

Testing Gmail Login & Logout Using Selenium WebDriver

AIM: To automate the Gmail login and logout procedure using Selenium WebDriver in Java.

Tools Required:

- **Java Development Kit (JDK)**
- **Eclipse IDE**
- **Selenium WebDriver** library
- **ChromeDriver** for Google Chrome browser automation

Test Case steps

1. **Setting up WebDriver:** The `System.setProperty()` method sets the ChromeDriver location.
2. **Navigating to Gmail Login Page:** The driver is directed to Gmail's login page.
3. **Login Process:** The script automates entering the email, clicking the "Next" button, entering the password, and signing in.
4. **Waiting for Elements:** The `WebDriverWait` is used to wait for the page elements (email input, password input, etc.) to load.
5. **Logout Process:** After login, the script clicks the profile icon and signs out by locating the "Sign out" button.
6. **Completion:** The script waits for the login page to reappear, confirming the logout process.

Script for Testcase

```
package account;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import java.time.Duration;

public class gmailac {
    public static void main(String[] args) {
        // Set the path for ChromeDriver
        System.setProperty("webdriver.chrome.driver", "C://chromedriver.exe");

        // Initialize ChromeDriver
        WebDriver driver = new ChromeDriver();

        // Maximize the browser window
        driver.manage().window().maximize();

        // Open Gmail login page
        driver.get("https://accounts.google.com/signin");

        // Wait for the email input to be present
        WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));
        WebElement mailip = wait.until(ExpectedConditions.presenceOfElementLocated(By.id("identifierId")));

        // Enter the Gmail email/username
        mailip.sendKeys("dpk08626@gmail.com");

        // Click on the "Next" button
        driver.findElement(By.xpath("//span[text()='Next']/parent::button")).click();

        // Wait for the password input to be present
        WebElement pwip = wait.until(ExpectedConditions.presenceOfElementLocated(By.name("password")));

        // Enter the Gmail password
        pwip.sendKeys("your-password");

        // Click on the "Next" button
        driver.findElement(By.xpath("//span[text()='Next']/parent::button")).click();

        // Wait until the user profile icon appears after successful login
        WebElement ppc =
            wait.until(ExpectedConditions.presenceOfElementLocated(By.xpath("//a[contains(@href,
'SignOutOptions')]")));

        System.out.println("Login Successful");
    }
}
```

```
// Click on the profile icon
ppc.click();

// Wait for the Sign out button to be present
WebElement soButton =
wait.until(ExpectedConditions.presenceOfElementLocated(By.xpath("//a[text()='Sign out']")));

// Click on the "Sign out" button
soButton.click();

// Wait until the login page reappears to confirm sign out
wait.until(ExpectedConditions.presenceOfElementLocated(By.id("identifierId")));

System.out.println("Logout Successful");

// Close the browser
driver.quit();
}
```

Output:- Logout Successful

Result:- The Gmail login and logout process was successfully automated using Selenium WebDriver.