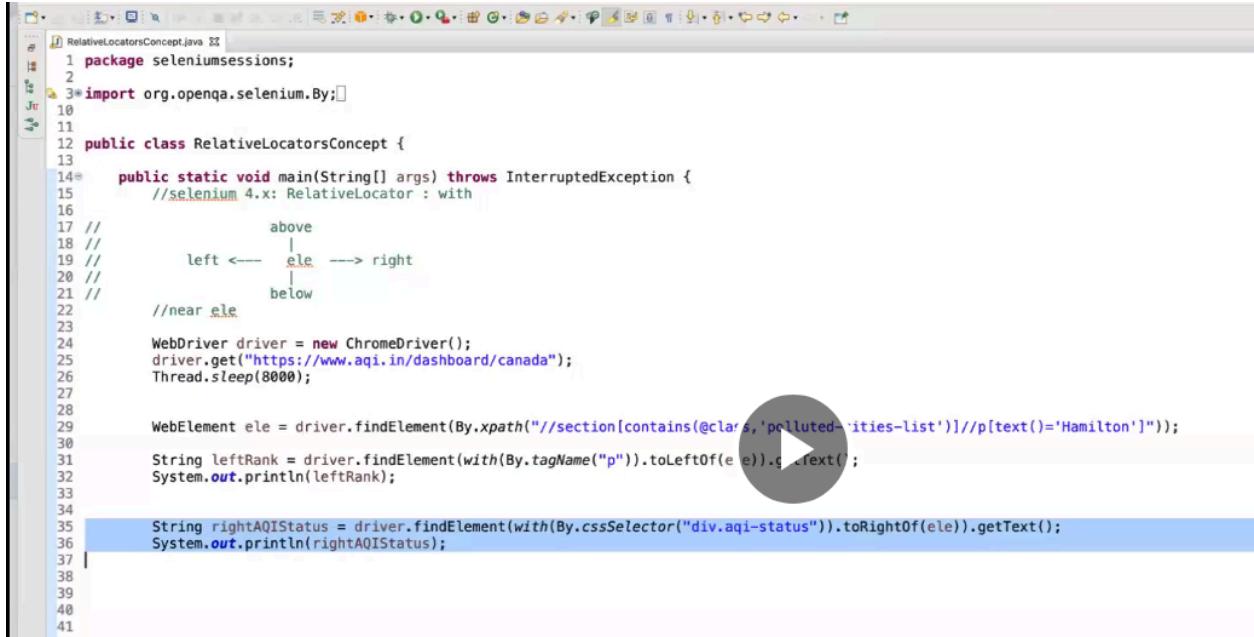


## Get the aqi rank and status of hamilton-

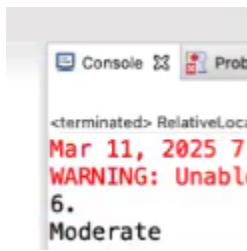


The screenshot shows a Java code editor with a script named `RelativeLocatorsConcept.java`. The code uses Selenium to find an element for 'Hamilton' and then prints its left and right neighbors. A diagram illustrates the relative locator `toLeftOf()` and `toRightOf()` methods. The code is as follows:

```
1 package seleniumsessions;
2
3 import org.openqa.selenium.By;
4
5
6 public class RelativeLocatorsConcept {
7
8     public static void main(String[] args) throws InterruptedException {
9         //selenium 4.x: RelativeLocator : with
10
11         // above
12         //    left <-- ele --> right
13         // below
14         // near ele
15
16         WebDriver driver = new ChromeDriver();
17         driver.get("https://www.aqi.in/dashboard/canada");
18         Thread.sleep(8000);
19
20         WebElement ele = driver.findElement(By.xpath("//section[contains(@class, 'polluted-cities-list')]//p[text()='Hamilton']"));
21
22         String leftRank = driver.findElement(with(By.tagName("p")).toLeftOf(ele)).getText();
23         System.out.println(leftRank);
24
25         String rightAQIStatus = driver.findElement(with(By.cssSelector("div.aqi-status")).toRightOf(ele)).getText();
26         System.out.println(rightAQIStatus);
27     }
28
29
30 }
```

## More clearer line 29 and 31-

```
27     WebElement ele = driver.findElement(By.xpath("//section[contains(@class, 'polluted-cities-
28         list')]//p[text()='Hamilton']"));
29
30         String leftRank = driver.findElement(with(By.tagName("p")).toLeftOf(ele)).getText();
31         System.out.println(leftRank);
```

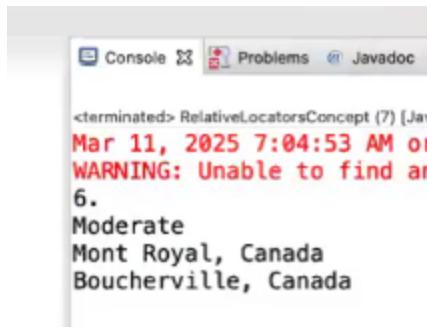


The screenshot shows the Java console output. It shows the execution of the script and the resulting output, which includes the AQI rank and status for Hamilton.

```
<terminated> RelativeLocatorsConcept
Mar 11, 2025 7:17:54 PM
WARNING: Unable to start embedded browser
6.
Moderate
```

## Print cities which are above and below hamilton-

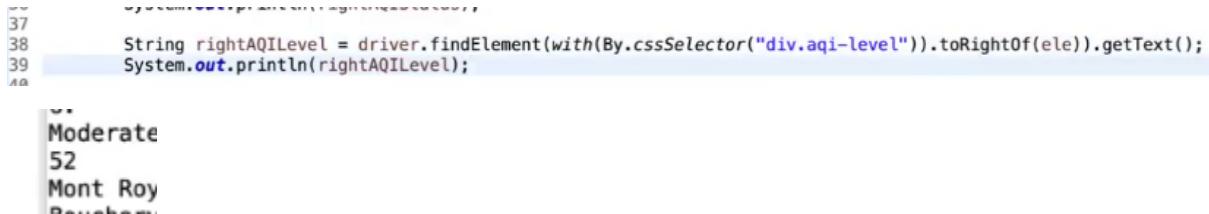
```
36     System.out.println(rightAQIStatus);
37
38     String aboveCity = driver.findElement(with(By.tagName("p")).above(ele)).getText();
39     System.out.println(aboveCity);
40
41     String belowCity = driver.findElement(with(By.tagName("p")).below(ele)).getText();
42     System.out.println(belowCity);
43 }
```



The screenshot shows the Eclipse IDE interface with the 'Console' tab selected. The output window displays the following text:

```
<terminated> RelativeLocatorsConcept (7) [Java]
Mar 11, 2025 7:04:53 AM or
WARNING: Unable to find an
6.
Moderate
Mont Royal, Canada
Boucherville, Canada
```

Aqi level-  
Get the aqi level of hamilton.



The screenshot shows the Eclipse IDE interface with the code editor and output console. The code is:

```
37
38     String rightAQIlevel = driver.findElement(By.cssSelector("div.aqi-level")).toRightOf(ele)).getText();
39     System.out.println(rightAQIlevel);
```

The output window shows the result:

```
Moderate
52
Mont Roy
Boucherville, Canada
```

Note-

In this case, we cant put canada because its in new  
line.1.32 - selenium session 14.

The screenshot shows a web browser window with the title "Canada Air Quality Index (AQI)". The main content is a table ranking locations by AQI. The 5th row, representing Hamilton, Canada, has a tooltip over it. The tooltip contains the CSS selector "p.font-bold.text-[1.5em].sm:ext-[1.7em].truncate" and the value "122.8 x 22.19". Below the table, the browser's developer tools are visible, specifically the Elements tab, which shows the corresponding HTML structure for the highlighted element.

Find element with tag name div which is near to the base element hamilton-

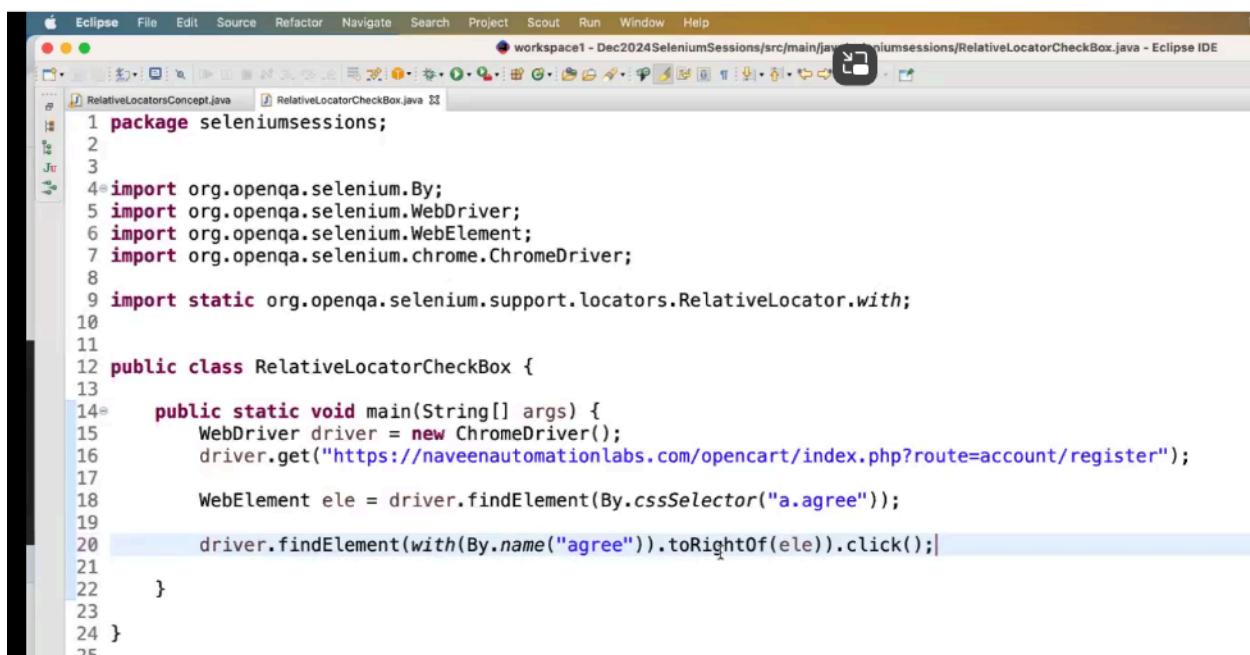
```

48
49     String nearEleText = driver.findElement(By.tagName("div")).near(ele).getText();
50     System.out.println(nearEleText);

```

Hamilton, Canada

Naveen website-  
Checkbox to the right of privacy policy.



```

1 package seleniumsessions;
2
3
4 import org.openqa.selenium.By;
5 import org.openqa.selenium.WebDriver;
6 import org.openqa.selenium.WebElement;
7 import org.openqa.selenium.chrome.ChromeDriver;
8
9 import static org.openqa.selenium.support.locators.RelativeLocator.with;
10
11
12 public class RelativeLocatorCheckBox {
13
14     public static void main(String[] args) {
15         WebDriver driver = new ChromeDriver();
16         driver.get("https://naveenautomationlabs.com/opencart/index.php?route=account/register");
17
18         WebElement ele = driver.findElement(By.cssSelector("a.agree"));
19
20         driver.findElement(with(By.name("agree")).toRightOf(ele)).click();
21
22     }
23
24 }
25

```

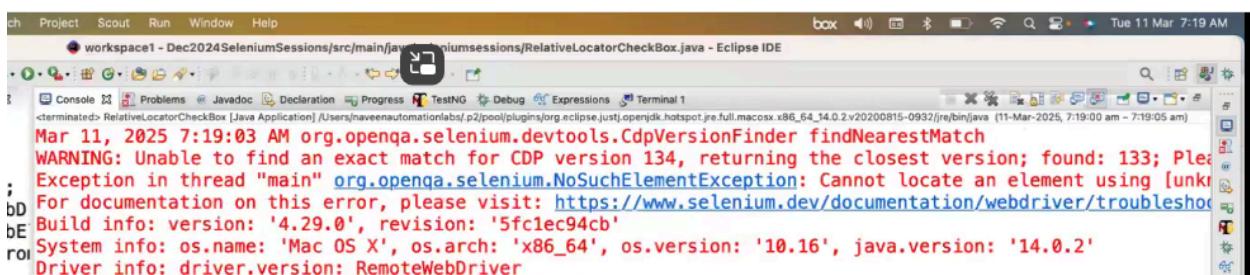


**Check for text I have read and agree to -**  
**We need to check if the text is present to the Left of privacy policy.**

```

21 String mesg = driver.findElement(with(By.cssSelector("form div.pull-right")).toLeftOf(ele)).getText();
22 System.out.println(mesg);
23
24

```



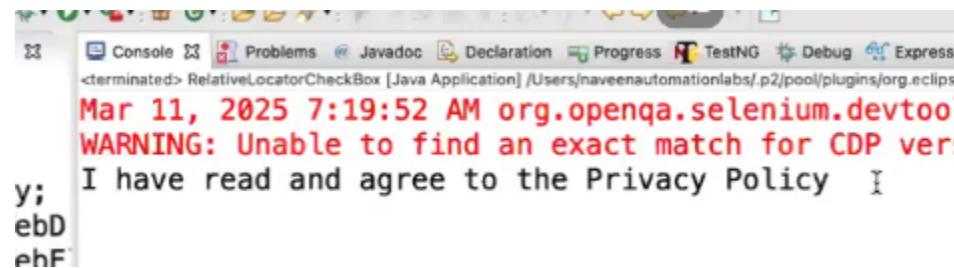
```

Mar 11, 2025 7:19:03 AM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 134, returning the closest version; found: 133; Please
; Exception in thread "main" org.openqa.selenium.NoSuchElementException: Cannot locate an element using [unkn
bD For documentation on this error, please visit: https://www.selenium.dev/documentation/webdriver/troubleshoo
bE Build info: version: '4.29.0', revision: '5fc1ec94cb'
r0 System info: os.name: 'Mac OS X', os.arch: 'x86_64', os.version: '10.16', java.version: '14.0.2'
Driver info: driver.version: RemoteWebDriver

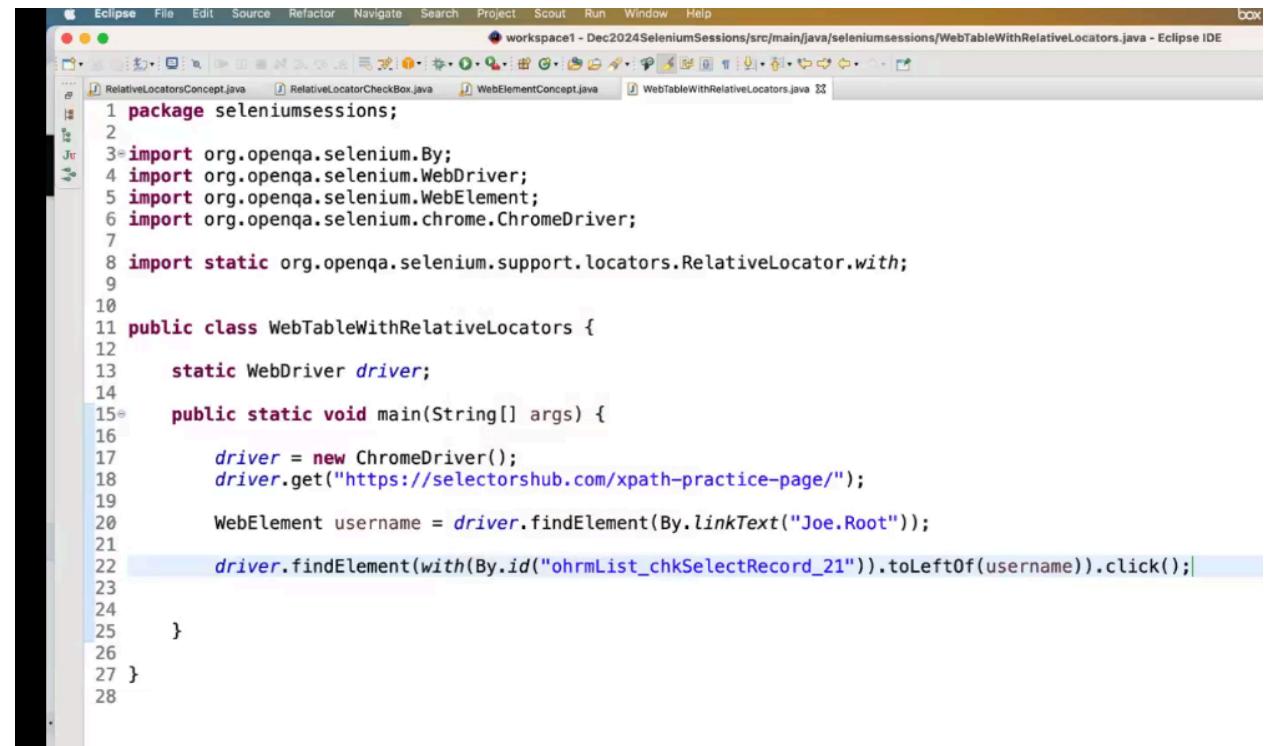
```

Change locator as above one giving error-  
Lets get the nearest div tag which is present against  
the element. We get the div for the text which we  
want.

```
21     String mesg = driver.findElement(By.tagName("div")).near(ele)).getText();  
22     System.out.println(mesg);
```



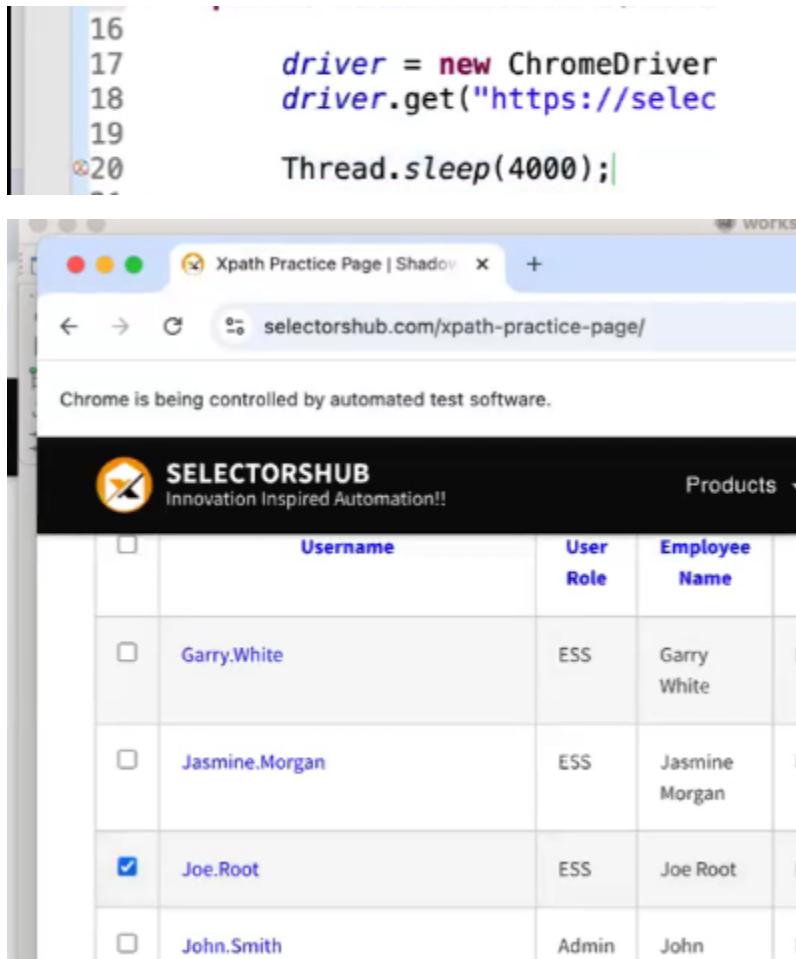
Click the check box to the left of joe root-



Apply some wait as issues in sync-

So in this case, apply `thread.sleep` and manually scroll when it is sleeping. (1.12).

Added line 20.



The screenshot shows a Java code editor and a web browser. The code editor has the following lines of code:

```
16  
17  
18     driver = new ChromeDriver()  
19     driver.get("https://selec  
20     Thread.sleep(4000);
```

The browser window displays a table from SelectorHub. The table has columns: Username, User Role, Employee Name, and E. The rows are:

	Username	User Role	Employee Name	E
<input type="checkbox"/>	Garry.White	ESS	Garry White	E
<input type="checkbox"/>	Jasmine.Morgan	ESS	Jasmine Morgan	E
<input checked="" type="checkbox"/>	Joe.Root	ESS	Joe Root	E
<input type="checkbox"/>	John.Smith	Admin	John	E

The browser title is "Xpath Practice Page | SelectorHub". The URL in the address bar is "selectorhub.com/xpath-practice-page/". A status message at the top of the page says "Chrome is being controlled by automated test software."

Now we want to the right of joe root-  
There are multiple elements.

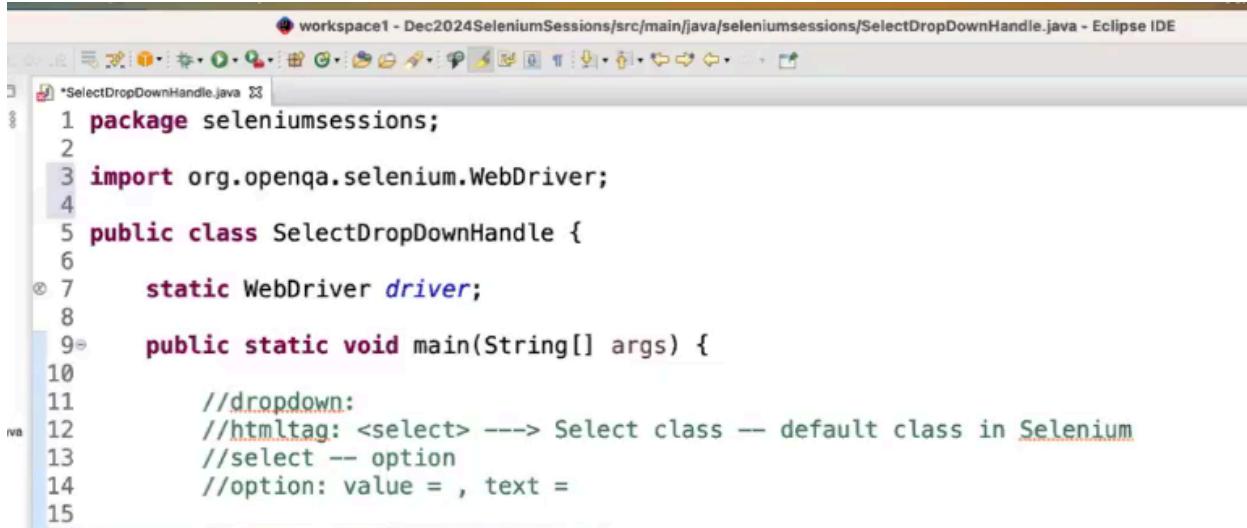
Problem with `find elements` method. Cant work with the relative locators because it will give all tds which are to the right of joe root.

```
25
26     driver.findElement(with(By.id("ohrmList_chkSelectRecord_21"))).toLeftOf(username)).click();
27
28     List<WebElement> eleList = driver.findElements(with(By.tagName("td")).toRightOf(username));
29
30     for(WebElement e : eleList) {
31         String text = e.getText();
32         System.out.println(text);
33     }
```

Mar 11, 2025 7:28:58 |  
WARNING: Unable to fi

ESS  
ESS  
Admin  
ESS  
ESS  
ESS  
ESS  
Joe Root  
Jasmine Morgan  
John Smith  
Garry White  
Jordan Mathews  
Kevin Mathews  
Enabled  
Enabled  
Enabled  
Enabled  
Enabled  
Enabled  
Enabled  
windows  
windows  
chrome  
mac  
chrome  
windows  
chrome  
Hvidovre  
windows  
chrome

## Select drop down-



```
workspace1 - Dec2024SeleniumSessions/src/main/java/seleniumsessions>SelectDropDownHandle.java - Eclipse IDE
* * * * * SelectDropDownHandle.java * * * * *
1 package seleniumsessions;
2
3 import org.openqa.selenium.WebDriver;
4
5 public class SelectDropDownHandle {
6
7     static WebDriver driver;
8
9     public static void main(String[] args) {
10
11         //dropdown:
12         //htmltag: <select> ---> Select class — default class in Selenium
13         //select -- option
14         //option: value = , text =
15 }
```

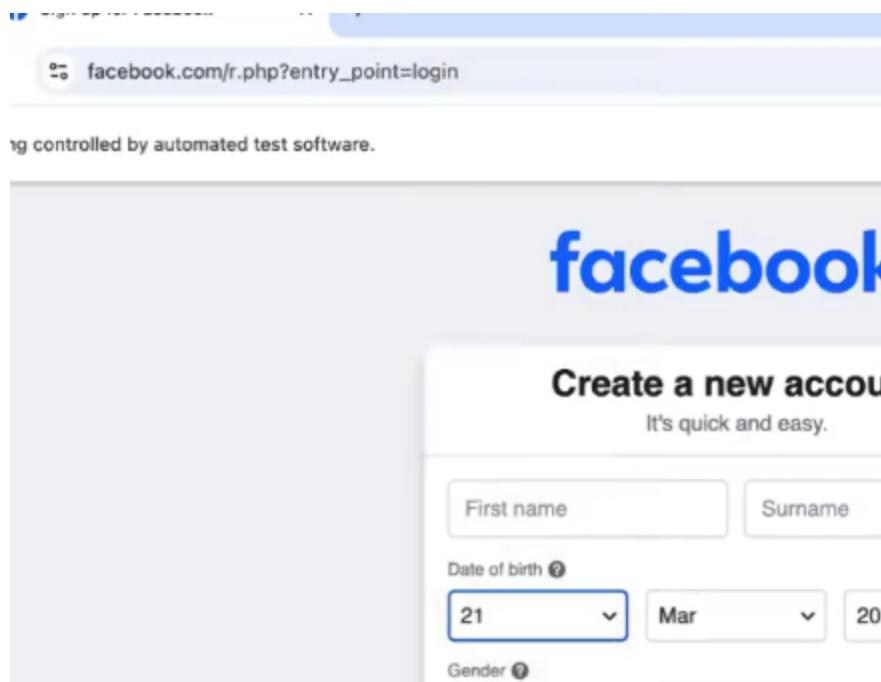
Interact with facebook date of birth field in registration page.

Select requires web element as argument. No default constructor for select present.

select by index. Select index 20. Index starts from zero.

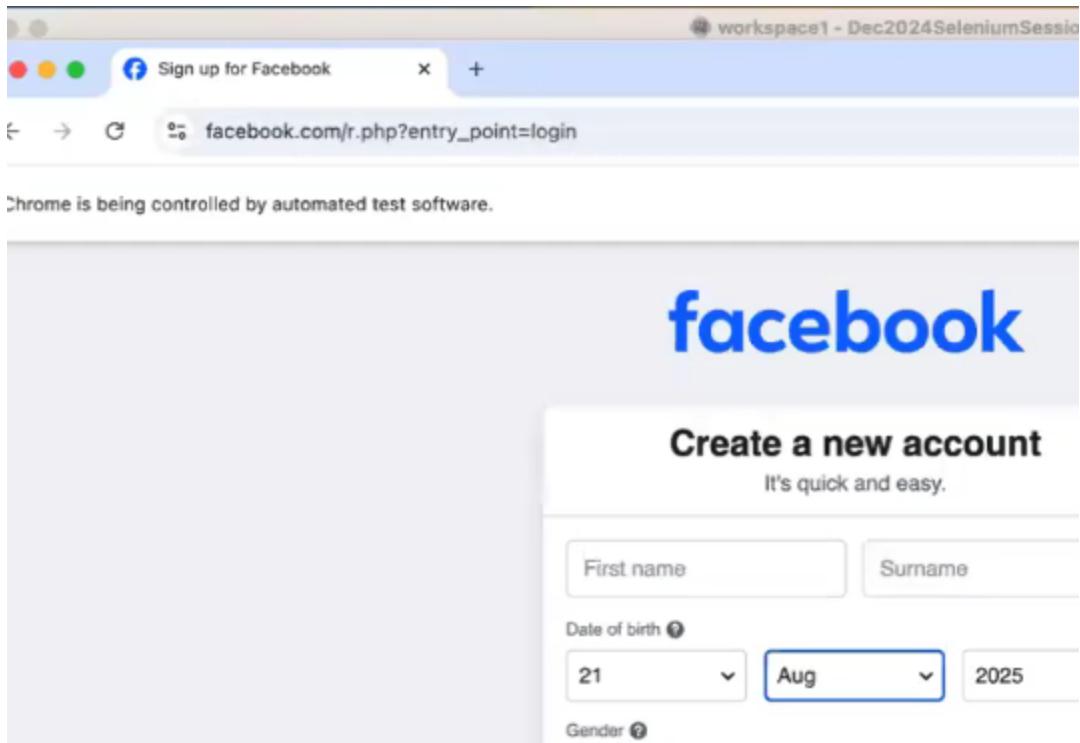


```
19
20     driver = new ChromeDriver();
21     driver.get("https://www.facebook.com/r.php?entry_point=login");
22
23     By day = By.id("day");
24     By month = By.id("month");
25     By year = By.id("year");
26
27     WebElement dayEle = driver.findElement(day);
28
29     Select select = new Select(dayEle);
30     select.selectByIndex(20);
31
32 |
```



Select august from month-  
Select by visible text on the webpage.

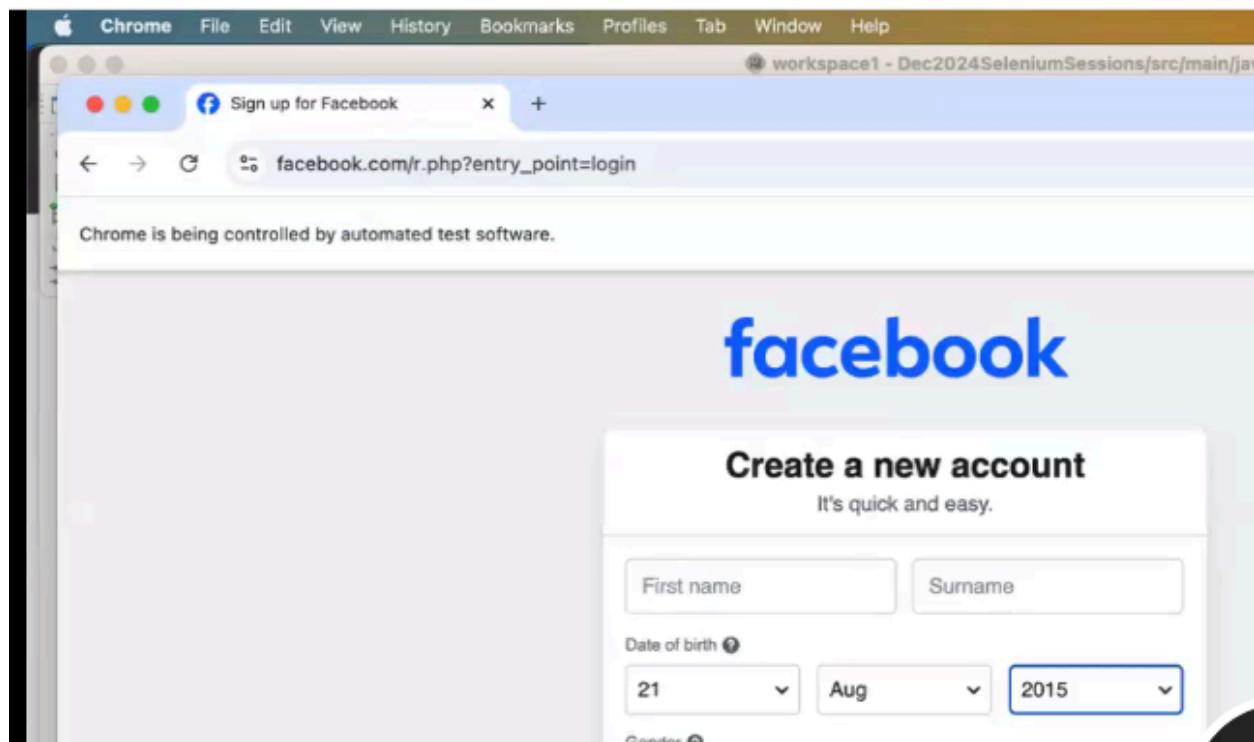
```
34     Select select2 = new Select(monthEle);
35     select2.selectByVisibleText("Aug");
36
37 }
```



Select year-

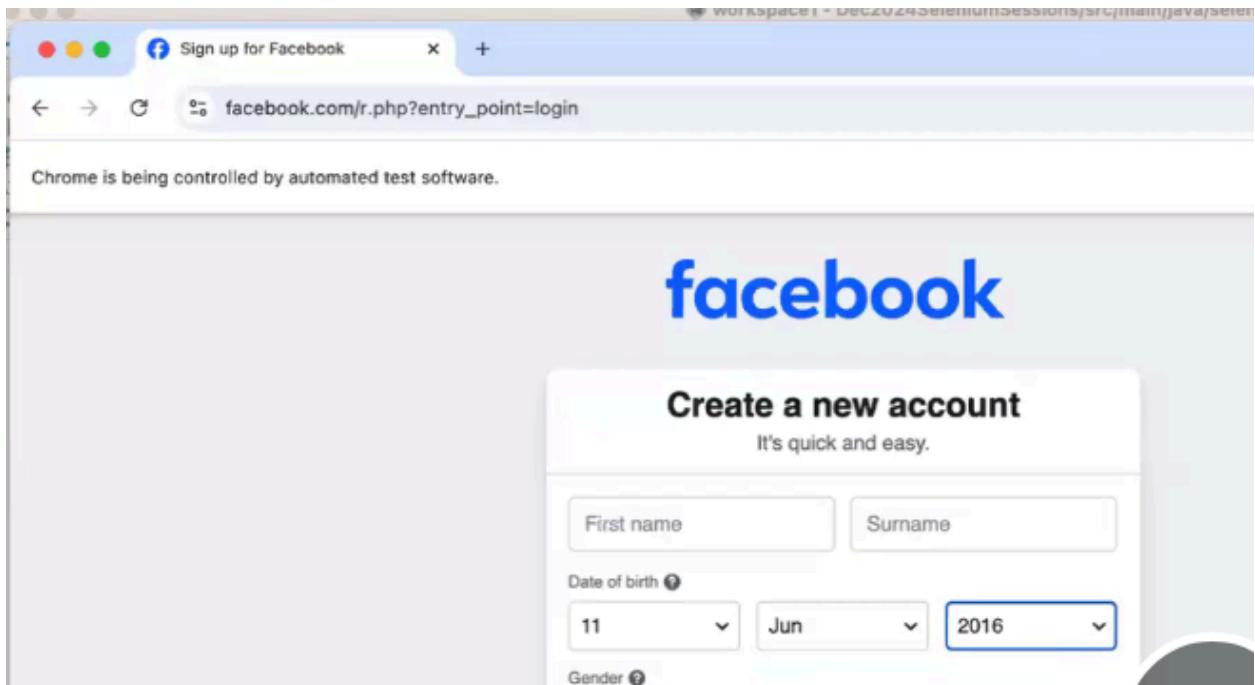
Select by value. Use the value attribute from html.

```
22
23     By day = By.id("day");
24     By month = By.id("month");
25     By year = By.id("year");
26
27     WebElement dayEle = driver.findElement(day);
28     WebElement monthEle = driver.findElement(month);
29     WebElement yearEle = driver.findElement(year);
30
31
32     Select select1 = new Select(dayEle);
33     select1.selectByIndex(20);
34
35     Select select2 = new Select(monthEle);
36     select2.selectByVisibleText("Aug");
37
38     Select select3 = new Select(yearEle);
39     select3.selectByValue("2015");
40
```



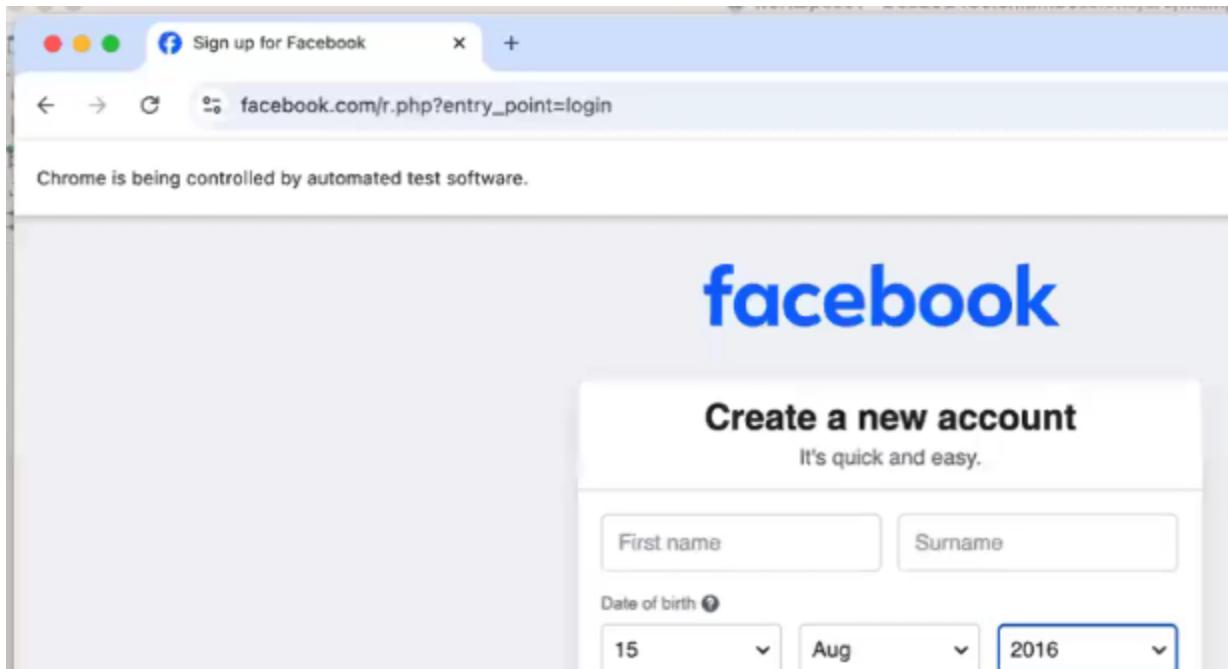
Create utility for select-  
Check if working when we pass index.

```
41     doSelectDropDownByIndex(day, 10);
42     doSelectDropDownByIndex(month, 5);
43     doSelectDropDownByIndex(year, 9);
44
45 }
46
47
48 public static WebElement getElement(By locator) {
49     return driver.findElement(locator);
50 }
51
52 public static void doSelectDropDownByIndex(By locator, int index) {
53     Select select = new Select(getElement(locator));
54     select.selectByIndex(index);
55 }
```



Another utility for select by visible text-  
Call it and check if working.

```
45  
46      doSelectDropDownByVisibleText(day, "15");  
47      doSelectDropDownByVisibleText(month, "Aug");  
48      doSelectDropDownByVisibleText(year, "2016");  
49  
50  
51  public static void doSelectDropDownByVisibleText(By locator, String visibleText) {  
52      Select select = new Select(getElement(locator));  
53      select.selectByVisibleText(visibleText);  
54  }  
55
```

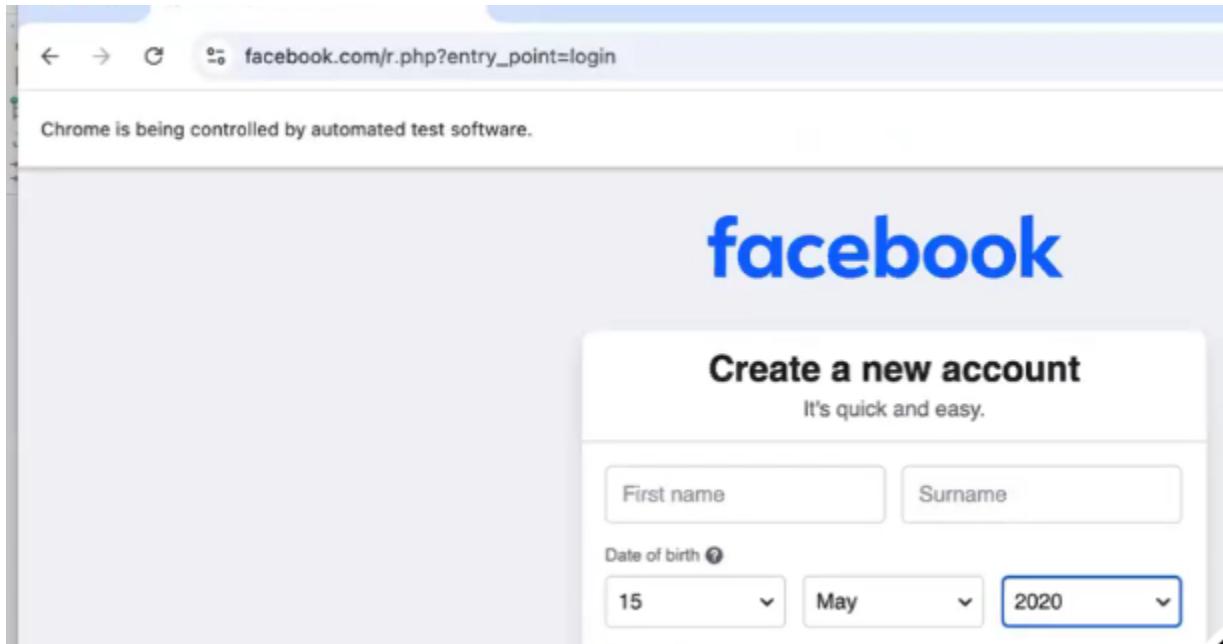


Another utility for select by value-

```
67  
68  public static void doSelectDropDownByValue(By locator, String value) {  
69      Select select = new Select(getElement(locator));  
70      select.selectByValue(value);  
71  }  
72
```

Check if working.

```
49  
50     doSelectDropDownByVisibleText(day, "15");  
51     doSelectDropDownByValue(month, "5");  
52     doSelectDropDownByVisibleText(year, "2020");  
53 }
```



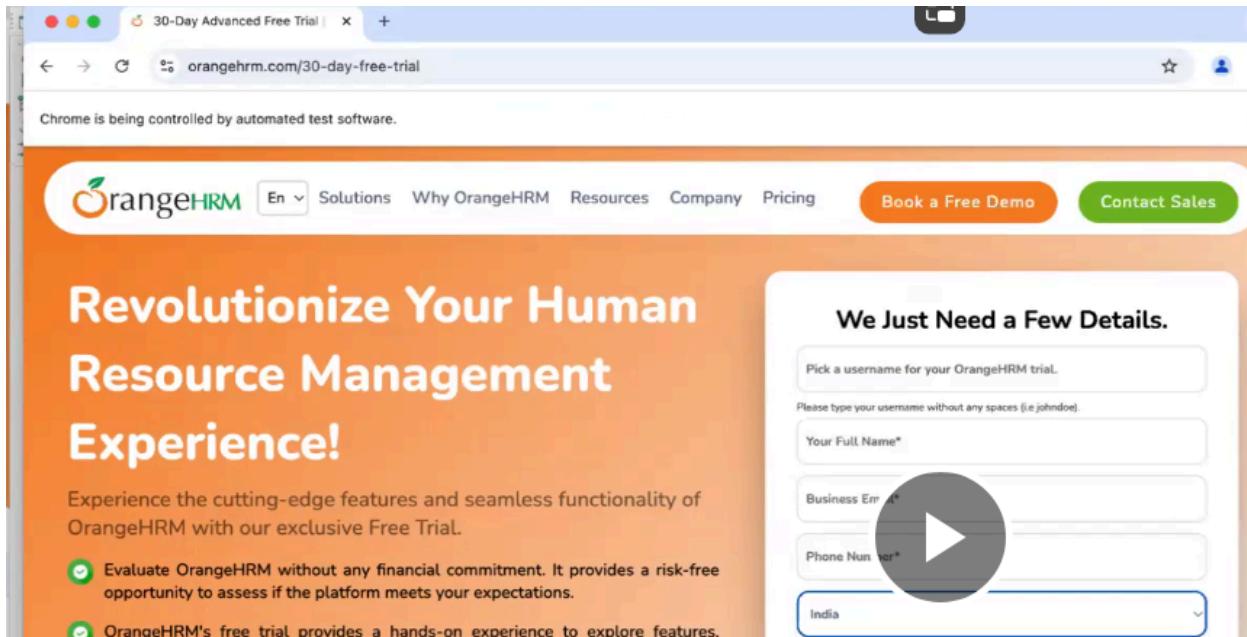
Test for orange hrm-  
Change url.

```
10     //dropdown -- select -- select class -- default class in select  
11     //select -- option  
12     //option: value = , text =  
13  
14     driver = new ChromeDriver();  
15     driver.get("https://www.orangehrm.com/30-day-free-trial");  
16  
17     By day = By.id("day");  
18     By month = By.id("month");  
19     By year = By.id("year");
```



Select india.

```
53  
54     By country = By.id("Form_getForm_Country");  
55     doSelectDropDownByVisibleText(country, "India");  
56 }
```

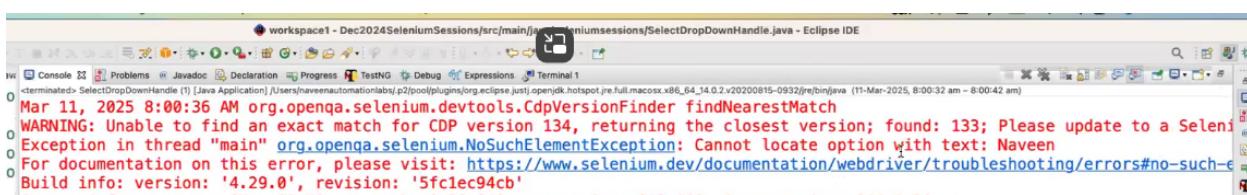


Value doesn't exist-  
Then what will be the error or exception.

```

53
54      By country = By.id("Form_getForm_Country");
55      doSelectDropDownByVisibleText(country, "Naveen");
56  }
  
```

No such element exception.



Changed code to include try catch for invalid text-  
Also returning true or false if selection was made or not.

```

54
55     By country = By.id("Form_getForm_Country");
56     boolean flag = doSelectDropDownByVisibleText(country, "Naveen");
57     System.out.println(flag);
58 }

~~~
69 public static boolean doSelectDropDownByVisibleText(By locator, String visibleText) {
70     Select select = new Select(getElement(locator));
71     try {
72         select.selectByVisibleText(visibleText);
73         return true;
74     } catch (NoSuchElementException e) {
75         System.out.println(visibleText + " is not present in the dropdown");
76         return false;
77     }
78 }

```

```

Console Problems Declaration Progress TestNG Debug Ex
<terminated> SelectDropDownHandle [1] [Java Application] /Users/naveenautomationlabs/p2/pool/plugins/org
Mar 11, 2025 8:03:51 AM org.openqa.selenium.dev
WARNING: Unable to find an exact match for CDP v
Naveen is not present in the dropdown
false

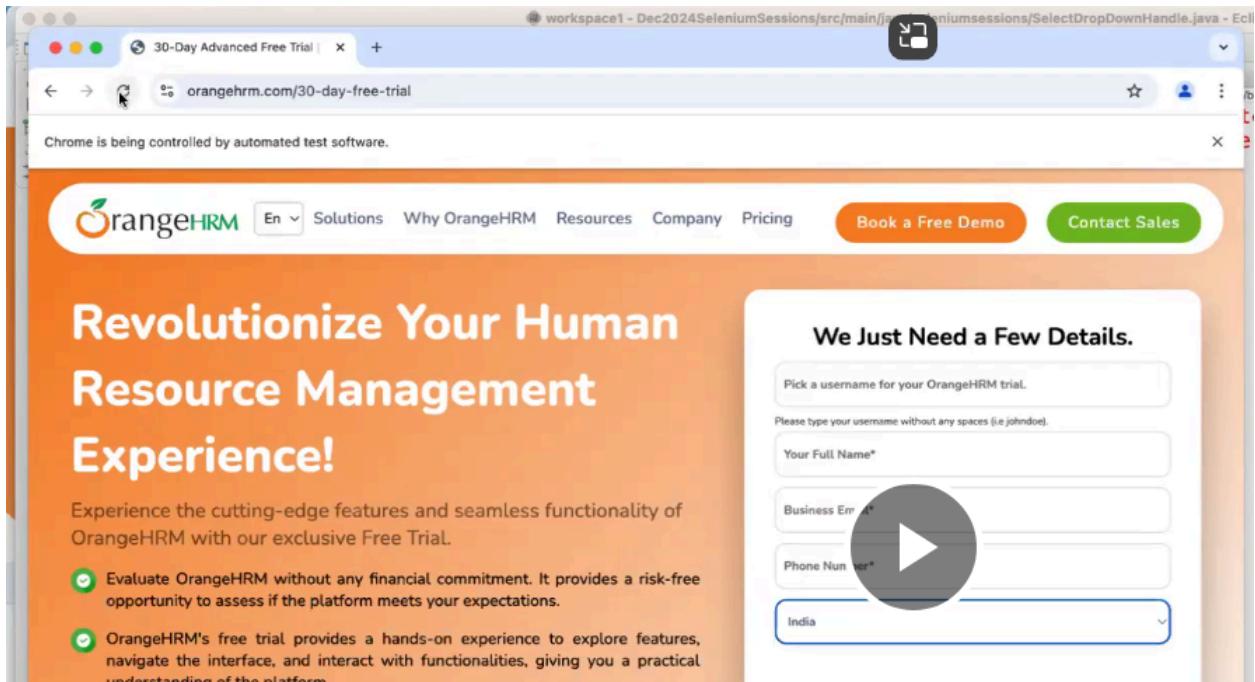
```

Pass right value-  
No exception and works.

```

54
55     By country = By.id("Form_getForm_Country");
56     boolean flag = doSelectDropDownByVisibleText(country, "India");
57     System.out.println(flag);
58 }

```



Console Problems Javadoc  
<terminated> SelectDropDownHandle {1} [J]  
**Mar 11, 2025 8:04:2**  
**WARNING: Unable to**  
true

Lets see the exception for index also-  
Pass wrong index value. No such element  
exception.

```
58
59         doSelectDropDownByIndex(country, 400);
60     }
```

Console Problems Javadoc Declaration Progress TestNG Debug Expressions Terminal 1  
<terminated> SelectDropDownHandle {1} [Java Application] /Users/naveenautomationlabs/p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86\_64\_14.0.2.v20200815-0932/jre/bin/java (11-Mar-2025, 8:05:28 am - 8:06:40 am)  
**Mar 11, 2025 8:05:32 AM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch**  
**WARNING: Unable to find an exact match for CDP version 134, returning the closest version; found: 133; Please up**  
**Exception in thread "main" org.openqa.selenium.NoSuchElementException: Cannot locate option with index: 400**  
For documentation on this error, please visit: <https://www.selenium.dev/documentation/webdriver/troubleshooting>

Update the index utility method-

```
66 public static boolean doSelectDropDownByIndex(By locator, int index) {  
67     Select select = new Select(getElement(locator));  
68     try {  
69         select.selectByIndex(index);  
70         return true;  
71     } catch (NoSuchElementException e) {  
72         System.out.println(index + " is not present in the dropdown");  
73         return false;  
74     }  
75 }
```



## Update the value utility method-

```
87  
88 public static boolean doSelectDropDownByValue(By locator, String value) {  
89     Select select = new Select(getElement(locator));  
90     try {  
91         select.selectByValue(value);  
92         return true;  
93     } catch (NoSuchElementException e) {  
94         System.out.println(value + " is not present in the dropdown");  
95         return false;  
96     }  
97 }
```

## Move to the element util -

```
127
128 //*****Drop Down Utils -- Select based DropDown*****
129
130 public boolean doSelectDropDownByIndex(By locator, int index) {
131     Select select = new Select(getElement(locator));
132     try {
133         select.selectByIndex(index);
134         return true;
135     } catch (NoSuchElementException e) {
136         System.out.println(index + " is not present in the dropdown");
137         return false;
138     }
139 }
140
141 public boolean doSelectDropDownByVisibleText(By locator, String visibleText) {
142     Select select = new Select(getElement(locator));
143     try {
144         select.selectByVisibleText(visibleText);
145         return true;
146     } catch (NoSuchElementException e) {
147         System.out.println(visibleText + " is not present in the dropdown");
148         return false;
149     }
150 }
151
152 public boolean doSelectDropDownByValue(By locator, String value) {
153     Select select = new Select(getElement(locator));
154     try {
155         select.selectByValue(value);
156         return true;
157     } catch (NoSuchElementException e) {
158         System.out.println(value + " is not present in the dropdown");
159         return false;
160     }
161 }
162 }
```

