

# Data Analytics with Python

## Module-3

### Assignment 1: Automating a Simple Web Login with Selenium

#### Overview

The objective of this assignment is to help clients get hands-on experience with Selenium for web automation by automating a simple login process.

#### Task:

##### 1. Setup Selenium and WebDriver:

- Install Selenium and WebDriver for your preferred browser (e.g., Chrome).
- Write a Python script to set up the WebDriver and open a browser.

##### 2. Navigate to a Web Page:

- Use Selenium to navigate to a login page of a dummy website (e.g., Share point or publicly available login form).

##### 3. Locating Elements:

- Identify and locate the elements (e.g., input fields, buttons) on the web page using Selenium's finding methods like `find_element_by_name()`, `find_element_by_id()`, `find_element_by_xpath()`, etc.

##### 4. Form Interaction:

- Automate the process of entering a username and password and submitting the form. Make sure to handle any potential errors like incorrect credentials or missing elements.

##### 5. Validation:

- After submitting the form, validate that the login was successful by checking for specific elements on the landing page (e.g., a welcome message).

**Deliverables:**

- Python Script demonstrating the login automation process.
- A brief report on the setup, challenges, and a screenshot of the successful login.