



Window Handles

## What is a window?

Each browser or the tab is called window

No tab concept in WebDriver (Everything is a window)

Google, Facebook and Twitter is a Tab





## How to move to specific window?

To move to a specific window, we need to know something unique about the window

Title / URL of two windows will be same

Web driver uses unique identifier called to handle each window Using that window handle, we can move to specific window



## **How does Selenium moves?**

Selenium webdriver moves to a specific window using the window handle

Syntax to move

driver.switchTo().window(winHandle);

How to know the window handle?



## **How to find window handle?**

We cannot find the window handle directly

So, use getWindowHandles() method to find all the windows opened by Selenium webdriver now

driver.getWindowHandles();

Note: Webdriver cannot communicate with manually opened or previously opened browsers.



#### **GetWindowHandles**

# java.util.Set<java.lang.String> getWindowHandles()

Return a set of window handles which can be used to iterate over all open windows of this WebDriver instance by passing them

#### **Returns:**

A set of window handles which can be used to iterate over all open windows.

Set<String> wHandles = driver.getWindowHandles();



## **Set vs List**

Features	Set	List
What it is?	Collection with no duplicates and unordered	Ordered <u>Collection</u> and can allow duplicates
Example	getWindowHandles() returns unique unordered collection (Set)	findElements() returns ordered collection (List)
Null	Only one Null allowed	Multi Null allowed (as duplicated allowed)



### For each in Java

# Syntax:

```
for (type item: iterableCollection)
        // every time, the loop iterates -> the next item in the collection
is
        accessible
Set<String> winHandles = driver.getWindowHandles();
for (String winHandle: winHandles){
        // winHandle will have the handle of each browser in sequence
```

Always Ahead

## **Sample Code**

String parentHandle = driver.getWindowHandle(); // get the current window handle

```
for (String winHandle : driver.getWindowHandles()) {
    driver.switchTo().window(winHandle); // switch focus of WebDriver to
the next found window handle (that's newly opened window)
}
```

driver.switchTo().window(parentHandle); // switch back to the original window



## **Close vs Quit**

Close() – closes the browser or page currently which is having the focus.

Quit() – shut down the web driver instance or destroy the web driver instance (Close all the windows)



## Recap

What is a window?

How Selenium identifies a window?

Syntax to move to a window

Set vs List

Close vs Quit





#### KEEP IN TOUCH WITH US

WE ARE HERE TO ASSIST YOU



#### Address

22, First Floor, College Road, Nanganallur Chennai, India, 600061



#### Contact Info

Email: <a href="mailto:sakthivel@testleaf.com">sakthivel@testleaf.com</a>
Information: info@testleaf.com
Support: contact@testleaf.com



#### **Telephone**

Office Phone: +91 (44) 4554 4246 Sales: +91 (950) 000 6373 Support: +91 (984) 057 7905









# THANKS FOR LISTENING