

## Difference between findElement() and findElements()

### FindElement()

1. To locate the element on a web page we use the findElement method.
2. To identify the element by class is used by the find element method.
3. It returns a single web element.

**Syntax** - `WebElement search = driver.findElement(By.xpath("//input[@title='Search']"));`

### FindElements()

1. To locate the list of web elements on a web page we use the findElements method.
2. It returns a list of web elements.

**Syntax** - `List<WebElement> input = driver.findElements(By.tagName("input"));`

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FindElement()	FindElements()
On zero element match it throws NoSuchElementException.	On zero match it returns an empty list(zero).
On one match it returns webElement.	On one match found it returns a list of webElement.
One or more than one match is found then it returns the first matching web element.	One or more then one match found then it returns the list with all matching web element.

E.x

```
package testJava;
```

```
import java.util.List;
```

```
import org.openqa.selenium.By;
```

```
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.WebElement;
```

```
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class aclass {
```

```

    static WebDriver driver;

    public static void main(String[] args) {

        System.setProperty("webdriver.chrome.driver",
            "/Users/amitparate/Downloads/chromedriver");

        driver = new ChromeDriver();

        driver.get("https://demo.guru99.com/test/ajax.html");

        List<WebElement> input = driver.findElements(By.tagName("input"));

        System.out.println(input.size());

        for (WebElement element : input) {
            System.out.println(element.getAttribute("value"));
        }

    }
}

```

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### Methods of Webdriver

1. get()
2. getCurrentURL()
3. navigate()
4. close()
5. quit()
6. switchTo()
7. findElements()
8. findElement()
9. getWindowHandles()
10. getWindowHandle()
11. getTitle()
12. manage()

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### Methods of WebElement

1. click()
2. sendkeys()
3. getAttribute()
4. isDisplayed()
5. isSelected()
6. isEnabled()
7. size()
8. getTagName()

9. getText()
10. clear()

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**Methods of Actions class**

1. moveToElement()
2. dragAndDrop()
3. perform()
4. build()
5. click()
6. doubleClick()
7. contextClick()
8. clickAndHold()

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