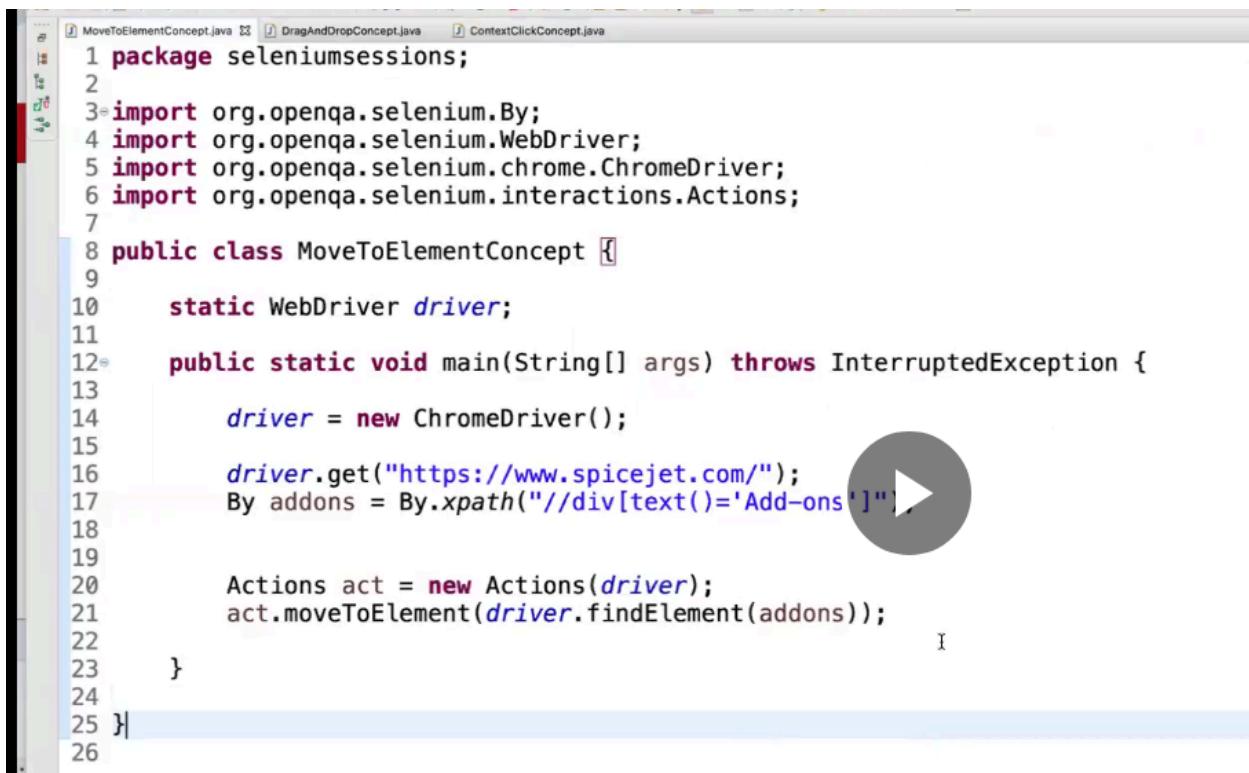


Spice jet.

Move to add ons.

Move to element moves exactly to middle of element.

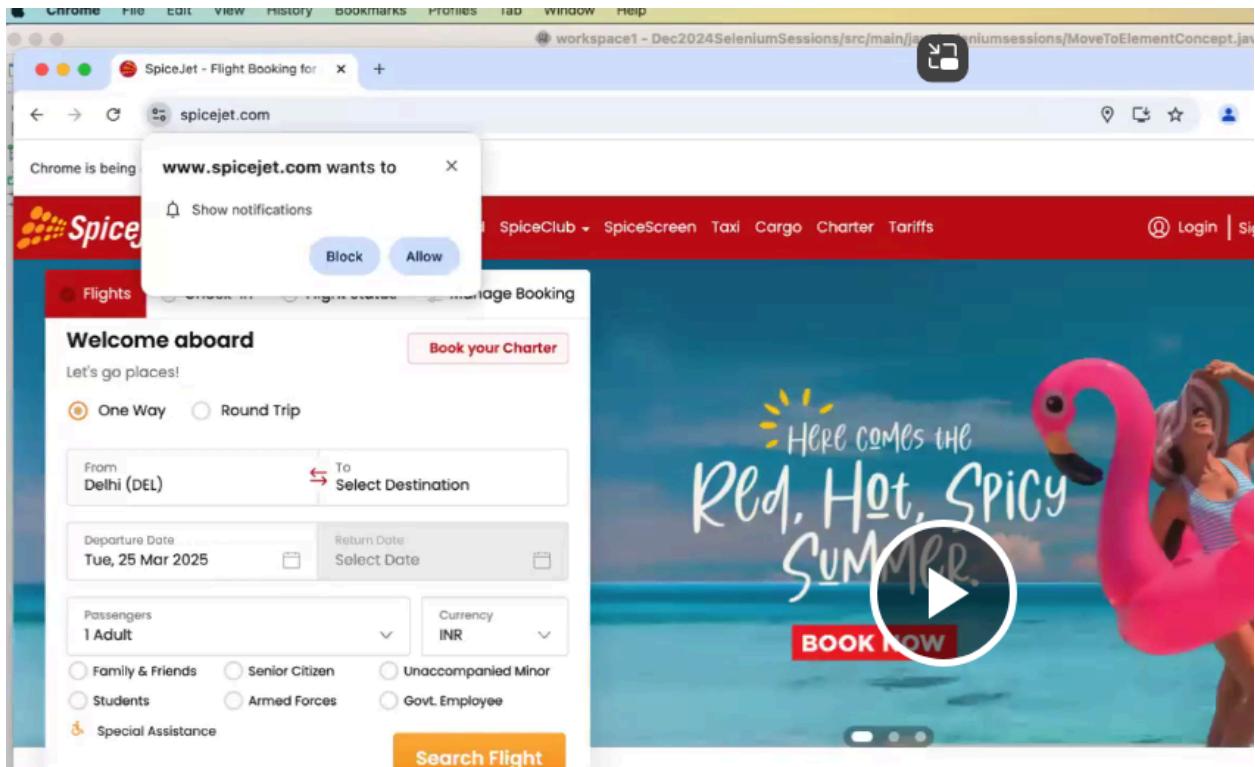
Simply writing the below actions code wont do anything-



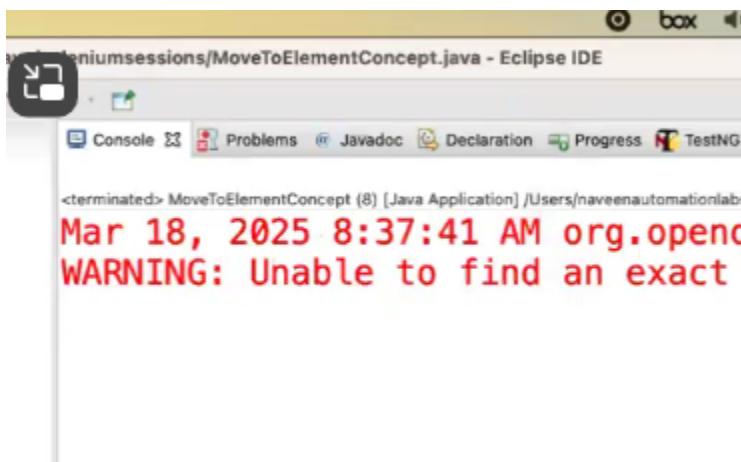
```
1 package seleniumsessions;
2
3 import org.openqa.selenium.By;
4 import org.openqa.selenium.WebDriver;
5 import org.openqa.selenium.chrome.ChromeDriver;
6 import org.openqa.selenium.interactions.Actions;
7
8 public class MoveToElementConcept {
9
10     static WebDriver driver;
11
12     public static void main(String[] args) throws InterruptedException {
13
14         driver = new ChromeDriver();
15
16         driver.get("https://www.spicejet.com/");
17         By addons = By.xpath("//div[text()='Add-ons']");
18
19
20         Actions act = new Actions(driver);
21         act.moveToElement(driver.findElement(addons));
22
23     }
24
25 }
26
```

Clearer line 17-

By addons = By.xpath("//div[text()='Add-ons']");
Nothing happens in output.



Output is also blank.



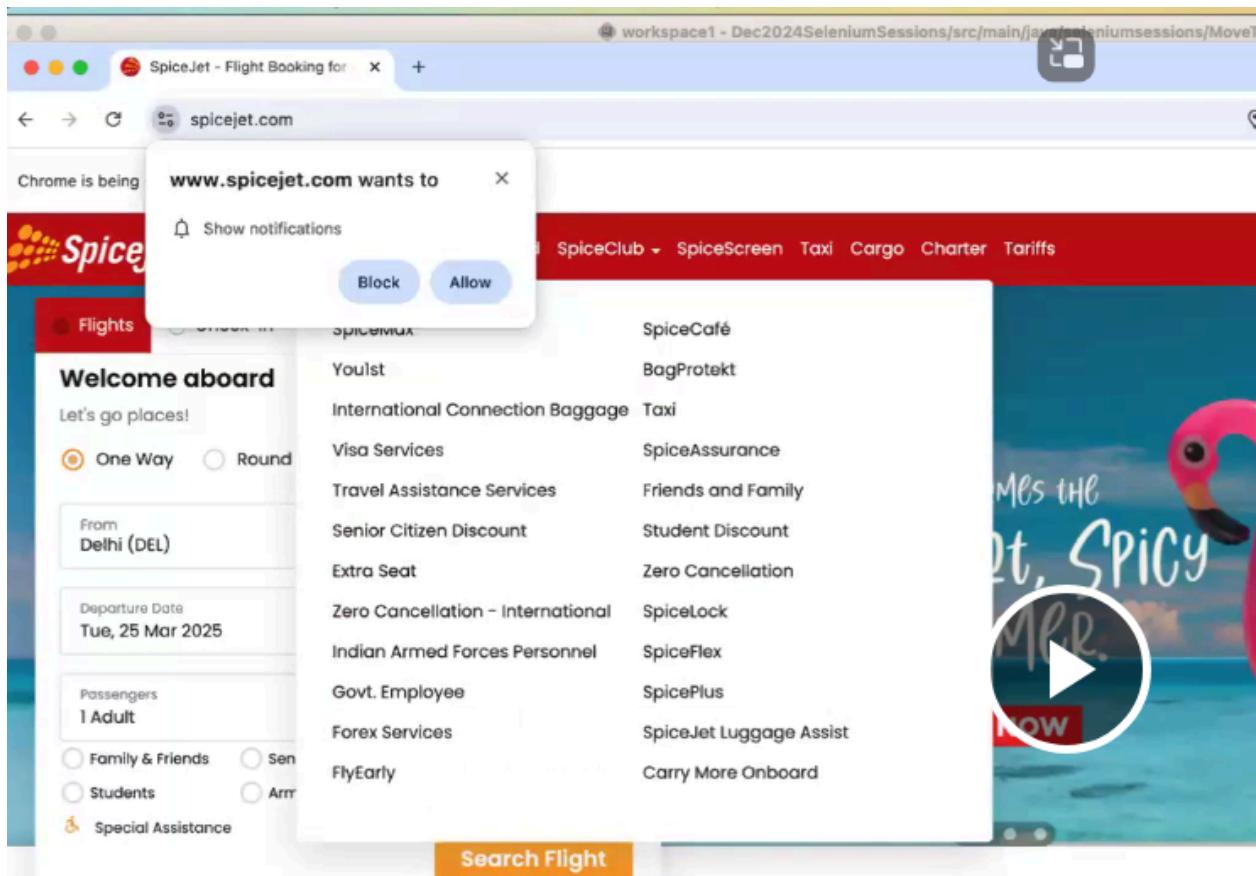
Build method-

Groups all actions if more than one and makes them into one single action internally. Then perform

method will come and perform the actions. Perform method performs action on the browser.

Add build.perform-

```
18  
19  
20     Actions act = new Actions(driver);  
21     act.moveToElement(driver.findElement(addons)).build().perform();  
22  
23 }
```



Click visa services in add ons-

```
22  
23     Actions act = new Actions(driver);  
24     Thread.sleep(2000);  
25     driver.findElement(By.xpath("//div[text()='Visa Services']")).click();
```

The screenshot shows a web browser window with the title 'SpiceJet - Flight Booking for' and the URL 'corporate.spicejet.com/VisaServices.aspx'. A message at the top states 'Chrome is being controlled by automated test software.' The page features the SpiceJet logo and navigation links for BOOK, ADD-ONS, DEALS, GIFT CARD, SPICECLUB, SPICESCREEN, TAXI, CARGO, CHARTER, and LOGIN. A prominent banner on the left reads 'VISA ON YOUR MIND?' with the subtext 'NOW APPLY FOR VISA ON WWW.SPICEJET.COM.' and a red 'APPLY NOW' button. To the right is a QR code with the text 'SCAN TO APPLY NOW' and a circular play button icon. Below the banner, a woman in a hat and sunglasses sits cross-legged, holding a red passport and giving a thumbs-up. A text overlay below her says: 'Your favourite international destinations are now just a few clicks away. Apply for your visa online in a few simple and convenient steps. What's more, SpiceJet customers will also get attractive offers on visas of 25+ countries.'

Generic method-

Rajat irritating - 13.00.

Created utility.

```

25  public static void handleParentSubMenu(By parentMenu, By subMenu) throws InterruptedException {
26      Actions act = new Actions(driver);
27      act.moveToElement(getElement(parentMenu)).build().perform();
28      Thread.sleep(2000);
29      getElement(subMenu).click();
30  }
31
32
33  public static WebElement getElement(By locator) {
34      return driver.findElement(locator);
35  }
36

```

Clearer line 26-

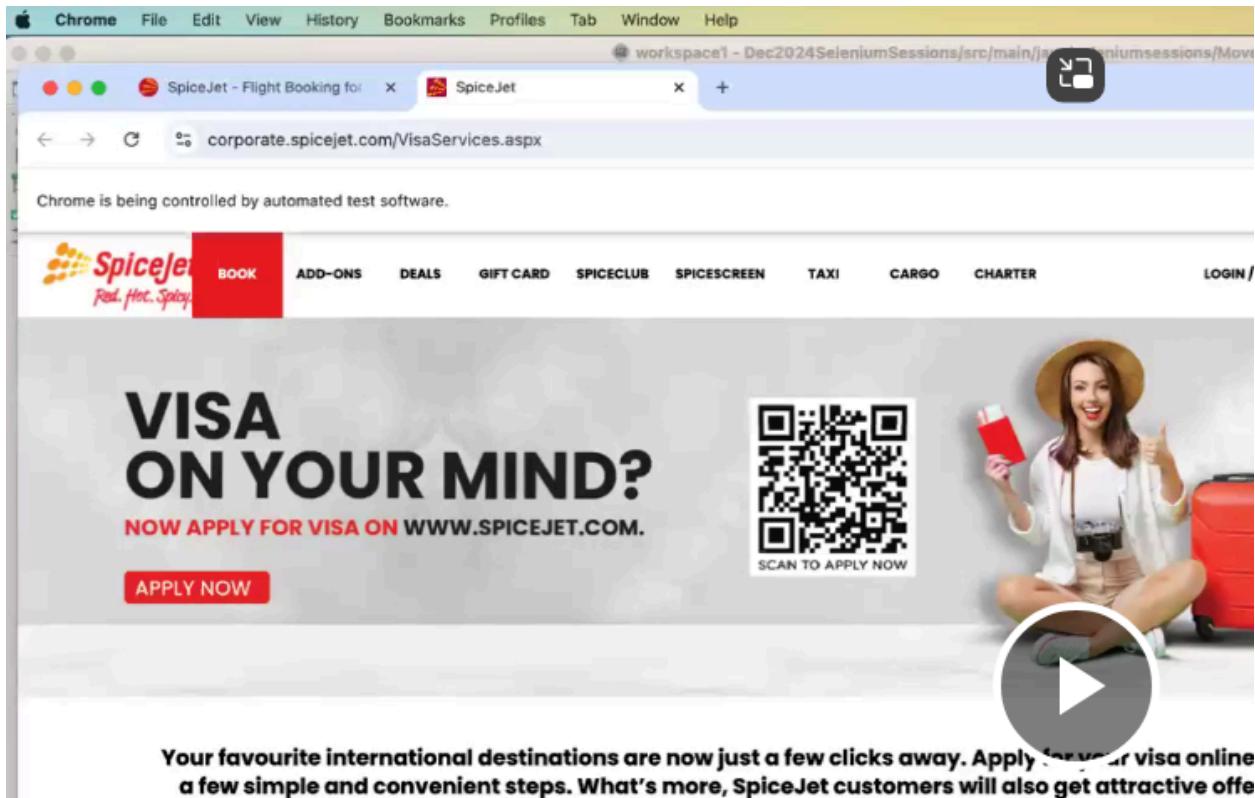
```
public static void handleParentSubMenu(By parentMenu, By subMenu) throws InterruptedException {
```

Call above utility-

```

17     driver.get("https://www.spicejet.com/");
18     By addons = By.xpath("//div[text()='Add-ons']");
19     By visaServices = By.xpath("//div[text()='Visa Services']");
20
21     handleParentSubMenu(addons, visaServices);
22

```



Lets now check for spice club → earn points-

```

21     By spiceClub = By.xpath("//div[text()='SpiceClub']");
22     By earnPoints = By.xpath("//div[text()='Earn Points']");
23
24
25     handleParentSubMenu(spiceClub, earnPoints);
26

```

Chrome is being controlled by automated test software.

Coming Soon

You arrived early!

We are working on this currently and should be done soon

About Us	Contact Us	Travel Info	Investors	Connect with us
Spice Route Magazine	Airlines	Citizen's Charter	Corporate Governance	For Reservations, kindly call us at:
Corporate Overview	International Offices	FAQ	Financial Information	+91 (0)124 4983410
Fleet	Corporate Head Office	Fitness To Fly Guideline	Notices	+91 (0)124 491600
Careers	Advertise with Us	Flight Schedules	Corporate Announcements	
Media Center	RFP	Terms of Carriage	Shareholding Pattern	
Awards and Applaud		Fees and Charges	Investor Services	
		Know Your Rights	Disclosure Regulation 46	
		Book Any Test From Any Lab		
		Book Any Test From Any Lab in Delhi		

Move to element util-

```

315      //*****Actions Utils*****//
316
317= public void handleParentSubMenu(By parentMenu, By subMenu) throws InterruptedException {
318     Actions act = new Actions(driver);
319     act.moveToElement(getElement(parentMenu)).build().perform();
320     Thread.sleep(2000);
321     doClick(subMenu);
322 }
323

```

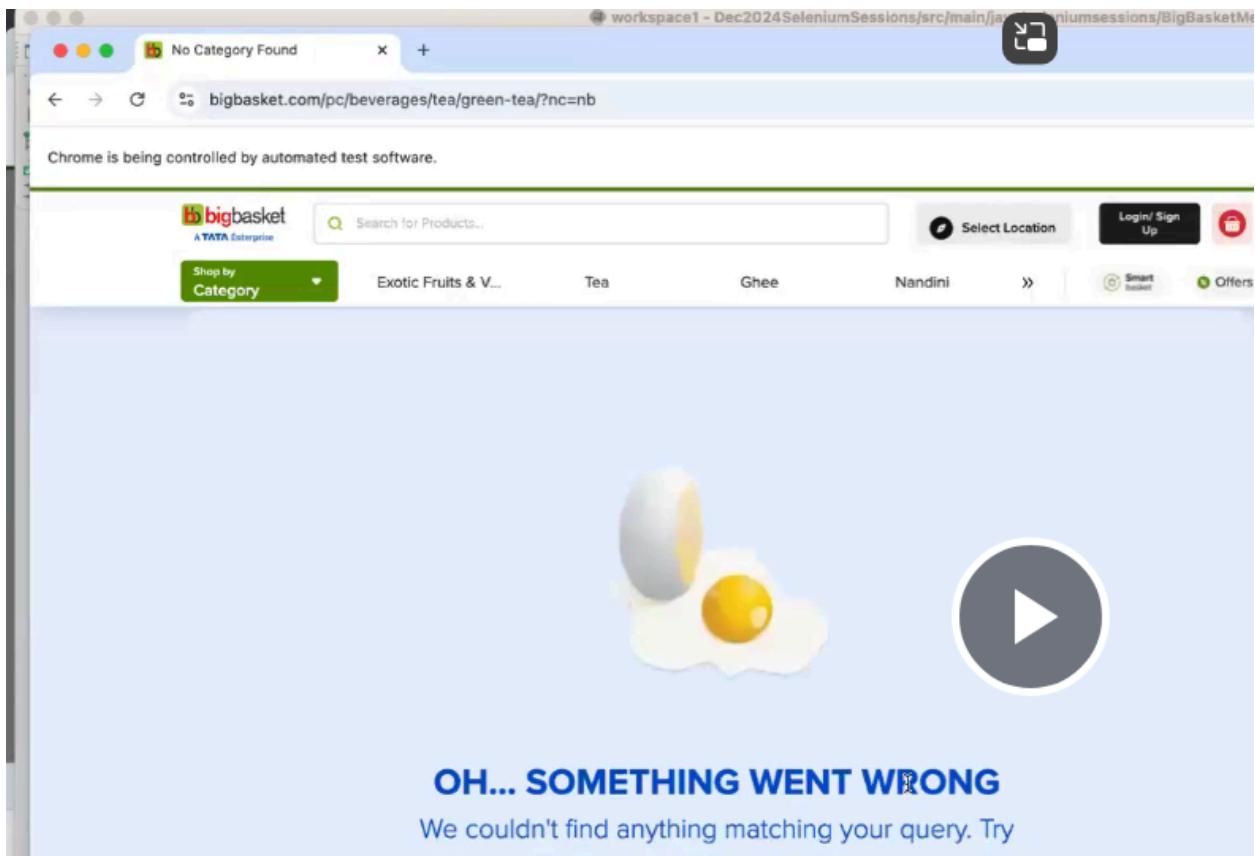
Big basket-
 Click shop by.
 Then mouse hover on beverages.
 Then mouse hover on tea.

Click green tea.



The screenshot shows the Eclipse IDE interface with the title bar "workspace1 - Dec2024SeleniumSessions/src/main/java/seleniumsessions/BigBasketMenuHandling.java". The code editor displays Java code for navigating through a menu structure on the BigBasket website to click on "Green Tea".

```
1 package seleniumsessions;
2
3 import org.openqa.selenium.By;
4 import org.openqa.selenium.WebDriver;
5 import org.openqa.selenium.chrome.ChromeDriver;
6
7 public class BigBasketMenuHandling {
8
9     static WebDriver driver;
10
11    public static void main(String[] args) throws InterruptedException {
12
13        driver = new ChromeDriver();
14
15        driver.get("https://www.bigbasket.com/");
16
17        By level1Menu = By.xpath("//span[text()='Shop by'][2]");
18        By level2Menu = By.linkText("Beverages");
19        By level3Menu = By.linkText("Tea");
20        By level4Menu = By.linkText("Green Tea");
21
22
23        Actions act = new Actions(driver);
24        driver.findElement(level1Menu).click();
25        Thread.sleep(2000);
26        act.moveToElement(driver.findElement(level2Menu)).build().perform();
27        Thread.sleep(2000);
28        act.moveToElement(driver.findElement(level3Menu)).build().perform();
29        Thread.sleep(2000);
30        driver.findElement(level4Menu).click();
31    }
}
```



Create utility-

```
36
37  public static WebElement getElement(By locator) {
38      return driver.findElement(locator);
39  }
40
```

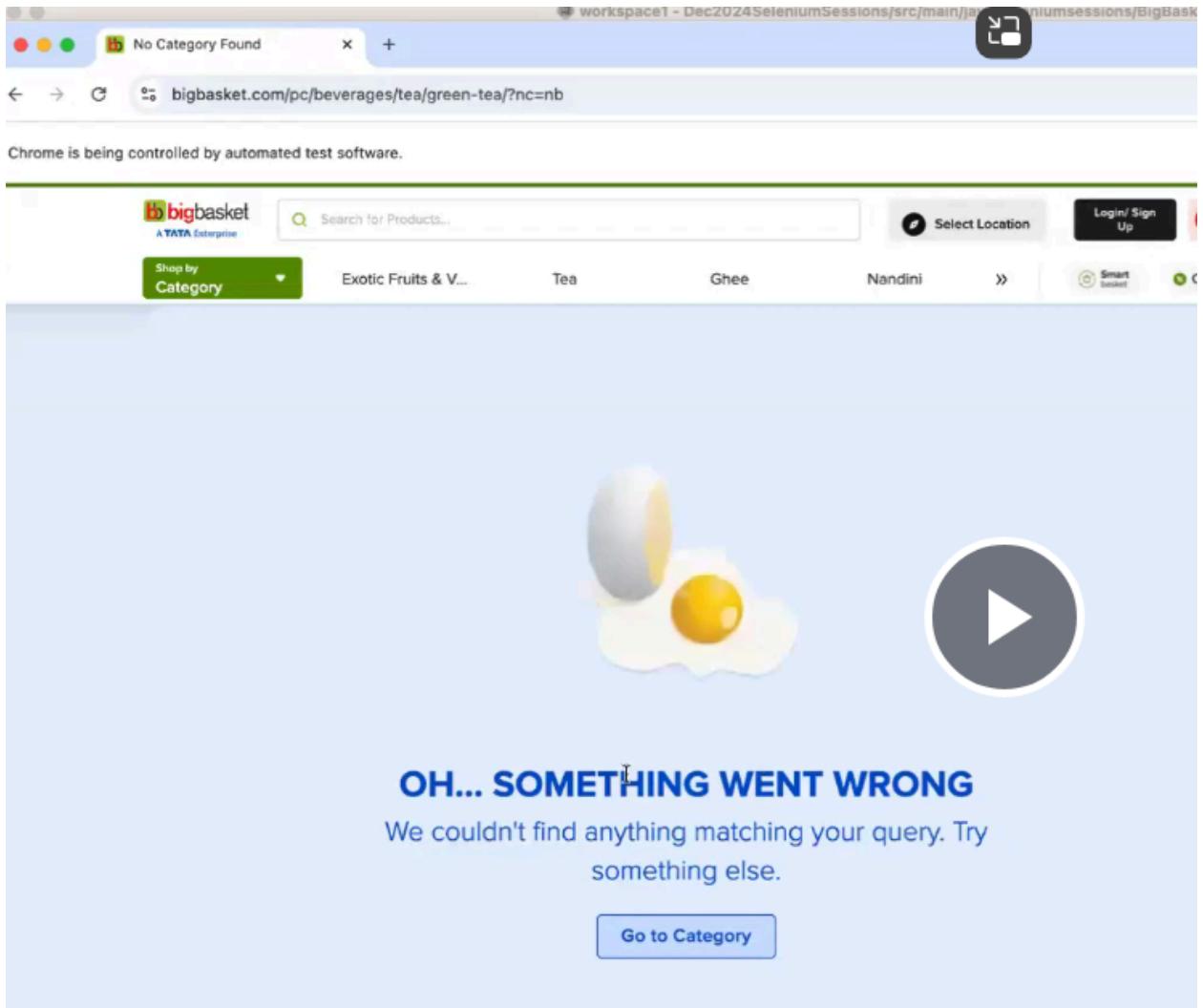
```
27
28  public static void handle4LevelMenuHandle(By level1Menu, By level2Menu, By level3Menu, By level4Menu) throws InterruptedException {
29      Actions act = new Actions(driver);
30      getElement(level1Menu).click();
31      Thread.sleep(2000);
32      act.moveToElement(getElement(level2Menu)).build().perform();
33      Thread.sleep(2000);
34      act.moveToElement(getElement(level3Menu)).build().perform();
35      Thread.sleep(2000);
36      getElement(level4Menu).click();
37 }
```

Call utility method-

```

17     driver.get("https://www.bigbasket.com/");
18
19     By level1Menu = By.xpath("//span[text()='Shop by'][2]");
20     By level2Menu = By.linkText("Beverages");
21     By level3Menu = By.linkText("Tea");
22     By level4Menu = By.linkText("Green Tea");
23
24     handle4LevelMenuHandle(level1Menu, level2Menu, level3Menu, level4Menu);
25

```



34.00 – Similarly we can create more methods for different levels, by adding independent functions for different levels. Dont club all levels in one util

function. Like, three levels will be one method, for four levels create another method and so on.

Move to element util-

```
3243  public void handle4LevelMenuHandle(By level1Menu, By level2Menu, By level3Menu, By level4Menu) throws InterruptedException {  
325      Actions act = new Actions(driver);  
326      doClick(level1Menu);  
327      Thread.sleep(2000);  
328      act.moveToElement(getElement(level2Menu)).build().perform();  
329      Thread.sleep(2000);  
330      act.moveToElement(getElement(level3Menu)).build().perform();  
331      Thread.sleep(2000);  
332      doClick(level4Menu);  
333  }  
334
```

Made utility for move to element method-
Updated the other utility method to call this move to element method.
Element util class.

```
3101  public void doMoveToElement(By locator) throws InterruptedException {  
311      Actions act = new Actions(driver);  
312      act.moveToElement(getElement(locator)).build().perform();  
313      Thread.sleep(2000);  
314  }  
315  
3232  public void handleParentSubMenu(By parentMenu, By subMenu) throws InterruptedException {  
324      doMoveToElement(parentMenu);  
325      doClick(subMenu);  
326  }
```

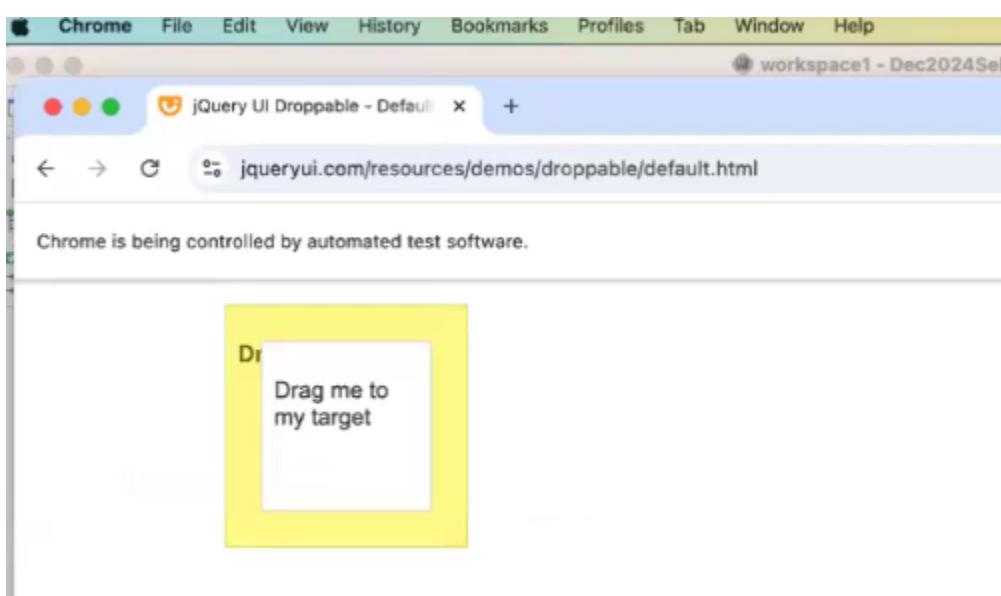
Change in the other method also and call the move to element method-

```
3273  public void handle4LevelMenuHandle(By level1Menu, By level2Menu, By level3Menu, By level4Menu) throws InterruptedException {  
328      doClick(level1Menu);  
329      Thread.sleep(2000);  
330      doMoveToElement(level2Menu);  
331      Thread.sleep(2000);  
332      doMoveToElement(level3Menu);  
333      Thread.sleep(2000);  
334      doClick(level4Menu);  
335  }  
336  
337
```

Drag and drop-

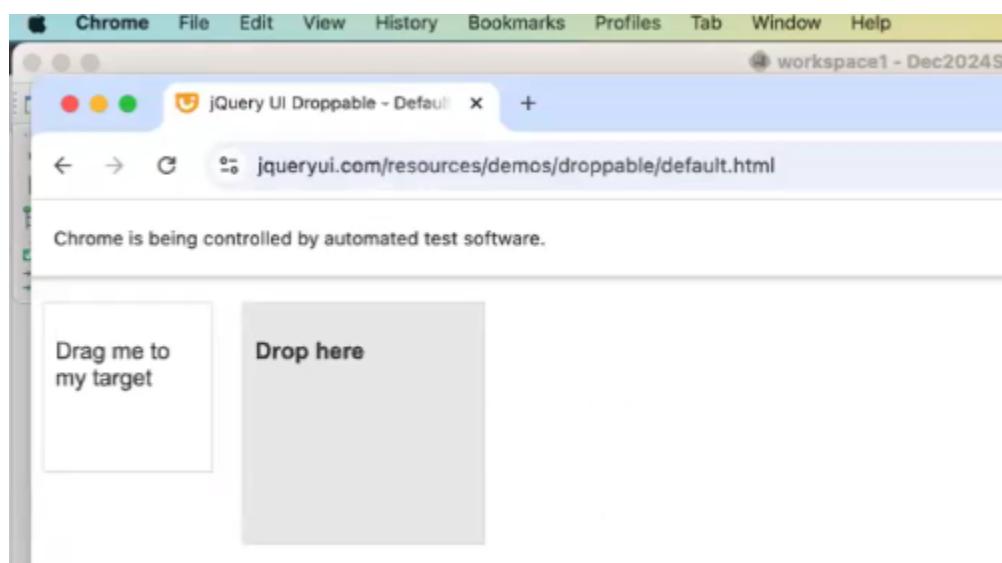
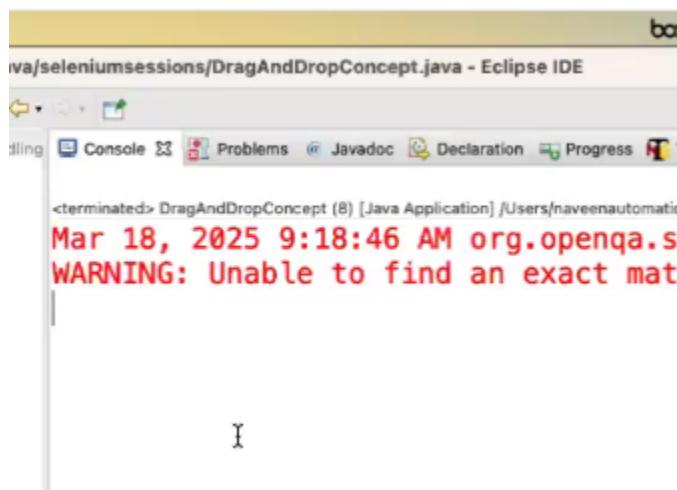
Works from one web element to another web element only. Cannot do drag and drop with files or anything else.

```
1 package seleniumsessions;
2
3 import org.openqa.selenium.By;
4 import org.openqa.selenium.WebDriver;
5 import org.openqa.selenium.WebElement;
6 import org.openqa.selenium.chrome.ChromeDriver;
7 import org.openqa.selenium.interactions.Actions;
8
9 public class DragAndDropConcept {
10
11     static WebDriver driver;
12
13     public static void main(String[] args) throws InterruptedException {
14
15         driver = new ChromeDriver();
16
17         driver.get("https://jqueryui.com/resources/demos/droppable/default.html");
18
19         WebElement sourceEle = driver.findElement(By.id("draggable"));
20         WebElement targetEle = driver.findElement(By.id("droppable"));
21
22         Actions act = new Actions(driver);
23         act
24             .clickAndHold(sourceEle)
25             .moveToElement(targetEle)
26             .release()
27             .build()
28             .perform();
29     }
}
```



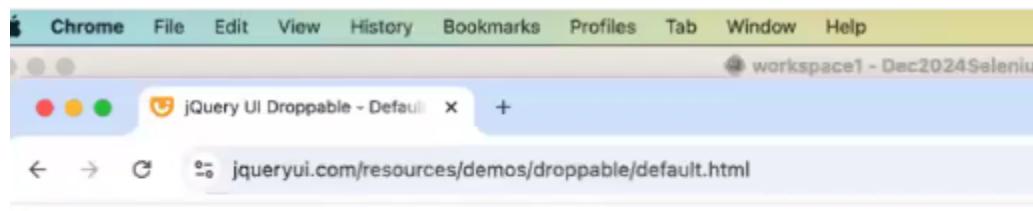
Remove build and perform-
No error, no action in output.

```
20         WebElement sourceEle = driver.findElement();
21
22         Actions act = new Actions(driver);
23         act
24             .clickAndHold(sourceEle)
25             .moveToElement(targetEle)
26             .release();
27
28
```



Write only build-
Wont work.

```
21
22     Actions act = new Actions(driver);
23     act
24         .clickAndHold(sourceEle)
25             .moveToElement(targetEle)
26                 .release()
27                     .build();
```

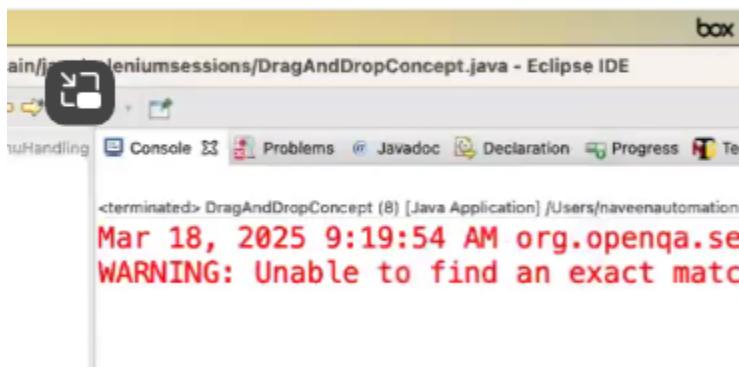
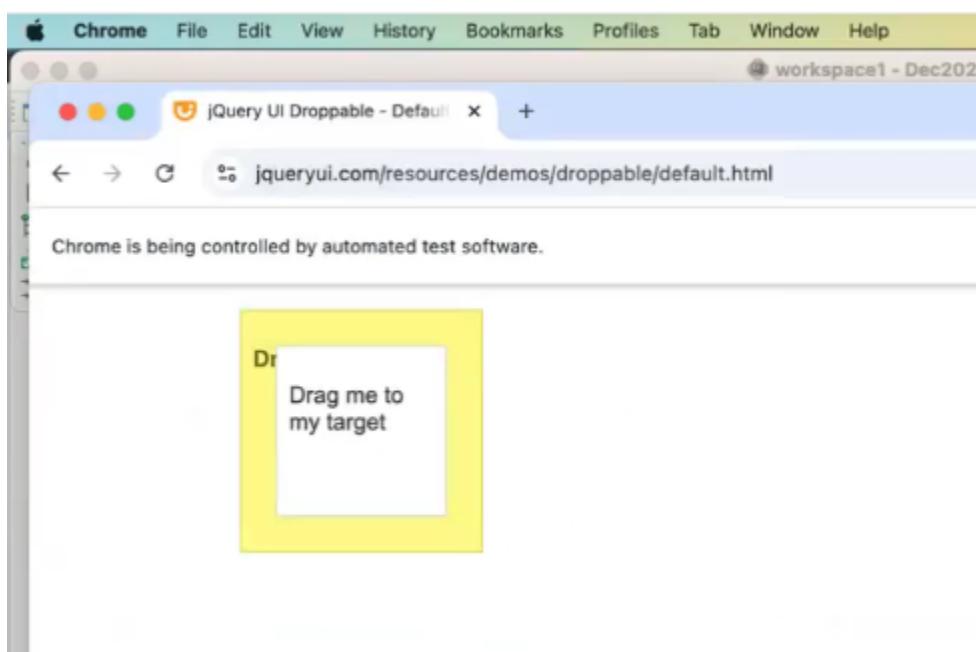


Chrome is being controlled by automated test software.



No build but only perform-
Perform is mandatory to write.

```
20      WebElement sourceEle = driver.findElement(By.id("draggable"));
21
22      Actions act = new Actions(driver);
23      act
24          .clickAndHold(sourceEle)
25              .moveToElement(targetEle)
26                  .release()
27                      .perform();
28
29 --
```

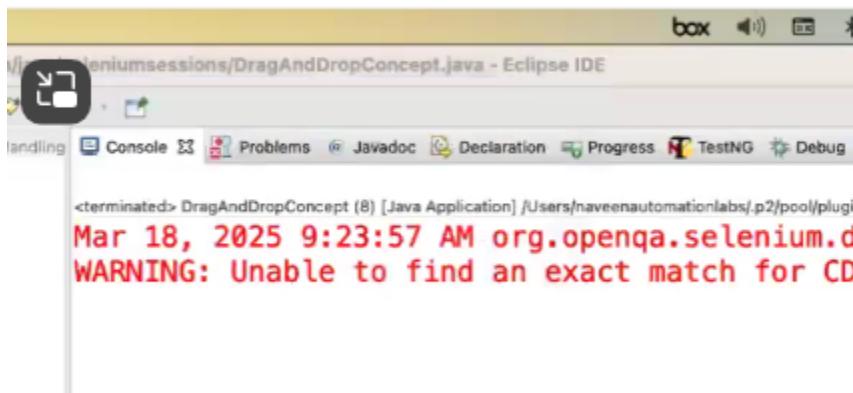
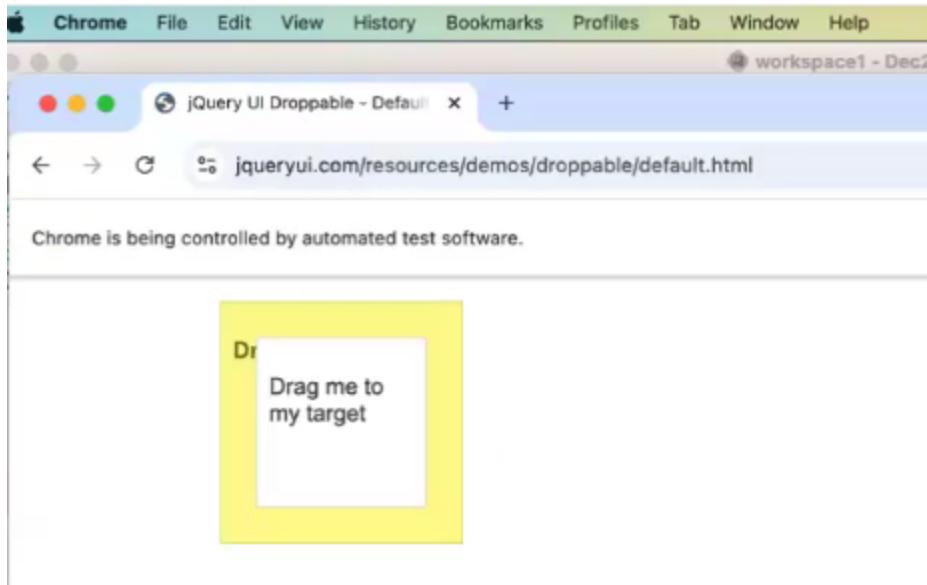


Build method returns Action.

Actions versus action. Actions is class. Provides methods for various user actions. Action is interface. Action is returned by build method.

Store in action and then reuse the variable.

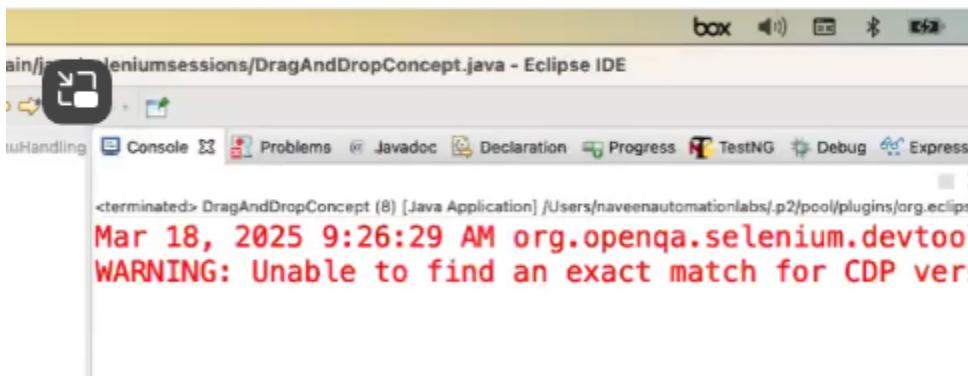
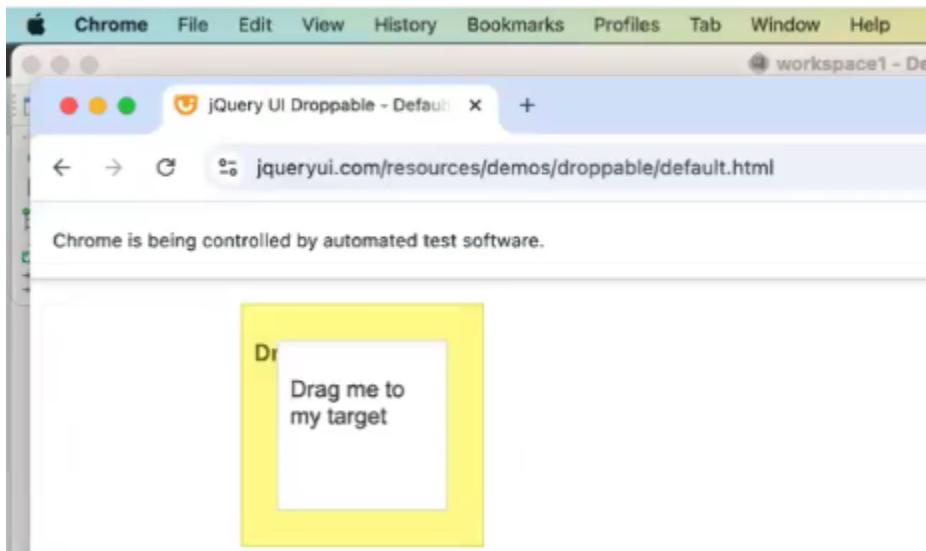
```
22  
23     Actions act = new Actions(driver);  
24     Action myAction = act  
25             .clickAndHold(sourceEle)  
26             .moveToElement(targetEle)  
27             .release()  
28             .build();  
29  
30  
31     myAction.perform();  
32
```



Perform will first build internally and then perform action. 51.00

One liner code to drag and drop-

```
32
33
34     act.dragAndDrop(sourceEle, targetEle).perform();
35
```



Context click-

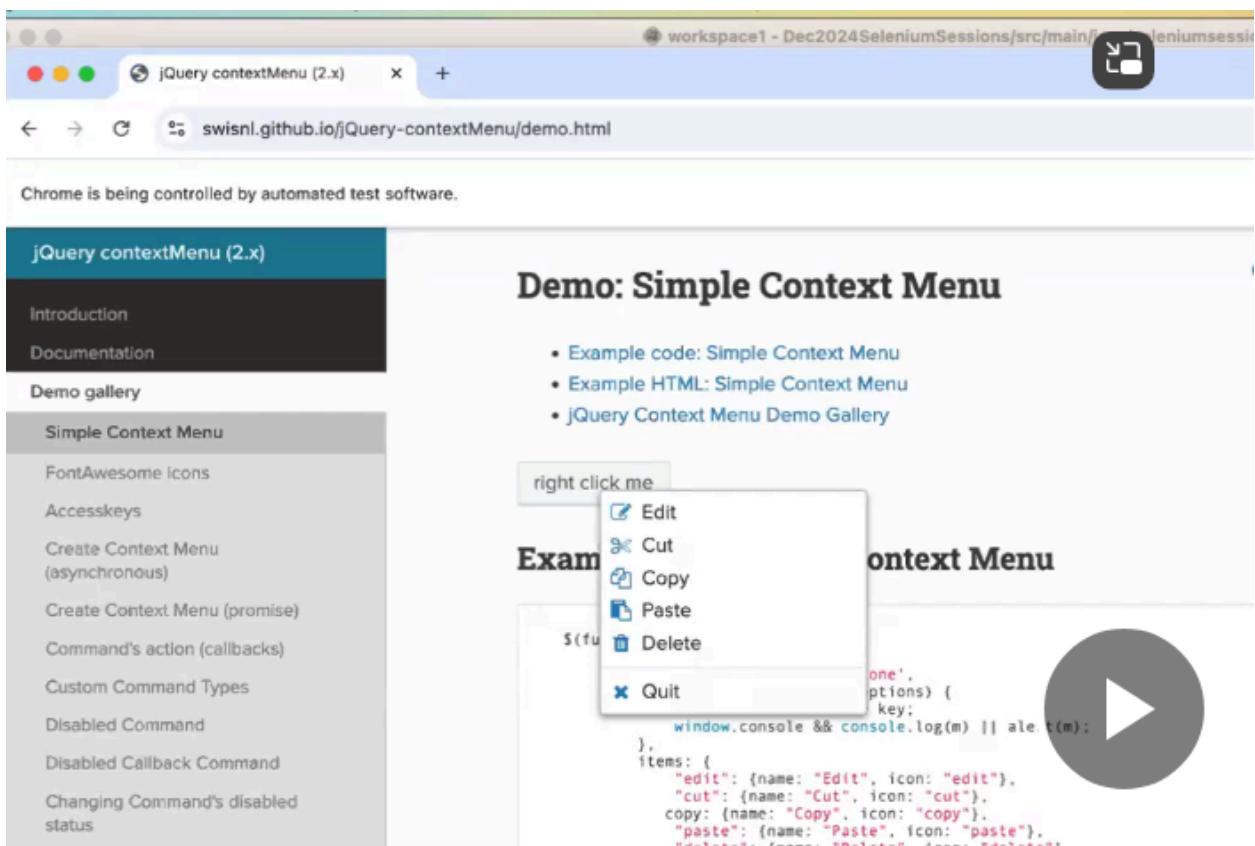
Cant automate this. This comes from browser and not web elements.

Context click has two methods - one default which will do right click at the current location of mouse. Other is pass web element on which to right click.

The screenshot shows a web browser window with the title bar "workspace1 - Dec2024SeleniumSessions/src/main/java/com/swisnl/seleniumsessions/ContextMenuClickConcept.java - Eclipse IDE". The address bar displays "Not Secure swisnl.github.io/jQuery-contextMenu/demo.html". The page content is titled "jQuery contextMenu (2.x)" and includes a sidebar with links like "Introduction", "Documentation", "Demo gallery", and "Simple Context Menu". A main section titled "Demo: Simple Context Menu" contains a list of links: "Example code: Simple Context Menu", "Example HTML: Simple Context Menu", and "jQuery Context Menu Demo Gallery". Below this is a button labeled "right click me". A context menu is open over this button, with the option "Open Link in Incognito Window" highlighted in blue. Other menu items include "Open Link in New Tab", "Open Link in New Window", "Save Link As...", "Copy Link Address", "Copy", "Copy Link to Highlight", "Search Google for 'Example code: Simple Context Menu'", "Print...", "Translate Selection to English", "Attach to Keyboard Shortcuts", "SelectorsHub Pro", "Inspect", "Speech", and "Services".

```
$(function() {
    $.contextMenu({
        selector: '.context-menu-one',
        callback: function(key, op)
        var m = "clicked: " + op.item;
        window.console && console.log(m);
    },
    items: {
        "edit": {name: "Edit", icon: "edit"},
        "cut": {name: "Cut", icon: "cut"},
        copy: {name: "Copy", icon: "copy"}
    }
});
```

```
1 package seleniumsessions;
2
3 import org.openqa.selenium.By;
4 import org.openqa.selenium.WebDriver;
5 import org.openqa.selenium.WebElement;
6 import org.openqa.selenium.chrome.ChromeDriver;
7 import org.openqa.selenium.interactions.Actions;
8
9 public class ContextClickConcept {
10
11     public static void main(String[] args) {
12
13         WebDriver driver = new ChromeDriver();
14
15         driver.get("http://swisnl.github.io/jQuery-contextMenu/demo.html");
16
17         WebElement rightClickEle = driver.findElement(By.xpath("//span[text()='right click me']"));
18
19         Actions act = new Actions(driver);
20
21         act.contextClick(rightClickEle).perform();
22
23
24     }
25
26 }
27
28 }
```



Print all options on console-

Apply get text on **li** and we get all text elements of that plus its child and grand child.

The screenshot shows a browser window with the following components:

- Left Panel:** A sidebar titled "Demo gallery" containing links to "Simple Context Menu", "FontAwesome icons", "Accesskeys", "Create Context Menu (asynchronous)", "Create Context Menu (promise)", and "Command's action (callbacks)".
- Middle Panel:** A main content area titled "Example" showing a context menu with items: Edit, Cut, Copy, Paste, Delete, and Quit.
- Right Panel:** A sidebar titled "jQuery Context Menu Demo Gallery" with a link to "Example".
- Bottom Panel:** The browser's developer tools, specifically the "Elements" tab of the DevTools. It displays the DOM structure of the context menu. One item, "Edit", is highlighted with a blue selection bar. The DOM tree shows:

```
<script src="https://swisnl.github.io/jquery-contextmenu/js/menu.js"></script>
<ul class="context-menu-list context-menu-root" style="width: 208px; top: 194px; left: 415px; z-index: 1000; position: absolute; background-color: white; border: 1px solid #ccc; padding: 5px; list-style-type: none; margin: 0; border-radius: 5px; opacity: 1; transition: all 0.2s ease-in-out; </ul>
...<li class="context-menu-item context-menu-icon context-menu-icon-edit" style="border-bottom: 1px solid #ccc; padding: 5px; font-size: 14px; font-weight: bold; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-icon context-menu-icon-cut" style="padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-icon context-menu-icon-copy" style="padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-icon context-menu-icon-paste" style="padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-icon context-menu-icon-delete context-menu-visible" style="padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-separator context-menu-not-selectable" style="border-bottom: 1px solid #ccc; padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
<li class="context-menu-item context-menu-icon context-menu-icon-quit" style="padding: 5px; font-size: 12px; font-weight: normal; margin: 0; font-family: inherit; color: inherit; text-decoration: none; position: relative; </li>
```

Collect all the options but dont include the option of the line-

SpiceJet - Flight Booking for | jQuery UI Droppable - Default | jQuery contextMenu (2.x) | workspace1 - Dec2024SeleniumSessions/src/main/java/seleniumsessions/Context

Not Secure swisnl.github.io/jQuery-contextMenu/demo.html

Learners Notifications How to Setup Next... Run Selenoid with... Network Requests... How to Remove Ar... Learn Git Branching mak

Introduction Documentation Demo gallery Simple Context Menu

- FontAwesome icons
- Accesskeys
- Create Context Menu (asynchronous)
- Create Context Menu (promise)
- Command's action (callbacks)
- Custom Command Types
- Disabled Command

Maintained by:
SWIS Creative Digital Agency

right click me

Example Context Menu

- Edit
- Cut
- Copy
- Paste
- Delete
- Quit

```
$(function() {
    $( "#context-menu" ).contextMenu({
        menu: {
            one: {
                option: function(m) {
                    if (m === 'one') {
                        alert('One');
                    }
                }
            }
        },
        items: {
            "edit": {name: "Edit", icon: "edit"},
            "cut": {name: "Cut", icon: "cut"},
            "copy": {name: "Copy", icon: "copy"}
        }
    });
});
```

Elements Console Sources Recorder Network Performance Memory Application Privacy and security Light

```
<script src="https://swisnl.github.io/jQuery-contextMenu/js/theme.js"></script>
<script>...</script>
<ul class="context-menu-list context-menu-root" style="width: 208px; top: 194px; left: 415px; z-index: 1;">
    <li class="context-menu-item context-menu-icon context-menu-icon-edit">
        ::before
        <span>Edit</span> == $0
    </li>
    <li class="context-menu-item context-menu-icon context-menu-icon-cut">...</li>
    <li class="context-menu-item context-menu-icon context-menu-icon-copy">...</li>
    <li class="context-menu-item context-menu-icon context-menu-icon-paste">...</li>
    <li class="context-menu-item context-menu-icon context-menu-icon-delete context-menu-visible">...</li>
    <li class="context-menu-item context-menu-separator context-menu-not-selectable">...</li>
    <li class="context-menu-item context-menu-icon context-menu-icon-quit">...</li>
</ul>
```

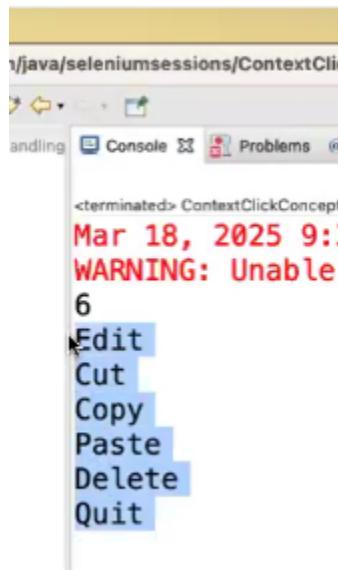
html body.wy-body-for-nav ul.context-menu-list.context-menu-root li.context-menu-item.context-menu-icon.context-menu-icon-edit span

ul.context-menu-list > li.context-menu-icon > span

```

24
25     List<WebElement> optionsList =
26         driver.findElements(By.cssSelector("ul.context-menu-list > li.context-menu-icon > span"));
27
28     System.out.println(optionsList.size());
29
30     for(WebElement e : optionsList) {
31         String text = e.getText();
32         System.out.println(text);
33     }

```



Click copy-

```

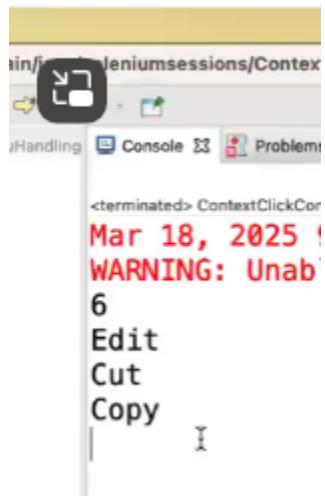
29
30     for(WebElement e : optionsList) {
31         String text = e.getText();
32         System.out.println(text);
33         if(text.equals("Copy")) {
34             e.click();
35             break;
36         }
37     }

```

Ocd-

```
29
30     for(WebElement e : optionsList) {
31         String text = e.getText();
32         System.out.println(text);
33         if(text.equals("Copy")) {
34             e.click();
35             break;
36         }

```



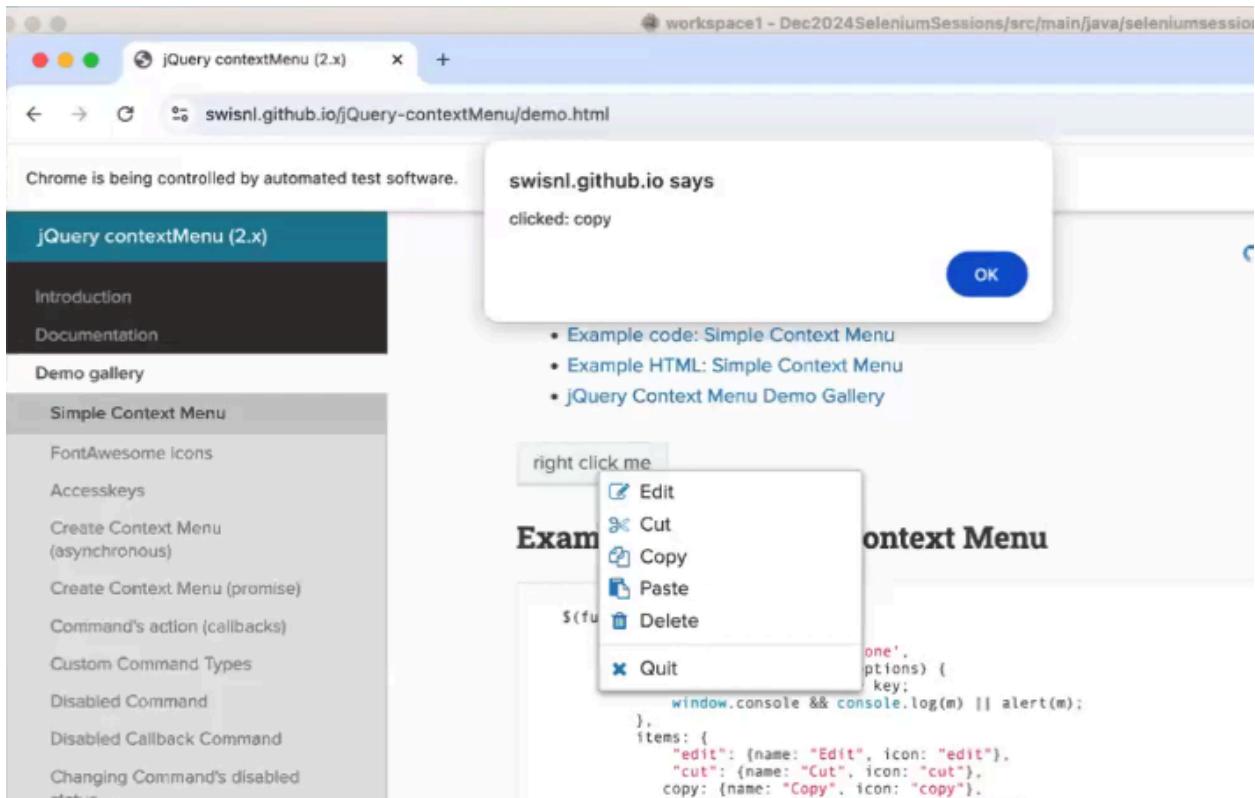
Click copy directly-

```
23         act.contextClick(rightClickEle).perform();
24
25         driver.findElement(By.xpath("//span[text()='Copy']")).click();
```



Clearer line 25-

```
driver.findElement(By.xpath("//span[text()='Copy']")).click();
```



Actions best used for mouse or keyboard actions.

1.12