

Web Elements Locator

Common Locators

By ID

```
driver.findElement(By.id('username'));
```

By Name

```
driver.findElement(By.name('password'));
```

By Classname

```
driver.findElement(By.className('submit-button'));
```

By CSS Selector

```
driver.findElement(By.className('submit-button'));
```

By XPath

```
driver.findElement(By.xpath('//button[text()="Submit"]'));
```

By Link Text

```
driver.findElement(By.linkText('Click Here'));
```

NOTE

- IDs and names for faster execution.
- CSS selectors and XPath for complex elements

Finding XPATH

```
<html>
<body>
  <input class='email' id='email'>
  <button class='submit' id='submit'>Login
</button>
</body>
</html>
```

Absolute XPath

```
/html/body/button
```

Relative XPath

```
//button[@id='submit']
```

```
//button[@class='submit']
```

```
//button[contains(text(),'Login')]
```

```
//button[contains(@class,'submit')]
```

Finding XPATH

```
<html>
<body>
<div class="grandparent">
  <div class="parent">
    <div class="child">
      <span id="target">Target Element
    </span>
    </div>
    <div class="sibling">
      <span>Sibling Element</span>
    </div>
  </div>
  <div class="uncle">
    <span>Uncle Element</span>
  </div>
</div>
</body>
</html>
```

Find the **parent div** of the element with id='target'

```
//span[@id='target']/ancestor::div[@class='parent']
```

Find all **span elements** that are descendants of the **div** with the class **grandparent**

```
//div[@class='grandparent']/descendant::span[@id='target']
```

Find the **sibling div** of the element with the class child

```
//div[@class='child']/following-sibling::div
```

Find the **preceding sibling div** of the element with the class sibling

```
//div[@class='sibling']/preceding-sibling::div
```