

# Difference Between findElement & findElements

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## Introduction

Hello and Welcome. My name is Rex Jones II. Feel free to connect with me on [LinkedIn](#) and subscribe to my [YouTube](#) channel. If you subscribe to YouTube, make sure to click the bell icon to get notification of each video. In this video, we are going to look at the difference between Selenium's findElement and findElements method.

Before the demo, let's investigate both methods. The findElement method finds 1 WebElement on a page. If there's more than 1 WebElement then the findElement method will find the first WebElement matching the locator's value.

The findElements method finds all of the WebElements within the page matching the locator's value. Selenium returns a NoSuchElementException if our Test Script does not return at least 1 WebElement.

Both methods use By class as their locating mechanism for any 1 of the 8 locator types. The 8 locator types in alphabetical order are className, cssSelector, id, linkText, name, partialLinkText, tagName, and XPath.

## Demo

Now, let's get into our demo using yahoo as our AUT. The menu bar will be our focus for showing the difference between findElement and findElements. Let's inspect the menubar and we want all 8 links. There's a few ways to find the elements but let's use CSS Selector's Ancestor Child Relationship. I'm going to use. Let me see, div tag and id attribute as the Ancestor and the a tag as the child. div#mega-bottombar a and we see 8 results.

Copy the value and go to Eclipse, I already have a setUp and tearDown method. Now, let's see the difference between findElement and findElements. First, is findElement driver.findElement and we see WebElement is the Data Type. Do you see By within the parenthesis? That's the parameter which is a locating mechanism. (By.cssSelector("div#mega-bottombar a")) then assign the element to WebElement

```
yahooLink =
```

```
Import the WebElement. Print the WebElement. sysout System.out.println("findElement: \n \t" +  
yahooLink.getText());
```

Next is findElements driver.findElements and it also has a WebElement Data Type but it returns a list of all WebElements. (By.cssSelector("div#mega-bottombar a"));

then assign the list to List <WebElement> yahooLinks =. Import the List. In order to get each element, we have to iterate each element using an Enhanced For Loop. for CTRL + SPACE, select for each then change webElement to another name tempYahooLink and print each Yahoo Link.

```
sysout System.out.println("\t" + tempYahooLink.getText());
```

Also print before the loop sysout System.out.println("findElements: "); Let's Run. Do you see how findElement only returned 1 element although there are 8 elements? It returned Mail which is the first element. However, findElements returned all 8 elements. That's the difference between findElement and findElements. Thank You for watching and hope to see you next time.