Automatic UI Testing : Selenium

Development environment:
- Visual Studio Code

Development tools :
- Python3

Module used :
- selenium
- time (python's standard library, no need to be installed)
- sys (python's standard library, no need to be installed)

Installation :

- Selenium - using command line :

```
pip3 install selenium
```

- Driver(chrome) - manual installation (link) :

Step1 : Choose "downloads" by the Browser named Chromium/Chrome

Quick Reference

Browser	Supported OS	Maintained by	Download	Issue Tracker
Chromium/Chrome	Windows/macOS/Linux	Google	Downloads	Issues
Firefox	Windows/macOS/Linux	Mozilla	Downloads	Issues
Edge	Windows/macOS	Microsoft	Downloads	Issues
Internet Explorer	Windows	Selenium Project	Downloads	Issues
Safari	macOS High Sierra and newer	Apple	Built in	Issues

Step2 : Download the chrome driver by the version you are using

Current Releases

- If you are using Chrome version 105, please download ChromeDriver 105.0.5195.19
- If you are using Chrome version 104, please download ChromeDriver 104.0.5112.79
- If you are using Chrome version 103, please download ChromeDriver 103.0.5060.134
- For older version of Chrome, please see below for the version of ChromeDriver that supports it.

If you are using Chrome from Dev or Canary channel, please following instructions on the ChromeDriver Canary page.

For more information on selecting the right version of ChromeDriver, please see the Version Selection page.

ChromeDriver 105.0.5195.19

Supports Chrome version 105

For more details, please see the release notes.

ChromeDriver 104.0.5112.79

Supports Chrome version 104

For more details, please see the release notes.

ChromeDriver 104.0.5112.29

Supports Chrome version 104

- Resolved issue 4121: WebDriver command sometimes fails with "unexpected command response" [Pri-1]

For more details, please see the release notes.

ChromeDriver 104.0.5112.20

Supports Chrome version 104

- Resolved issue 4121: WebDriver command sometimes fails with "unexpected command response" [Pri-1]

For more details, please see the release notes.

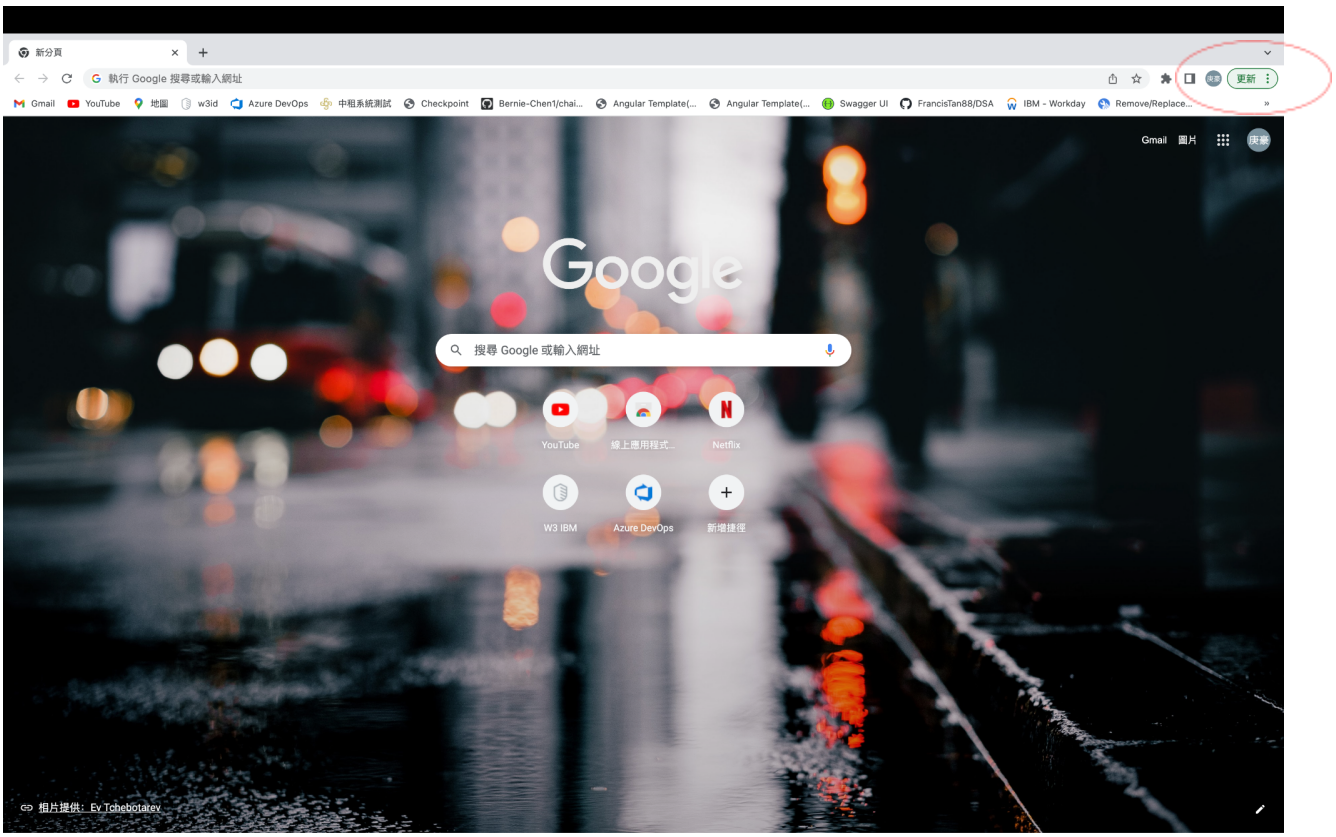
ChromeDriver 103.0.5060.134

Supports Chrome version 103

- Resolved issue 4048: target frame detached [Pri-]
- Resolved issue 4121: WebDriver command sometimes fails with "unexpected command response" [Pri-1]

To check the version of your browser :

1.Open the chrome and go to the top right of the page, click the image of “three dots”



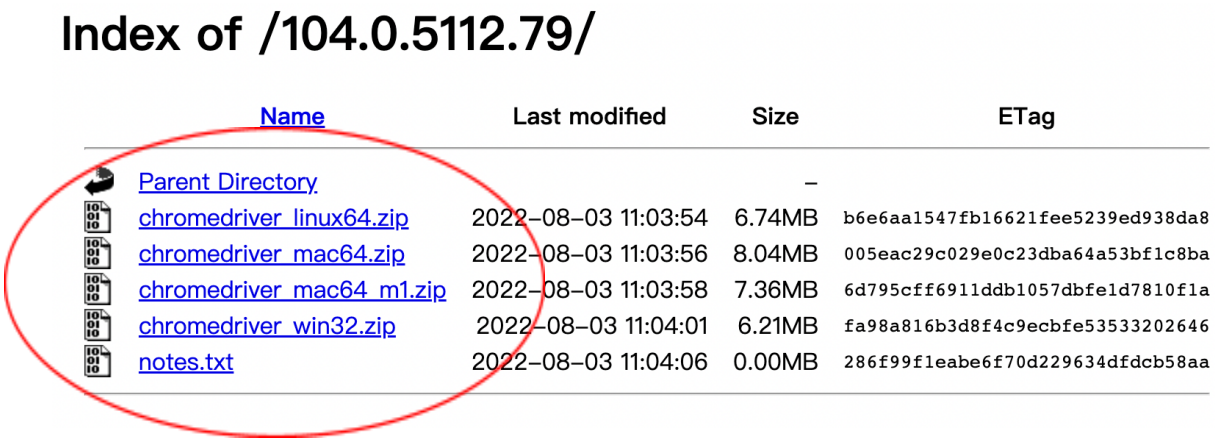
2.Click “set up”

3.Click “about chrome”

4.Check the version you are using

關於 Chrome

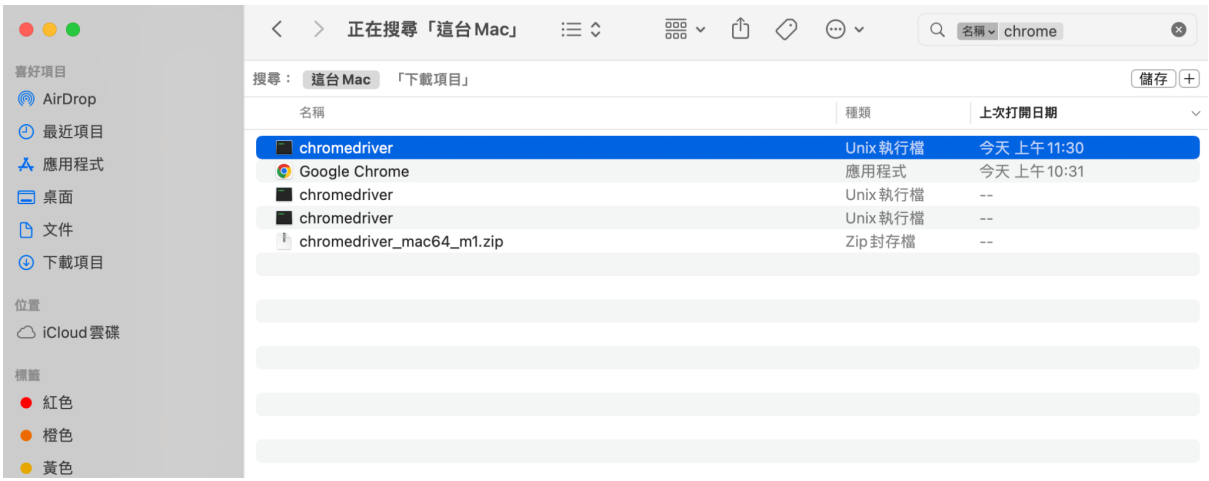
Step3 : Choose the installation file by the operating system you are using



Index of /104.0.5112.79/

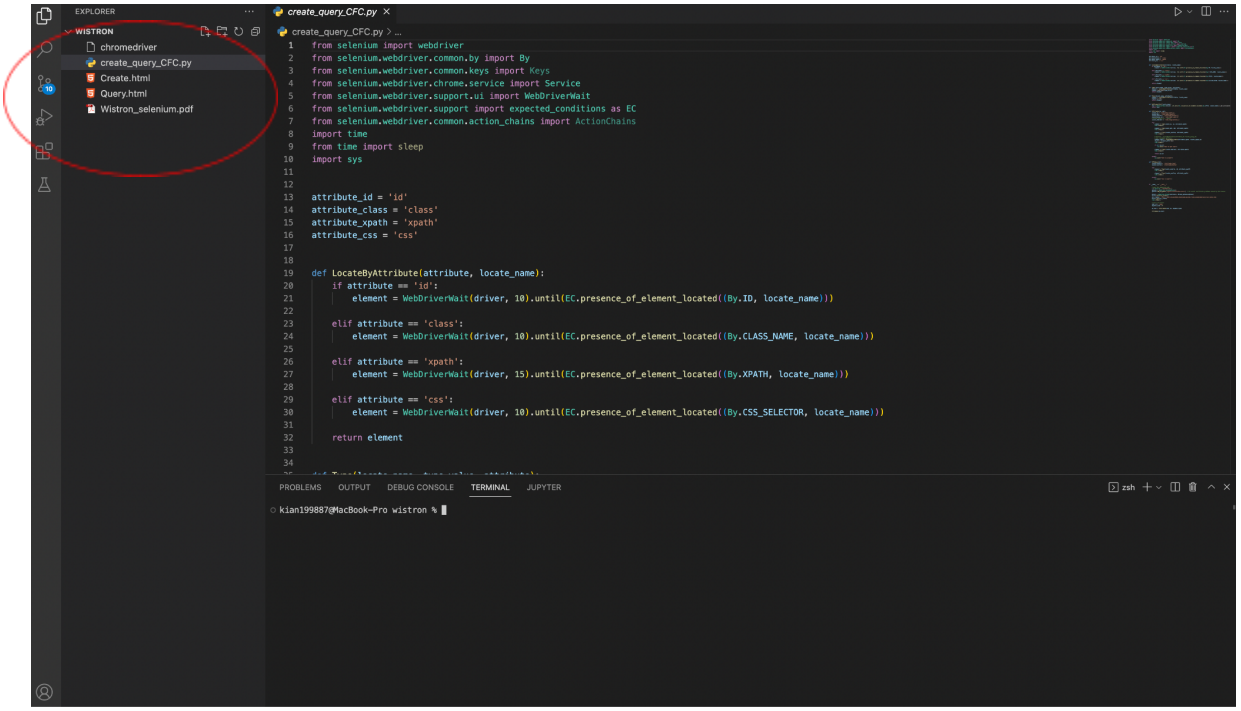
Name	Last modified	Size	ETag
Parent Directory		–	
chromedriver_linux64.zip	2022-08-03 11:03:54	6.74MB	b6e6aa1547fb16621fee5239ed938da8
chromedriver_mac64.zip	2022-08-03 11:03:56	8.04MB	005eac29c029e0c23dba64a53bf1c8ba
chromedriver_mac64_m1.zip	2022-08-03 11:03:58	7.36MB	6d795cff6911ddb1057dbfe1d7810f1a
chromedriver_win32.zip	2022-08-03 11:04:01	6.21MB	fa98a816b3d8f4c9ecbfe53533202646
notes.txt	2022-08-03 11:04:06	0.00MB	286f99f1eabe6f70d229634dfdcb58aa

Step4 : After the installation is finished, click the zip file and you will see the file named “chromedriver”



paste or move it to the directory that you plan to execute the program

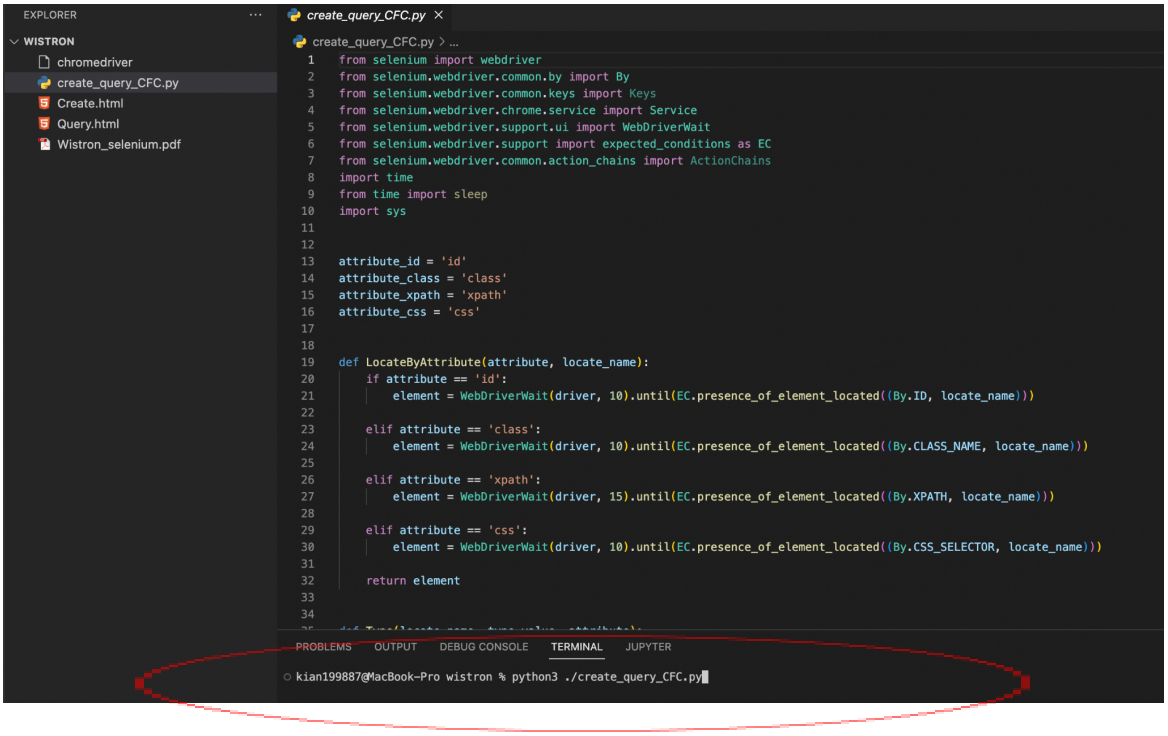
Step5 : Now open your IDE(e.g. VS code), and cd to the directory that you just chose for installing the chrome driver and python file. For example:



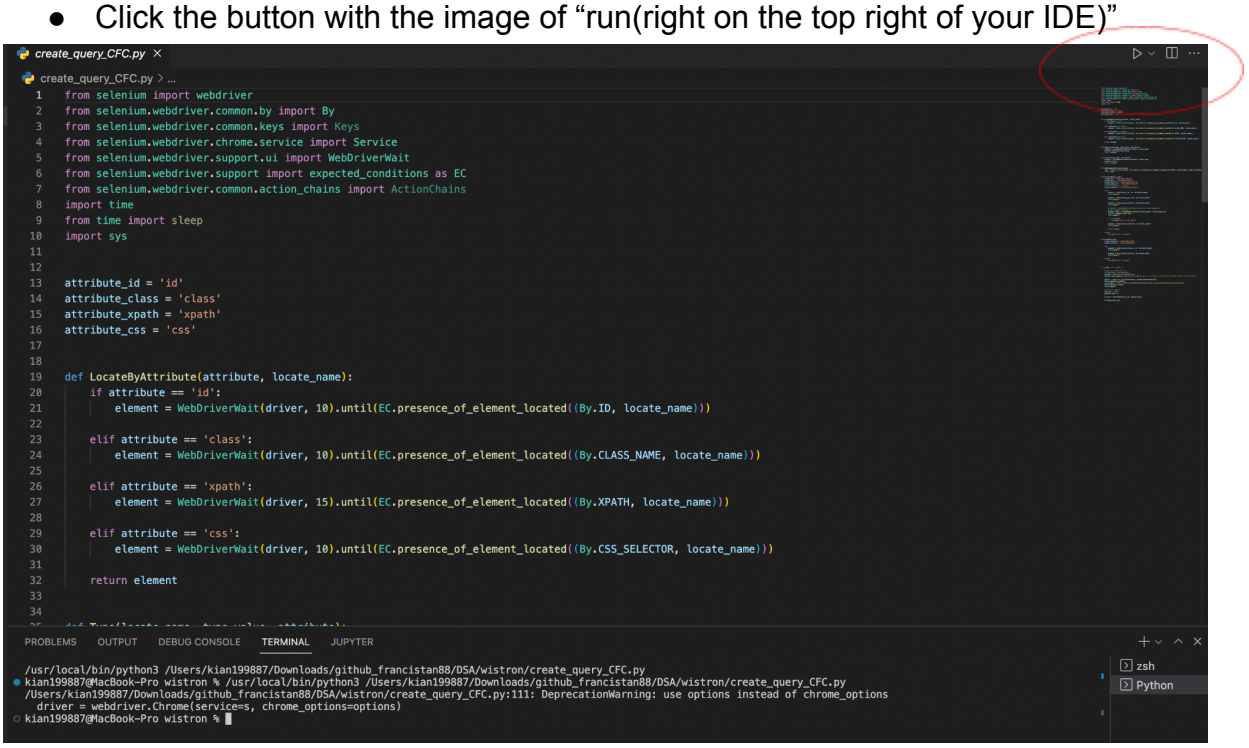
Step6: Open the python file(i.e. the file ends in “.py”) and execute it(note that you can execute the python file the way you want, it does not affect the result of the testing). A few ways below:

- Using command line(make sure that you are already in the folder which has chrome driver and python file)

```
python3 ./"the python file you like to execute"
```



- Click the button with the image of “run(right on the top right of your IDE)”



Step7: After executing the python file, you will see a browser pop up, that means the testing has started, check if there are any problems~