

Selenium Questions



Question (Locators):

What are the most common locators to find WebElement?

Answer:

- id
- name
- CssSelector
- Xpath

Question (Locators):

Can you show me how to find the highlighted WebElement, given this snippet of HTML? Please notice the id attribute will change overtime page reloads?

```
▼ <table id=":h0" class="aoP aoC">
  ▼ <tbody>
    ▼ <tr>
      <td class="aoY"></td>
      ▼ <td id=":hz" class="I5">
        ▼ <form id=":g5" action method="POST" enctype="multipart/form-data" accept-charset="utf-8">
          ▶ <div class="fX aXjCH" id=":fu" style="display: none;">...</div>
          ▼ <div id=":hy" class="aoD hl" tabindex="1" style>
            <div id=":gt" class="oL aDm">Recipients</div>
          </div>
          ▶ <div id=":hp" class="aoD az6">...</div>
          <input type="hidden" name="composeid" value="1448636818226">
          <input type="hidden" name="from" id=":i1" value>
          <input type="hidden" name="subject" id=":i6" value>
          <input type="hidden" name="draft" id=":i9" value="undefined">
```



Answer:

- Xpath: "//div[contains(text(), 'Recipients')]"
- CssSelector: "div[class='oL aDm']"
- **Please note this snippet is from Gmail compose window.

Question (Sync):

What are the synchronization strategies in WebDriver Automation Test?

Answer:

- Implicit wait
- Explicit wait
- Prefer to use Explicit wait to make test suites stable
- Please refer to here for details: http://www.seleniumhq.org/docs/04_webdriver_advanced.jsp

Question (Sync):

How to determine when can I click a WebElement?

Answer:

- You have to wait for the element become clickable. You can use ExplicitWait with pre-defined Expected Conditions, e.g.

```
public final int WAIT_TIMEOUT = 30;  
WebDriverWait wait = new WebDriverWait(driver, WAIT_TIMEOUT);  
wait.until(ExpectedConditions.elementToBeClickable(By.id("name")));
```


Question (Actions):

How to input words into an input box, e.g. username?

Answer:

- After you find the WebElement, let's say
`WebElement username = driver.findElement`
`WebElement element = driver.findElement(By.id("username"));`
`element.clear();`
`element.sendKeys(s);`

Question (Actions):

How to click a login button?

Answer:

- After you find the WebElement, let's say:
`WebElement element = driver.findElement(By.id("submit"));`
`element.click();`

Question (Actions):

How to right-click on a WebElement?

Answer:

- After you find the WebElement, let's say:
`WebElement element = driver.findElement(By.id("submit"));`
`Actions action = new Actions(driver).contextClick(element);`
`action.build().perform();`

Question (Switch):

How to dismiss(or accept) an alert box and get its alert text?

Answer:

- switch to alert first and then deal with it. Example code:

```
public static String tryDismissAlert(WebDriver driver) {  
    String alertText = "";  
    try {  
        Alert alert = driver.switchTo().alert();  
        alertText = alert.getText();  
        alert.dismiss();  
        // or accept as below  
        // alert.accept();  
    } catch (NoAlertPresentException nape) {  
        // nothing to do, because we only want to close it when pop up  
    }  
    return alertText;  
}
```

Question (Page Object):

How to make your test framework easy to maintain and expansible?

Answer:

- Code reuse is very important for future maintenance. Model the software according to the business logic will help people understand the framework easier, hence an expansible framework.
- Page Object design pattern is a good practice when designing and developing the Web UI Automation framework.
- **Please refer to the course for details.

Question (Test Framework):

How to categorize critical tests and non-critical tests?

Answer:

- One option is JUnit Category.
- **Please refer to course for details

Question (Test Framework):

How to integrate with Jenkins the CI environment?

Answer:

- Select a version control system, e.g. Git
- Select a Web Host of Git, e.g. BitBucket or GitHub
- Create a job in Jenkins and link it with BitBucket or GitHub
- Configure the trigger conditions in Jenkins job
- **Please refer to course for details

Question (Test Framework):

How to implement Cross-Browser testing, e.g. include Chrome?

Answer:

- Config the path to include chromedriver
- Use other config, e.g. environment var to config browser type dynamically
- **Please refer to course for details

Question (Test Framework):

How to generate QA Report?

Answer:

- There are many ways. One option is to use Apache SureFire. Another is use Jenkins test result report.
- **Please refer to course for details

Question (Test Framework):

What is maven?

Answer:

- Maven is a Java project management tool. One of the great feature is to use maven to manage dependencies. e.g. upgrade from Selenium 2.46.0 to 2.48.2 will be just change the pom.xml file.
- **Please refer to course for details