

## Ex:-7 Opening Google India using Edge browser with Selenium Java WebDriver.

AIM :- The aim of this experiment is to demonstrate the usage of Selenium WebDriver to automate the Edge browser and open the Google India homepage

(<https://www.google.co.in>).

### Requirements:

1. **JDK (Java Development Kit):** Required to run Java applications. Ensure that JDK 8 or later is installed.
2. **Selenium WebDriver:** The web automation tool for interacting with various browsers.
3. **Edge browser:** Latest version of Microsoft Edge installed.
4. **EdgeDriver:** A separate executable to control the Edge browser with WebDriver.
5. **IDE (Eclipse/IntelliJ):** Java Integrated Development Environment for writing and executing Java programs.

### Selenium Java WebDriver Script:-

// Importing required Selenium libraries

```
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.edge.EdgeDriver;
```

```
public class OpenGoogleInEdge {
```

```
    public static void main(String[] args) {
```

```
        // Setting up EdgeDriver path
```

```
        System.setProperty("webdriver.edge.driver", "C://msedgedriver.exe");
```

```
        // Initializing WebDriver for Edge browser
```

```
        WebDriver driver = new EdgeDriver();
```

```
        // Open Google India homepage
```

```
        driver.get("https://www.google.co.in");
```

```
        // Maximize the browser window
```

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

```
        // Print the title of the page
```

```
        System.out.println("Page Title: " + driver.getTitle());
```

```
        // Wait for 5 seconds for observation
```

```
        Thread.sleep(5000);
```

```
        // Close the browser
```

```
        driver.quit();
```

```
    }  
}
```

## Procedure for Running the Script:

1. **Open Eclipse IDE:**
  - Launch Eclipse and create a new Java project.
2. **Create a Java Class:**
  - Inside the `src` folder, create a new class named `OpenGoogleInEdge`.
3. **Write the Code:**
  - Write the Selenium WebDriver script into the class file.
4. **Add Selenium Libraries:**
  - Right-click the project and select `Build Path -> Configure Build Path -> Add External JARs` to include the Selenium `.jar` files.
5. **Run the Program:**
  - Right-click on the Java class and select `Run As -> Java Application`.
6. **Observe the Output:**
  - The Edge browser will open automatically, load Google India, maximize the window, and display the title "Google" in the console.

## Common Issues and Troubleshooting:

1. **EdgeDriver Version Mismatch:** If the version of EdgeDriver doesn't match the version of the installed Edge browser, the script will fail to run. Always download the version of EdgeDriver that corresponds to your Edge browser version.
2. **Path to EdgeDriver:** If Selenium cannot locate the EdgeDriver executable, double-check the path specified in `System.setProperty()` and ensure it points to the correct location.
3. **WebDriverException:** If EdgeDriver fails to initialize or Selenium WebDriver throws an error, ensure:
  - Your Edge browser is updated.
  - The correct version of EdgeDriver is being used.
  - The WebDriver `.jar` files are correctly included in your project's build path.
4. **Browser Not Opening:** If the browser doesn't open, check if:
  - The correct WebDriver executable path is provided.
  - The browser is correctly installed and updated.
5. **Timeouts:** Increase the sleep time (if needed) to observe browser actions, especially on slower machines or networks.

## Output:

The output of this Selenium script will be:

- The Edge browser launches automatically.
- It navigates to the URL: `https://www.google.co.in`.
- The browser window maximizes, and the title of the page (i.e., "Google") is printed in the console.
- After a delay of 5 seconds, the browser closes automatically.

**Result:-** we have successfully opened the Google India homepage using Edge browser in Selenium WebDriver.