**JavaScriptExecutor in Selenium (Java)**

The **JavascriptExecutor** interface in Selenium is used to execute **JavaScript directly in the browser**, which is helpful when:

* Selenium WebDriver can't interact with elements normally (e.g., due to dynamic content, hidden elements).
* You want to do things faster or more precisely (like scrolling, clicking, setting values, etc.).

**✅ How to Use It**

JavascriptExecutor js = (JavascriptExecutor) driver;

**🚀 Commonly Used JavascriptExecutor Methods (with Examples)**

| **Action** | **JavaScript Code** | **Use Case** |
| --- | --- | --- |

**🔹 1. Click an Element**

js.executeScript("arguments[0].click();", element);

Used when element.click() fails (e.g., due to overlay).

**🔹 2. Scroll Down by Pixels**

js.executeScript("window.scrollBy(0,500);");

Scrolls down 500 pixels vertically.

**🔹 3. Scroll to an Element**

js.executeScript("arguments[0].scrollIntoView(true);", element);

Brings the element into view.

**🔹 4. Send Text to Input Field**

js.executeScript("arguments[0].value='Ajay';", inputElement);

Sets value when sendKeys() fails.

**🔹 5. Get Page Title**

String title = (String) js.executeScript("return document.title;");

**🔹 6. Get Current URL**

String url = (String) js.executeScript("return document.URL;");

**🔹 7. Get InnerText of Page**

String text = (String) js.executeScript("return document.documentElement.innerText;");

**📜 3. Scroll to Bottom of Page Using JavaScript**

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("window.scrollTo(0, document.body.scrollHeight);");

📝 Scrolls the web page to the bottom using JavaScript.

**🔹 8. Generate Alert**

js.executeScript("alert('This is a test alert');");

**🔹 9. Refresh the Page**

js.executeScript("history.go(0);");

**🔹 10. Set Element Attribute**

js.executeScript("arguments[0].setAttribute('value', '12345')", element);

**📌 Why Use JavascriptExecutor?**

* **When normal WebDriver commands fail**
* **To interact with hidden/disabled elements**
* **To improve speed in some cases**
* **For advanced DOM manipulation**