CSE 322 : Software Engineering

LAB 04

**“Working with Input Boxes”**

1. **Count all the input boxes in a webpage :**

* Add the import line as follows
* from selenium.webdriver.common.by import By
* Open the demo website <https://fs2.formsite.com/meherpavan/form2/index.html>
* Here you will find a lot of textboxes, checkboxes, radio buttons, drop downs etc.
* To get all the input boxes of this page you can just use the following command:

input\_boxes = driver.find\_elements(By.CLASS\_NAME, 'text\_field')  
print(len(input\_boxes))

* Running this command will create a **LIST** variable where all the elements under a similar CLASS name will be stored.
* To count how many are there we can just run the **len()** function on the variable input\_boxes

1. **Writing on a Textbox :**

* This is already a known concept for us, we just have to use a function named **send\_keys()** to write any text strings on a textbox.
* We have to find out the textbox by our methods which are known to us, and apply the featured function. On the same website as above, like follows:

time.sleep(2)  
input\_boxes[0].send\_keys("Sakib") #writes on FirstName  
time.sleep(2)  
input\_boxes[1].send\_keys("Hasan") #writes on LastName

* So here we are using the list variable and accessing that by the index of the values in it.
* After that simply we are using the send\_keys() function to write on the specified textbox.

1. **Run conditional commands on the textboxes :**

* This knowledge is also a known one from the previous labs, we can run the conditional commands on those textboxes also like **is\_displayed(), is\_enabled(), is\_selected().**
* To recap, we can do it like follows or use the created LIST variable as well:

status\_fname = driver.find\_element\_by\_xpath('//\*[@id="RESULT\_TextField-1"]').is\_displayed()  
  
status\_lname = driver.find\_element\_by\_xpath('//\*[@id="RESULT\_TextField-2"]').is\_enabled()  
  
status\_country = driver.find\_element\_by\_xpath('//\*[@id="RESULT\_TextField-4"]').is\_selected()  
  
print(status\_fname)  
print(status\_lname)  
print(status\_country)

* So the FirstName is displayed so will return **TRUE,** LastName is enabled so will return **TRUE** but the country will not be selected so will return **FALSE.**

**“Working with RadioButton/Checkboxes”**

1. **Verify status of Checkbox/RadioButton**

* Open the demo website <https://fs2.formsite.com/meherpavan/form2/index.html>
* Now we want to check if a RadioButton/CheckBox is selected or not. The steps are very easy: Find the Element, run is\_selected() on that, capture the return value and do further steps.
* In the webpage you will see, there are multiple checkboxes which are unselected. So, say for example we want to select **Sunday, Tuesday & Thursday** if they are not selected. So follow the above steps like follows:

sun = driver.find\_element\_by\_xpath('/html/body/form/div[2]/div[17]/table/tbody/tr[1]/td/label')  
tues = driver.find\_element\_by\_xpath('/html/body/form/div[2]/div[17]/table/tbody/tr[3]/td/label')  
thurs = driver.find\_element\_by\_xpath('/html/body/form/div[2]/div[17]/table/tbody/tr[5]/td/label')  
  
if sun.is\_selected() == False :  
 sun.click()  
  
if tues.is\_selected() == False :  
 tues.click()  
  
if thurs.is\_selected() == False :  
 thurs.click()

* So you can also do the same procedure to select any of the radio button, between MALE/FEMALE. (select MALE on your own)

**“Working with Drop-Down List”**

1. **Select one Option from the List**

* Add the import line as follows
* from selenium.webdriver.support.ui import Select
* Open the demo website <https://fs2.formsite.com/meherpavan/form2/index.html>
* So here we want to select an option from the list. The steps are as follows:
* First, find out the drop down element in the webpage by the code:

drop\_element = driver.find\_element\_by\_xpath('//\*[@id="RESULT\_RadioButton-9"]')

* Then, we have to create an Object of SELECT class which we will use to select an option from the list. Do as follows:

drp = Select(drop\_element) #creating an object for selecting option

* Now we will use the **drp** object to select any of the options available as follows:

drp.select\_by\_visible\_text('Morning')  
drp.select\_by\_index(3) #will select Evening

1. **Number of Options in the List**

* Now we want to count how many options are there in the dropdown list for selecting.
* So we have already created a SELECT object called **drp.**
* Now using this object we can find out easily how many options are available here in the list:

opn = drp.options  
print(len(opn))

1. **Capture all the options of the Drop Down**

* Now we want to capture all the available options from the list for future use say we will print them as output.
* Using the **drp** object again we can capture all the options and print out their text as follows with the help of a loop,

all\_opn = drp.options  
  
for option in all\_opn :  
 print(option.text)

**“Working with Links in a webpage”**

1. **How many links present in the page**

* Open the demo website <https://fs2.formsite.com/meherpavan/form2/index.html>
* Now for all the links present in any webpage you will find a **TAG\_NAME** in the html code called **‘a’.** We are going to use this tag name to capture all the links from the webpage as follows and print how many are present,
* links = driver.find\_elements(By.TAG\_NAME, "a")
* print(len(links))

1. **Capture or Extract all the links from the page**

* Using the **links** variable above we will extract out the text values of the links present in the page as follows,
* for link in links :  
   print(link.text)

1. **Click on the links**

* Now we want to click on a specific link from the list of links.
* We just have to follow our previous knowledges of finding out a link or element and click on that element.
* Suppose we want to click on the link called “**Software Testing Tools Training**” and printing the title of the new page we are returning back to our original page.. We will just have to do the followings,

driver.find\_element(By.LINK\_TEXT,"Software Testing Tools Training").click() #Full text value of a link  
print(driver.title)  
driver.back()  
print(driver.title)