



SET-221
Software Testing Technologies

LAB # 10

LAB Title

Interacting with UI Elements using Selenium
Performing actions on web elements.

Assessment of CLO: 03, PLO: 05

Student Name:			
Roll No.			
Semester		Session	

S. No.	Perf. Level Criteria	Excellent (2.5)	Good (2)	Satisfactory (1.5)	Needs Improvement (0 ~ 1)	Marks Obtained
1	Project Execution & Implementation	Fully functional, optimized, and well-structured.	Minor errors, mostly functional.	Some errors, requires guidance.	Major errors, non-functional, or not Performed.	
2	Results & Debugging Or Troubleshooting	Accurate results with effective debugging Or Troubleshooting.	Mostly correct, some debugging Or Troubleshooting needed.	Partial results, minimal debugging Or Troubleshooting.	Incorrect results, no debugging Or Troubleshooting, or not attempted.	
3	Problem-Solving & Adaptability (VIVA)	Creative approach, efficiently solves challenges.	Adapts well, minor struggles.	Some adaptability, needs guidance.	Lacks innovation or no innovation, unable to solve problems.	
4	Report Quality & Documentation	Clear, structured, with detailed visuals.	Mostly clear, minor gaps.	Some clarity issues, missing details.	Poorly structured, lacks clarity, or not submitted.	
Total Marks Obtained Out of 10						

Experiment evaluated by

Instructor's Name	Engr.Bushra Aziz		
Date		Signature	

Lab Experiment 10: Interacting with UI Elements using Selenium.

Objective:

The objective of this lab to enable students how to handle form elements.

Interacting with Web Elements

Interacting with web elements is a crucial aspect when working with Selenium and Python. It allows us to perform various actions in our test scripts. In this section, we will explore essential operations such as clicking elements, entering values into text boxes, handling alerts, pop-ups, dropdowns, and more. Mastering these interactions is fundamental for building effective and comprehensive test scripts with Selenium and Python.

Here are examples of different interactions with web elements using Selenium with Python:

Clicking Elements

```
# Clicking a button

button = driver.find_element_by_id("button-id")

button.click()

# Clicking a link

link = driver.find_element_by_link_text("Click Here")

link.click()
```

Sending Keys (Typing into input fields)

```
# Typing into a text field

text_field = driver.find_element_by_id("text-field-id")

text_field.send_keys("Hello, World!")

# Sending special keys (e.g., Enter key)

text_field.send_keys(Keys.ENTER)
```

Clearing Text

```
# Clearing a text field

text_field = driver.find_element_by_id("text-field-id")

text_field.clear()
```

Extracting Text

```
# Extracting text from an element

element = driver.find_element_by_id("element-id")

text = element.text

print("Extracted Text:", text)
```

Lab Experiment 10: Interacting with UI Elements using Selenium.

Handling Dropdowns

```
from selenium.webdriver.support.ui import Select

# Selecting an option by visible text
dropdown = Select(driver.find_element_by_id("dropdown-id"))
dropdown.select_by_visible_text("Option 1")

# Selecting an option by value
dropdown.select_by_value("option_value")

# Selecting an option by index
dropdown.select_by_index(2)
```

Working with Checkboxes and Radio Buttons

```
# Clicking a checkbox
checkbox = driver.find_element_by_id("checkbox-id")
checkbox.click()

# Clicking a radio button
radio_button = driver.find_element_by_id("radio-button-id")
radio_button.click()
```

Handling Alerts and Pop-ups

```
# Accepting an alert
alert = driver.switch_to.alert
alert.accept()

# Dismissing an alert
alert.dismiss()

# Entering text in an alert
alert.send_keys("Text for the alert")
alert.accept()
```

Task:

1. Test a signup/registration form of a website, form must contain multiple elements like username, email id and password etc, test also contain Click/submit button to continue for registration.
2. Now test the login/sign form for the same above website, by entering username, password and sign-button, after testing submit button, assert/confirmation of login must also be tested.