**1. What is the Actions Class?**

The Actions class in Selenium is a powerful utility for handling complex user interactions, such as:

* Hovering over elements
* Drag and drop
* Double clicks
* Right clicks (context clicks)
* Sending keyboard inputs
* Handling slider movements, etc.

**Package**: The Actions class is part of the org.openqa.selenium.interactions package in Selenium.

**2. Why is the Actions Class Used?**

In automation testing, sometimes interacting with an element via simple click() or sendKeys() isn’t sufficient. For example:

* You may need to hover over a menu to make it visible before interacting with it.
* A web application may require a double-click or drag-and-drop action, which is not possible with basic Selenium commands.

The Actions class provides the ability to simulate these user gestures and interactions.

**3. Common Methods of the Actions Class:**

The Actions class has several commonly used methods:

| **Method** | **Purpose** |
| --- | --- |
| click() | Clicks at the current mouse location or on the provided element. |
| doubleClick() | Performs a double-click on an element. |
| contextClick() | Performs a right-click (context click) on an element. |
| moveToElement() | Moves the mouse to the middle of the specified element (useful for hover). |
| dragAndDrop() | Clicks and holds an element, drags it to the target element, and releases it. |
| sendKeys() | Sends a sequence of keys to the active element. |
| clickAndHold() | Clicks without releasing the button until release() is called. |
| release() | Releases the held mouse button. |
| build() | Compiles all the listed actions into a single step. |
| perform() | Executes all the compiled actions. |

**Double-click:**

<https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5evondblclic>k

**Right-click/Context-click:**

<https://www.w3schools.com/jsref/tryit.asp?filename=tryjsref_oncontextmenu_addeventlistener>

**Mouse Over**

https://www.w3schools.com/jsref/tryit.asp?filename=tryjsref\_onmouseover\_dom

**Drag and Drop**

[**https://practice.expandtesting.com/drag-and-drop-circles**](https://practice.expandtesting.com/drag-and-drop-circles)

**Slider**

<https://practice.expandtesting.com/horizontal-slider>

**Key Press**

<https://the-internet.herokuapp.com/key_presses>

**TakesScreenshot**