**Multiple Ways to Locate Elements**

1. Using ID as a Locator
2. Using class name as a Locator
3. Using name as a Locator
4. Using Link Text as a Locator
5. Using Xpath as a Locator
6. Using CSS Selector as a Locator
7. Using tagName as a locator
8. Using XPath for handling complex and dynamic elements

**SeleniumLocatorsDemo.java**

package seleniumpratice;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class SeleniumLocatorsDemo {

public static void main(String[] args) {

//open the browser

WebDriver driver=new ChromeDriver();

//maximize the browser

driver.manage().window().maximize();

//open the url

driver.get("https://en.wikipedia.org/w/index.php?title=Special:CreateAccount&returnto=Wikipedia%3ASign+up");

//1. id locater demo

//check if the textbox is present or not

boolean displayed= driver.findElement(By.id("wpName2")).isDisplayed();

System.out.println("The input box is displayed: "+displayed);

//check if the text box is present or not

boolean enabled=driver.findElement(By.id("wpName2")).isEnabled();

System.out.println("The input box is enabled: "+enabled);

//check if the text box is take input or not

driver.findElement(By.id("wpName2")).sendKeys("admin");

//2. name locator demo

displayed =driver.findElement(By.name("wpPassword")).isDisplayed();

System.out.println("The password is displayed: "+displayed);

enabled=driver.findElement(By.name("wpPassword")).isEnabled();

System.out.println("The password is enabled: "+enabled);

driver.findElement(By.name("wpPassword")).sendKeys("admin123");

//3. linktext locator demo

driver.findElement(By.linkText("Log in")).click();

driver.findElement(By.id("wpName1")).sendKeys("admin");

driver.findElement(By.id("wpPassword1")).sendKeys("admin123");

driver.findElement(By.id("wpRemember")).click();

driver.findElement(By.id("wpLoginAttempt")).click();

//4.partialLinkText locator demo

driver.findElement(By.partialLinkText("account")).click();

//5.className locator demo

//driver.findElement(By.className("mw-login-flush-right")).click();

//6.xpath locator demo

//Syntax: //selector\_name[@attribute\_name='value']

driver.findElement(By.xpath("//input[@name='wpPassword']")).sendKeys("xpath");

//7.cssSelector locator demo

//syntax: css=tag#id

//id="wpRetype"

driver.findElement(By.cssSelector("input#wpRetype")).sendKeys("xpath");

//8. tagName locator demo

driver.findElement(By.tagName("input")).sendKeys("a@gmail.com");

}

}