you have two options:

1st Option : compile script x64 (for windows 64-bit machine)

2nd Option : compile script x86 (for windows 32-bit machine)

Finding element using Element Identifier

Finding Element with Element Identifier (Contd.)



'FileUpload exe' file generated after compilation

Step 6: 'FileUpload exe' file generated after compilation.

What is Auto IT?

AutoIT in Selenium

- In Selenium script, we find the elements of the application and upload file by executing AutoIT exe file generated from AutoIT script.
- When selenium clicks on 'UPLOAD FILES' button, file uploader box opens.
- Then we call AutoIT script, the control immediately transferred to AutoIT in order to upload a file and then control send back to selenium.

//call AutoIT script in selenium and upload file .

Runtime.getRuntime().exec("E:\\AutoIT\\FileUpload.exe");

- **Runtime** class allows the script to interface with the environment
- **getRuntime()** get the current runtime
- **exec()** methods execute the AutoIT script

THANK YOU