



Selenium

Class 4

Agenda

CSS Selector

WebElement commands

Working with Radio Buttons, CheckBoxes

Construct partial Xpath by using XPath functions

contains() : It is used when the value of any attribute changes dynamically, The contain feature has an ability to find the element with partial text

```
//img[contains(@src,'imdbpro')]
```

to use it with a text:

```
//img[contains(text(),'imdbpro')]
```

'starts-with()' : Start-with function finds the element whose attribute value changes on refresh or any operation on the webpage. In this expression, match the starting text of the attribute is used to find the element whose attribute changes dynamically.

```
//img[starts-with(@alt,'IMDbPro')]
```

to use it with a text:

```
//img[starts-with(text(),'IMDbPro')]
```

Test Case

Using Xpath ONLY

TC 1: Facebook login:

1. Open chrome browser
2. Go to “https://www.facebook.com/”
3. Enter valid username and valid password and click login
4. User successfully logged in

TC 2: Mercury Tours Registration:

1. Open chrome browser
2. Go to “http://newtours.demoaut.com/”
3. Click on Register Link
4. Fill out all required info
5. Click Submit
6. User successfully registered

CSS Selector

- When we don't have an option to choose Id or Name, we should prefer using CSS selector as the best alternative.
- CSS is "Cascading Style Sheets" and it is defined to display HTML in structured and colorful styles are applied to webpage.
- CSS has more Advantage than Xpath
- CSS is much more faster and simpler than the Xpath.
- In IE Xpath works very slow, whereas Css works faster when compared to Xpath.

CSS Selector

CSS Selectors have many formats, but we will only focus on the most common ones.

Tag and ID

Tag and class

Tag and attribute

Locating by CSS Selector - Tag and ID

Syntax	Description
<i>css=tag#id</i>	<ul style="list-style-type: none">• tag = the HTML tag of the element being accessed• # = the hash sign. This should always be present when using a CSS Selector with ID• id = the ID of the element being accessed

```
<a id="current time" href="http://someurl/" onclick="s_objectID="http://someur/">url</a>
```

```
WebElement element = driver.findElement(By.cssSelector("a[id='current time']"));
```

Or

```
WebElement element = driver.findElement(By.cssSelector("a#current time"));
```

Locating by CSS Selector - Tag and Class

Syntax	Description
<i>css=tag.class</i>	<ul style="list-style-type: none">• tag = the HTML tag of the element being accessed• . = the dot sign. This should always be present when using a CSS Selector with class• class = the class of the element being accessed

```
<a class="current time" href="http://someurl/" onclick="s_objectID="http://someur/">url</a>
```

```
WebElement element = driver.findElement(By.cssSelector("a[class='current time']"));
```

Or

```
WebElement element = driver.findElement(By.cssSelector("a.current time"));
```


Locating by CSS Selector - Tag and Attribute

Syntax	Description
<p>CSS= <i>tag[attribute='value']</i></p>	<ul style="list-style-type: none">• tag = the HTML tag of the element being accessed• [and] = square brackets within which a specific attribute and its corresponding value will be placed• attribute = the attribute to be used. It is advisable to use an attribute that is unique to the element such as a name or ID.• value = the corresponding value of the chosen attribute.

```
<input class="name" id="name" type="text" placeholder="Enter name..." />
```

```
WebElement element = driver.findElement(By.cssSelector("input[placeholder='Enter name...']"));
```

There are there important special characters:

1. '^' symbol, represents the starting text in a string.
2. '\$' symbol represents the ending text in a string.
3. '*' symbol represents contains text in a string.

CSS Locators for substring matches(Start, end and containing text) in selenium

It will find input tag which contains 'id' attribute starting with 'ema' text. Email starts with 'ema'

```
css=input[id^='ema']
```

It will find input tag which contains 'id' attribute ending with 'ail' text. Email ends with 'mail'

```
css=input[id$='mail']
```

It will find input tag which contains 'id' attribute containing 'mai' text. Email contains 'mai'

```
css=input[id*='mai']
```

Test Case

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