

Installing and getting started

1. Selenium is a web browser automation tool used for web testing and scraping.
2. Install Selenium (<https://www.selenium.dev/> (<https://www.selenium.dev/>)) pip install selenim or conda install Application: Web testing and Web Scraping Tool.
3. Download Chrome/Firefox(geckodriver)/Safari/Chromium/ Drivers as of your choice For Chrome: check the browser version and download appropriate one.
 - <https://chromedriver.chromium.org/> (<https://chromedriver.chromium.org/>)
4. Select a website
 - <http://example.webscraping.com/> (<http://example.webscraping.com/>)
 - <https://webscraper.io/test-sites> (<https://webscraper.io/test-sites>)
5. Getting started with Selenium

Getting started

```
In [30]: import selenium
from selenium import webdriver as wb
```

```
In [31]: webD= wb.Chrome("F:\Selenium\chromedriver.exe")
```

```
In [32]: webD.get('https://www.google.com')
```

Navigating throught Page

The page element will have "Name", "Class", "Id", "xpath" or some other kind of identifier

Finding element by name

```
In [24]: ele1=webD.find_element_by_name('q')
```

```
In [25]: ele1
```

```
Out[25]: <selenium.webdriver.remote.webelement.WebElement (session="3e07b6f888cf372b6d93
e7d64fd54ec1", element="5b336dec-e7c9-407a-ba57-ae018b6887e6")>
```

```
In [26]: ele1.send_keys('Web Scraping')
```

```
In [27]: btnEle=webD.find_element_by_name('btnK')
```

```
In [28]: btnEle.click()
```

Finding element by xpath

```
//*[@id="tsf"]/div[2]/div[1]/div[1]/div/div[2]/input
```

```
/html/body/div[1]/div[3]/form/div[2]/div[1]/div[1]/div/div[2]/input
```

```
In [33]: eleXP=webD.find_element_by_xpath('/html/body/div[1]/div[3]/form/div[2]/div[1]/div[1]/div/div[2]/input')
```

```
In [34]: eleXP.send_keys('Web Scraping')
```

```
In [35]: eleXP.send_keys(' ')
```

```
/html/body/div[1]/div[3]/form/div[2]/div[1]/div[2]/div[2]/div[2]/center/input[1]
```

```
In [36]: #btnEXpa=webD.find_element_by_xpath('//*[@id="tsf"]/div[2]/div[1]/div[3]/center/input[1]')
btnEXpa=webD.find_element_by_xpath('/html/body/div[1]/div[3]/form/div[2]/div[1]/div[2]/div[2]/div[2]/center/input[1]')
#btnEXpa=webD.find_element_by_xpath('/html/body/div[1]/div[3]/form/div[2]/div[1]/div[2]/div[2]/div[2]/center/input[1]')
```

```
In [37]: btnEXpa.click()
```

Finding element by Class

```
In [13]: eleCla=webD.find_element_by_class_name('SDKEP')
```

```
In [14]: eleCla2=eleCla.find_element_by_class_name('a4bIc')
```

```
In [15]: eleCla2Div=eleCla2.find_element_by_css_selector('input')
```

```
In [16]: eleCla2Div.send_keys('Web Scraping')
```

```
In [17]: webD.find_element_by_class_name('FPdoLc')
```

```
Out[17]: <selenium.webdriver.remote.webelement.WebElement (session="9608b0431079a74d60f172cf2b6c94e5", element="13adaf43-f9ef-4d8d-aea9-abd371c0b274")>
```

```
In [18]: centeEle=webD.find_element_by_css_selector('center')
```

```
In [19]: searhEle=centeEle.find_element_by_class_name('gN089b')
```

```
In [20]: searhEle.click()
```

Some other methods like

**webD.find_element_by_id,
webD.find_element_by_tag_name**

Filling forms using selenium

<https://forms.gle/LRYwqvGx1Uhq5qYt5> (<https://forms.gle/LRYwqvGx1Uhq5qYt5>).

```
In [24]: import selenium
from selenium import webdriver as wb
webD=wb.Chrome('chromedriver.exe')
webD.get('https://forms.gle/LRYwqvGx1Uhq5qYt5')
```

```
In [25]: question2=webD.find_element_by_xpath('//*[id="mG61Hd"]/div/div/div[2]/div[2]/div')
```

```
In [26]: question2Ele=question2.find_element_by_xpath('//*[id="mG61Hd"]/div/div/div[2]/div')
```

```
In [27]: question2Ele.text
```

```
Out[27]: 'Scraping\nData Science\nOther:'
```

```
In [28]: optionEle=question2Ele.find_element_by_class_name('freebirdFormviewerViewItemsRadi')
```

```
In [29]: eleOptions=optionEle.find_elements_by_class_name('freebirdFormviewerViewItemsRadi')
```

```
In [30]: for i in eleOptions:
print(i.text)
```

```
Scraping
Data Science
Other:
```

```
In [31]: for el in eleOptions:
if el.text == 'Scraping':
el.click()
```

```
In [ ]:
```

Select element in Selenium (Not Required)

```
In [ ]: from selenium.webdriver.support.ui import Select
import selenium
from selenium import webdriver as wb
webD=wb.Chrome('chromedriver.exe')
webD.get('https://forms.gle/LRYwqvGx1Uhq5qYt5')
```


