Windows Application Automation

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# Definition

## 1. Python

# Installation

## 1. Python

Step 1: Download and install Python latest version (ver. 3.7.3 as May 2019) at: <https://www.python.org/downloads/>



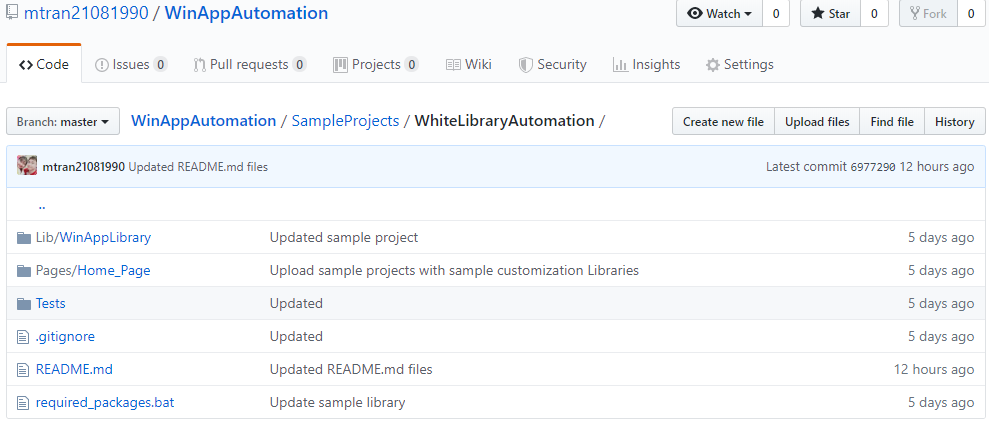
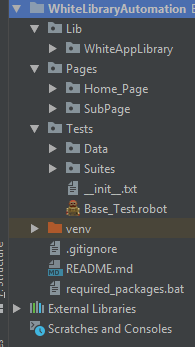
Step 2: Add its installation path into PATH environment variable. Go to **Common Question** section to know how to “[Add Path environment variable](#_1._How_to)”.

## 2. Net framework

## 3. WhiteAppLibrary project

Step 1: Pull (or download) this project from GitHub:

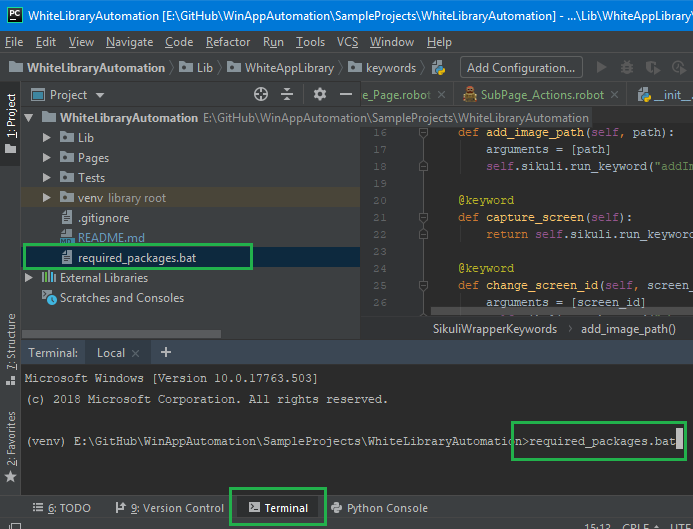
<https://github.com/mtran21081990/WinAppAutomation/tree/master/SampleProjects/WhiteLibraryAutomation>

**Project Details**:

* Lib > WinAppLibrary: contains the customized library which is extended from WhiteLibrary
* Pages: contains resource files for each module of an application. With a desktop application, each Window should be considered a module.
* Tests > Data: contains test data for each test suites.
* Tests > Suites: contains test suites.

Step 2: Open a Python IDE (prefered PyCharm), then open the WhiteLibraryAutomation project. Create a new Interpreter for this project in File > Settings > Project Interpreter. Restart IDE (if need). Go to **Common Question** section to know how to “[Create a new Interpreter on Pycharm](#_How_to_create)”.

Step 3: Install all required packages for the project:

- Open **Terminal**

- Input “required\_package.bat”

- Press ENTER.

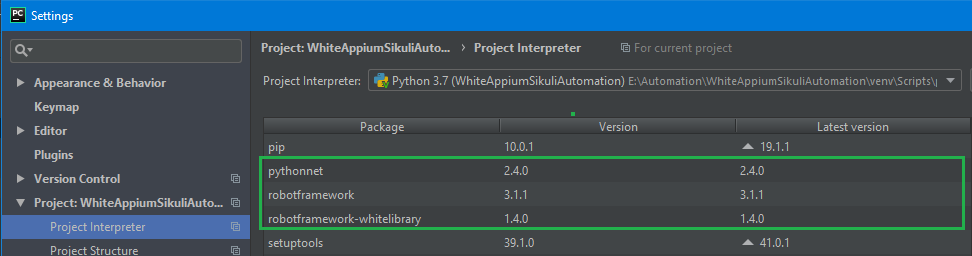
🡺 This will install the following libraries: robotframework, robotframework-SikuliLibrary, robotframework-appiumlibrary and pyyaml.

## 1. WhiteLibrary

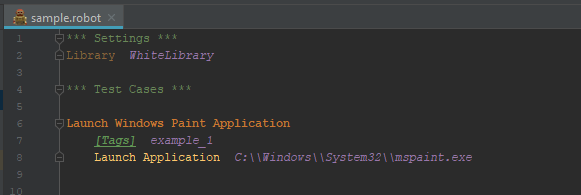
Step 1: In an existing or new python project, open Terminal and execute following command:

pip install --upgrade robotframework-whitelibrary

Step 2: Verify installed packages in Files > Settings: pythonnet, robotframework (if not) and robotframework-whitelibrary.



Step 3: Verify WhiteLibrary by composing and running a simple test case as follow:

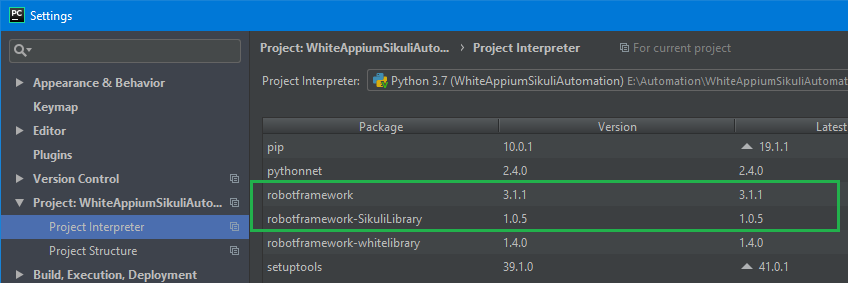


## 2. SikuliLibrary

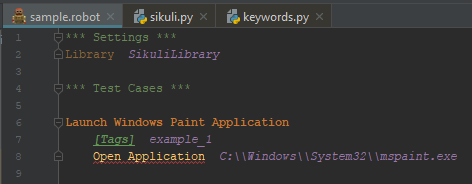
Step 1: In an existing or new python project, open Terminal and execute following command:

pip install robotframework-SikuliLibrary

Step 2: Verify installed packages in Files > Settings: robotframework (if not) and robotframework-SikuliLibrary.



Step 3: Verify SikuliLibrary by composing and running a simple test case as follow:

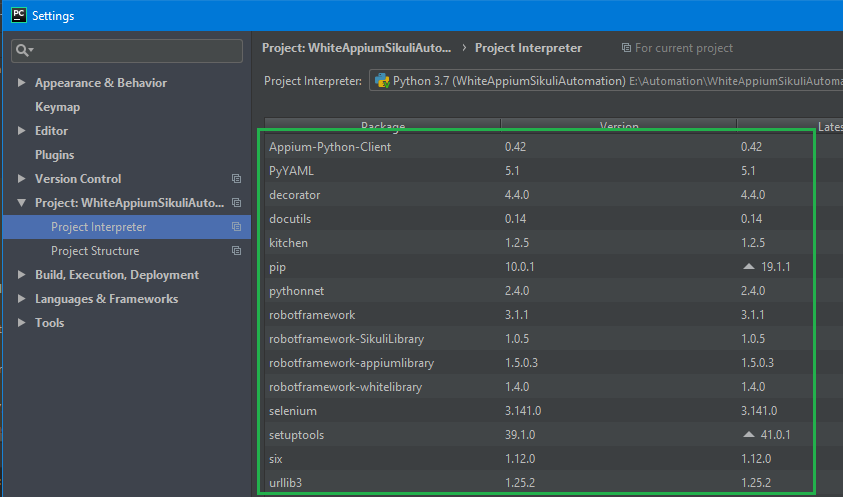


## 3. AppiumLibrary

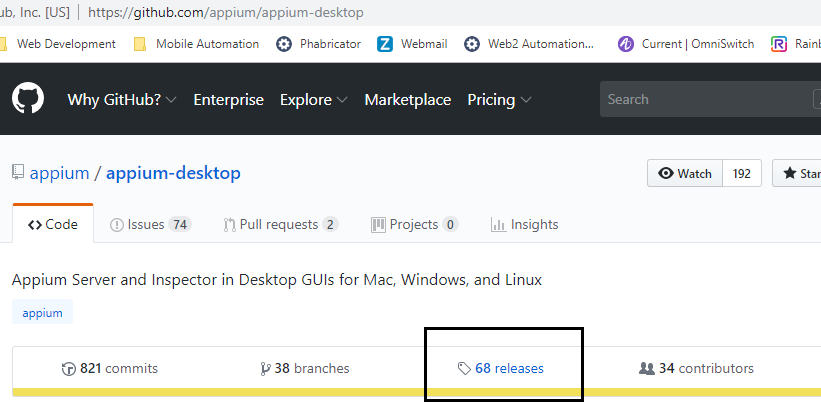
Step 1: In an existing or new python project, open Terminal and execute following command:

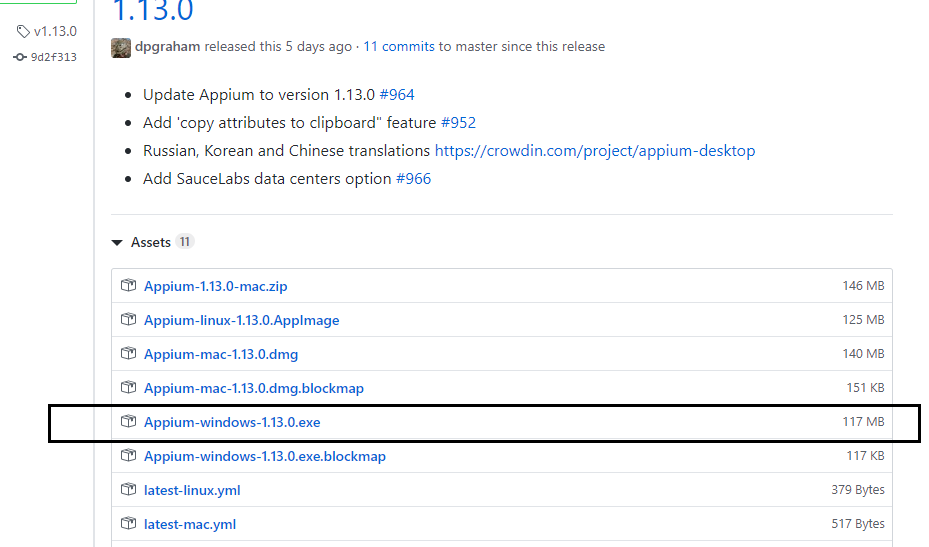
pip install robotframework-appiumlibrary

Step 2: Verify installed packages in Files > Settings: robotframework (if not), kitchen, decorator, urllib3, selenium, six, docutils, Appium-Python-Client and robotframework-appiumlibrary.

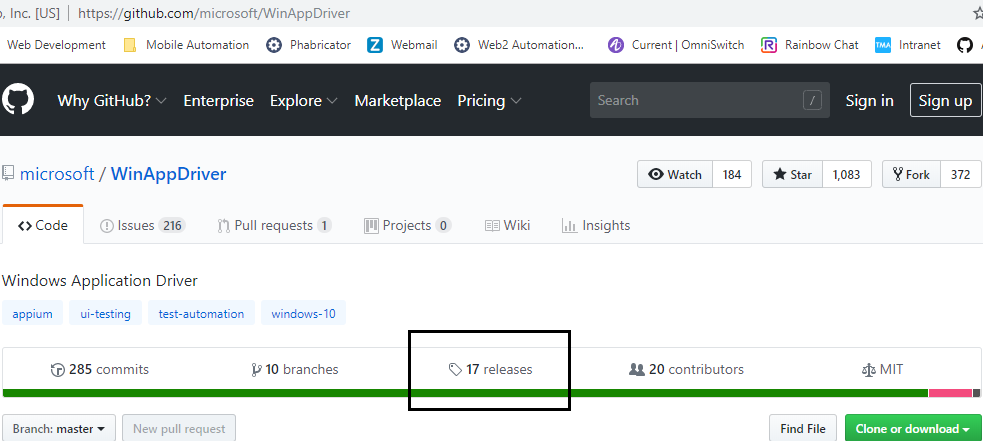


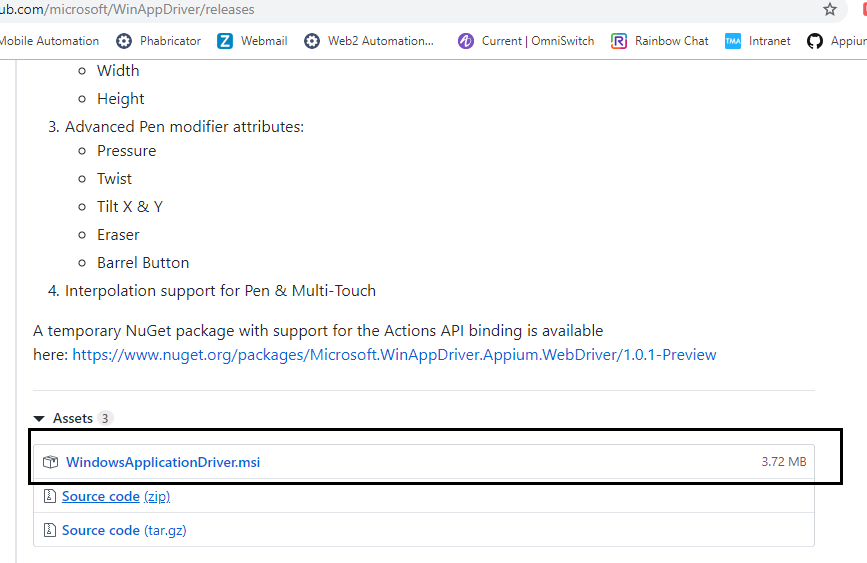
Step 3: Install Appium Desktop application by going to <https://github.com/appium/appium-desktop> and click on **Release** tab to download the latest version of Appium.



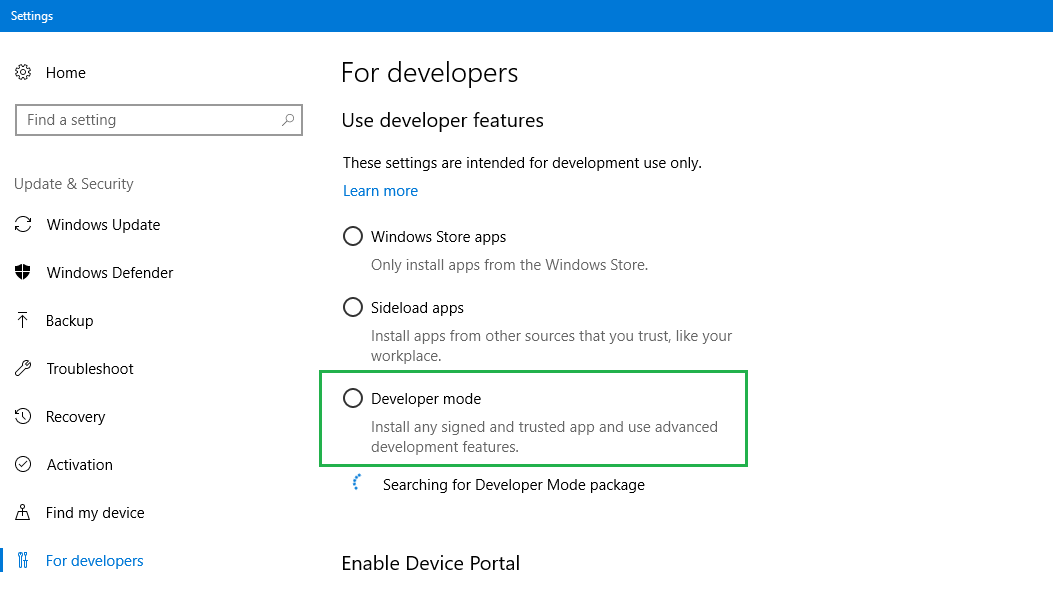


Step 4: Install Windows Application Driver (WinAppDriver) by going to <https://github.com/microsoft/WinAppDriver> and click on **Release** tab to download the latest version of WinAppDriver.

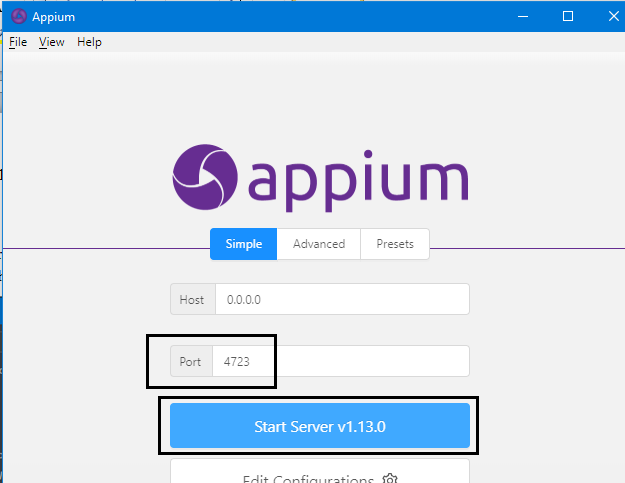




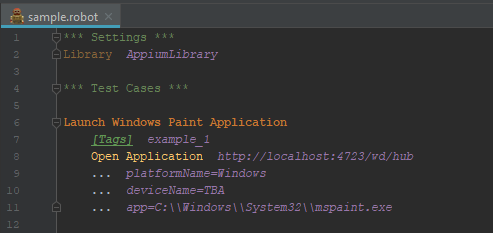
Step 5: Enable Developer mode on Windows by going to Settings:



Step 6: Install Appium Desktop & WinAppDriver applications. Run Appium Desktop application and Start Server (default port is 4723).



Step 7: Verify AppiumLibrary by composing and running a simple test case as follow:



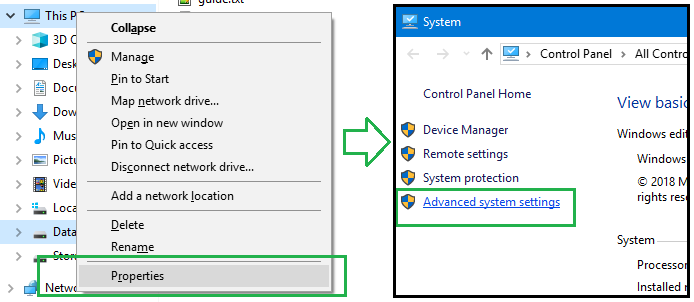
# Customization

## 1. SikuliLibrary

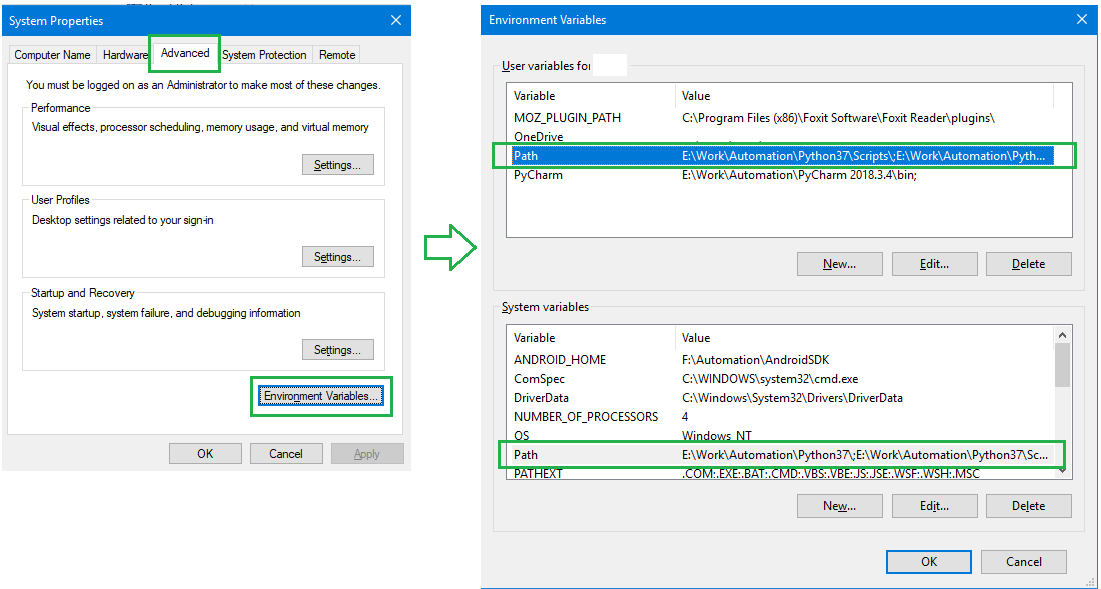
# Common Question

## How to add a path into Path environment variable?

Step 1: Right click on **My Computer** and select “Properties” to open **System** dialog. On **System** dialog, click “Advanced system settings” to open **System Properties** dialog.

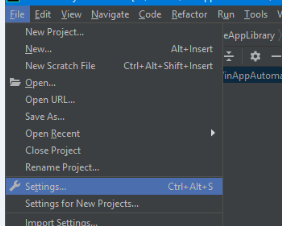


Step 2: On **System Properties** dialog, open “Advanced” tab, click “Environment Variables” button to open **Environment Variables** dialog. Add the new path into a ‘Path” variable (one is enough).

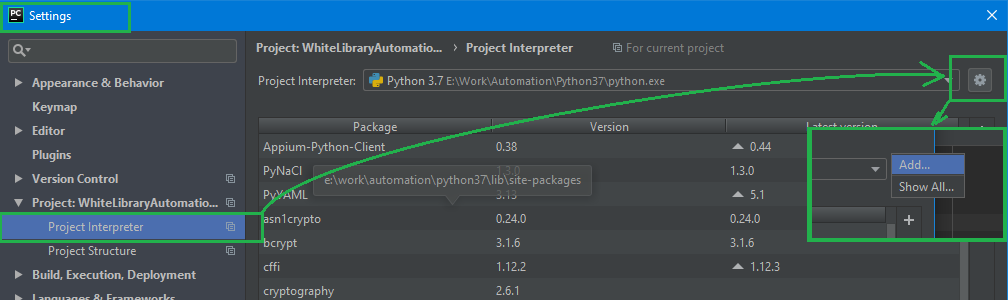


## How to create a new Interpreter in Pycharm?

Step 1: Open “File” on top menu and click “Settings” to open **Settings** dialog.



Step 2: On **Settings** dialog, open “Project Interpreter”, on the right section click on the **Gear** icon and select “Add” to open **Add Python Interpreter** dialog.



Step 3: On **Add Python Interpreter** dialog, select “New environment” radio button and uncheck any checkboxes. Click **OK** button.

