#### **2) How Python Can Be Used In Software Testing?**

* To generate test data; parse test results; generate reports;
* Testers use Python extensively in many companies with Selenium for test automation.

14) Which is the slowest locator?

Xpath. As from start node to end node of HTML

15) Which is the best locator?

ID locator and its unique and reliable. Fastest and safest

#### **3) What Python Frameworks Do You Know?**

Robot framework, pytest- to write test cases , pytest-html reports to generate reports

10) What is the commands for downloading selenium?

* pip install selenium

#### **16) What is the library to be imported to add keyboard actions to our scripts?**

from selenium.webdriver.common.keys import Keys

#### **17) What is the library to be imported to add mouse actions to our scripts?**

from selenium.webdriver.common.actionchains import ActionChains

#### **21) What is a Webdriver?**

Selenium provides a tool to interact with the different web browsers

#### **22) Whats XPATH?**

It is the X - extensible markup language’s path

#### **23) Whats the difference between / and // in xpath?**

/ is absolute path and // is relative path

/html/body/ntp-app//div/ntp-realbox//div/input

//input[@id='input']

#### **24) Whats explicit and implicit wait?**

#### **driver.implicitwait(20)**

implicit Wait directs the Selenium WebDriver to wait for a certain measure of time before throwing an exception. Once this time is set, WebDriver will wait for the element before the exception occurs.

Once the command is in place, Implicit Wait stays in place for the entire duration for which the browser is open.

Explicit wait makes the browser wait for a given duration or the condition is true else, it will throw a time exceeded exception

#### **25) What are window handles?**

During the script execution if there is a new window that pops up then they have an address

driver.get("https://testautomationpractice.blogspot.com/")  
var1 = driver.window\_handles[0]  
driver.find\_element(By.LINK\_TEXT, "Blogger").click()  
var2 = driver.window\_handles[1]  
driver.switch\_to.window(var1) *#switch to first tab*  
driver.switch\_to.window(var2) *#switch to second tab*

#### **26) What are alerts and how do you handle?**

#### Alerts are the popup windows

from selenium.webdriver.common.alert import Alert

Alert(driver).accept() or .dismiss()

#### **27) How to find element by hyperlink?**

driver.find\_element(By.LINK\_TEXT,"click here")  
driver.find\_element(By.PARTIAL\_LINK\_TEXT, "here")

driver.find\_element(By.PARTIAL\_LINK\_TEXT, "cli") # this will also work

#### **28) How do you write the text in the login form?**

Find\_element\_by\_id(“username\_field”).send\_keys(“USERNAME”)

#### **29) What is the difference between close() and quit() func of the browser?**

Browser.close() will close the current executing window and you can always switch to other window handles even after closing currently active one.Browser.quit() – will close the complete browser with all the open windows, this func handle and makes sure the processes are closed and terminated correctly without any memory leaks.

#### **30) When webpage is dynamic which element locater do we use to locate an element**?

#### Using the readily available attributes of a web element is not always as straightforward as it looks for various reasons. Hence, its best to write custom XPath or CSS Selectors. It is said that CSS Locators are 10X faster than the XPath Locators.

#### There are chances that page element locator get chance dynamically , like regular locator id,name,class values may change .

So we should create our own Xpath() or CSS selectors which is always reliable and unique.

Eg: for below HTML code

<input type="text" id="datepicker" class="hasDatepicker" xpath="1">

Rel Xpath is //input[@id='datepicker']

CSS selector input[id='datepicker'] or input#datepicker or #datepicker

#### **31) How do we define a function in Python ?**

def my\_function():  
  print("Hello from a function")  
  
**my\_function()**

#output = Hello from a function

#### **32) What is an indentation in python?**

Python does not use braces to indicate the start & stop of function. It uses indentation (Whitespaces) to make compiler understand start & stop of function.

Like for above function there is space between def and my\_function()

Also there is tab space to start next line

#### **33) What is the syntax for “for” loop if we have to run for loop for 3 times?**

for i in range(1,4):  
 print(i)

OR

list = [1,2,3]  
for i in list:  
 print(i)

output :

1

2

3

#### ****36) What type of languages can we use to write selenium scripts?****

Java, python,c#,ruby

#### ****37) Can I use selenium for automation scripting without selenium IDE?****

Yes. As I use Pycharm, Intellij can be also used via Pydev plugin

#### ****40) Is selenium helpful for standalone application testing?****

No, Selenium is only used as a test automation tool for web driver applications.

#### ****45) What are the limitations of Selenium****?

The main limitations of selenium are:

You can only perform tests in web applications, not for desktop or mobile. (But other tools are available to automate desktop application GUI tests.)

Captcha and barcode reading cannot be automated with Selenium. Manual testing is needed for them.

#### ****50) How can we select an option of a dropdown using Selenium Webdriver?****

from selenium.webdriver.support.select import Select

Select(driver.find\_element(By.CSS\_SELECTOR, "#files")).select\_by\_index(1)  
Select(driver.find\_element(By.CSS\_SELECTOR, "#files")).select\_by\_value("1")  
Select(driver.find\_element(By.CSS\_SELECTOR, "#files")).select\_by\_visible\_text("DOC file")

#### ****54) Can Selenium Web Services tested using Selenium?****

No it is used to automate only web based application.

So we can use ROBOT framework using API libraries

#### ****56) How Can we launch Different browser using python.****

For Chrome  
driver=Webdriver.Chrome(“PathofChromedriver”)  
For Firefox  
driver=webdriver.Firefox(“Path of Firefox Driver”)  
for IE  
driver=webdriver.Ie(“Path of IE Driver”)

#### ****61) How can we check if control enabled or not?****

e = driver.find\_element(By.ID,"id”).is\_enabled()  
print(e)

# True

#### ****62) How can we get text of a web element.****

e = driver.find\_element(By.XPATH,"x").text  
print(e)

#### ****65) what are the different Navigation command in selenium****

it is used to refresh  
driver.refresh()  
it is used to navigate back  
driver.back()  
it is used to move forward  
driver.forward()

**66) What is the difference b/w findelement and findelements**

* FindElement returns first matching element.
* FindElements returns more than one elements.

#### ****70) How can capture screenshot in selenium.****

driver.save\_screenshot("C:/Users/ss1.png")  
driver.get\_screenshot\_as\_png()  
driver.get\_screenshot\_as\_file("C/Users/ss2.png")

#### ****71) What are switch Class in selenium.****

Switch class are used to switch between the different browser,frames and alert pop up.

#### ****73) How can we perform drag drop in selenium****

act=ActionChains(driver)

act.drag\_and\_drop(sourcelement,targetelement),

**for drag slider bar**

actions = ActionChains(driver)  
sld = driver.find\_element(By.XPATH, "/htm ")  
actions.drag\_and\_drop\_by\_offset(sld, 40, 0).perform()

#### ****74) How can mouse hover on a control in selenium.****

act=ActionChains(driver)  
act.move\_to\_element(element)

#### ****75) Can we move the mouse control to specific cooridinate in selenium****

yes we can, selenium provides Action class in which we can make use of the act.move\_by\_offset() method to move the mouse control to specific cooridinates.

#### ****76) Write a method to read data from webtable for specific row and column index using selenium.****

def read\_data(r,c):  
 var1 = driver.find\_element(By.XPATH,"/html/body//tr["+str(r)+"]/td["+str(c)+"]").text return (var1)  
print(read\_data(4,2))

#### ****81) How will you handle exception in python****

try,except and finally key word is used to handle the exception

try:  
#code  
except: #catches the exception  
finally: #executes the block whether any exception is raised or not.

try:  
 assert driver.title == "Automation Testing Practice 123"  
except:  
 print("Exception: title do not match")  
finally:  
 print("Test Fails")

#### ****85) How to execute java script in selnium with python****

*# driver.execute\_script("window.scrollTo(0,document.body.scrollHeight);")  
# driver.execute\_script("window.scrollTo(0,500);")  
#element = driver.find\_element(By.XPATH, "//head/link[5]")  
# driver.execute\_script("arguments[0].scrollIntoView();", element)*

***#or we can also use ActionChain class "move to element"***

var1 = driver.find\_element(By.XPATH, "//tbody/tr[2]/td[1]")  
actions = ActionChains(driver)  
actions.move\_to\_element(var1).perform()

**88) What are the different exception in selenium**

* webdriver exception
* noalertPresent Exception
* nosuchwindow Exception
* nosuchelement exception
* timeoutexception when it exeeds implicit or explicit wait
* File not found, if file is open and we execute the script
* NameError: name 'var' is not defined. Did you mean: 'var1'?, when variable name is incorrect.
* AttributeError: type object 'By' has no attribute, when function expecting 2 argumnet and we give 1 or When argument is incorrect .
* Message: unknown error: net::ERR\_INTERNET\_DISCONNECTED

When no internet 😊

#### ****95) Why should Selenium be selected as a test tool?****

Selenium is free and open source have a large user base and helping communities have cross Browser compatibility (Firefox, chrome, Internet Explorer, Safari etc.) have great platform compatibility (Windows, Mac OS, Linux etc.)supports multiple programming languages (Java, C#, Ruby, Python, Pearl etc.) has fresh and regular repository developments supports distributed testing

#### ****97) When should I use Selenium IDE?****

* Tool to record and playback
* The main limitation of Selenium IDE is that, it supported in only **Firefox browser**. If you want to execute your scripts on different browsers, then you can use Selenium RC (Selenium Remote Control). The Selenium RC supports multiple browsers like IE, Firefox, Chrome, Safari, Opera etc.

**Q. How to select value from drop down other way other than Select class.**

s = Select(driver.find\_element(By.ID, "condi")).options  
for i in s:  
 if i.text == "Asia":  
 i.click()  
 break

**Q. How to print values in drop down**

s = Select(driver.find\_element(By.ID, "condi")).options  
for i in s:  
 print(i.text)

**Q. Other way of selecting value from drop down. I was geeting error while using Select class. So below will work.**

WebDriverWait(driver, 20).until(EC.element\_to\_be\_clickable((By.XPATH, "//input[@id='demo155-country-picker']"))).click()

# click on drop down  
WebDriverWait(driver, 20).until(EC.element\_to\_be\_clickable((By.XPATH, "//body/div[4]/div[3]/div[2]/div[1]/div[2]/div[1]/div[1]/div[2]/div[1]/div[1]/div[1]/div[41]/div[1]/div[1]/img[1]"))).click()

#click on value

**Q. How to handle Authentication Pop up**

Just give “admin.admin@” in url, then authentication pop up will not appear

e,g

driver.get(<http://admin.admin@the-internet.herokuapp.com/basic_auth>)

**Q.what is default time for Implicit wait?**

10 sec.

Its also called as dynamic wait , global wait.

**Q.what is diff between implicit wait and explicit wait**

|  |  |
| --- | --- |
| **Implicit** | **Explicit** |
| Applies for all element | Applies only for element which we have given condition |
| Not recommended:unnecessary applied for all element | Recommended:Applies only for element which we have given condition |
| Cannot be applied on title,url,alerts | Can be applied on title,url,alerts |