

## HANDLING MULTIPLE ELEMENTS

1) In order to get multiple elements from the webpage or in order to perform operation on multiple elements, we use find elements method of webdriver.

2) In order to identify multiple elements, follow below mentioned process

i) See the html hierarchy of first element.

ii) See the html hierarchy for second element.

Like that check the html hierarchy of any random element if you found all are following the same hierarchy then see the common parent.

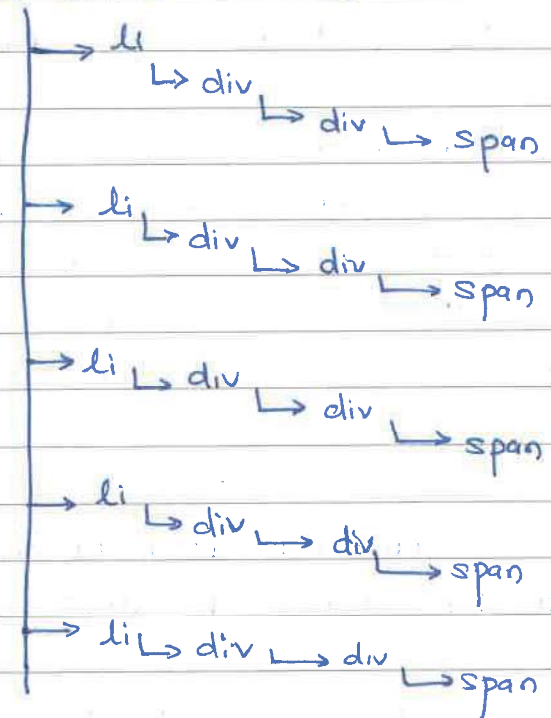
iii) Identify their common parent uniquely, then define the hierarchy in which all the required elements are present.

e.g. In google search if we need to print all the suggestions given by google then as per above steps, all the options are having below mentioned html hierarchy,

li → div → div → span

iii) After checking the common html hierarchy, we need to reachout the common parent which has all the options -

ul (class = "crkuge")



Find elements method returns list of web elements.

List <WebElement> options = driver.findElement(  
By.cssSelector("ul[class = \"crkuge\"] li > div > div > span")

After getting all the elements, we can get the count of identified element by using "size()".  
e.g. options.size() → (size of list)

In order to retrieve individual element from above list <WebElement>. We use get method by specifying index in the loop.

```
for (int i=0; i<options.size(); i++)
{
```

```
    Thread.sleep(2000);
```

```
    S.o.p (options.get(i).getText());
```

give you a  
web element

help you to retrieve the  
text from web element

Write a script to open any browser & open google in the search input field type selenium, get the all suggestions of count & name

```
→ public class HandlingMultipleElements
{
```

```
    p.s.v.m (String[] args)
```

```
{
```

```
    system.setProperty("webdriver.chrome.driver",
        "path");
```

```
    WebDriver d = new ChromeDriver();
```

```
// * Maximise a browser window
```

```
driver.manage().window().maximize();
```

```
// * Implicit wait //
```

```
driver.manage().timeouts().implicitlyWait(20,
    TimeUnit.SECONDS);
```

```
// * Step 2 *
```

```
driver.get("https://google.com");
```

```
// * Identify search input field & type selenium *
```

```
driver.findElement(By.name("q")).sendKeys(
    "Selenium");
```

```
// * Identify all the suggestion given by google
```

```
List<WebElement> options = driver.findElement(
    By.cssSelector("ul[class='erkuge']>li>div>div>
        span"));
```

```
// * get the count of options *
```

```
S.o.p ("options count: " + options.size());
```

```
// * print all the options name *
```

```
for (int i=0; i<options.size(); i++)
```

```
{
    Thread.sleep(2000);
```

```
    S.o.p (options.get(i).getText());
```



Q. Write a selenium script to get Samsung device count & their name from GSMArena.

→ class Test

```
p.s.v.m (String [] args)
{
```

```
System.setProperty("webdriver.chrome.driver", "Path");
```

```
WebDriver driver = new ChromeDriver();
```

```
/* Maximise window size
```

```
driver.manage().window().maximize();
```

```
/* Implicit wait //
```

```
driver.manage().timeouts().implicitlyWait(
    30, TimeUnit.SECONDS);
```

```
/* get URL */
```

```
driver.get("https://www.gsmarena.com/
Samsung=phone");
```

```
/* Identify device name */
```

```
List<WebElement> deviceName = driver.findElement(
    By.cssSelector("div[class='makers']>ul>li>
a>string>span"));
```

```
/* get the count //
```

```
S.o.p("Count:" + deviceName.size());
```

```
for (int i=0; i<deviceName.size(); i++)
```

```
{
```

```
S.o.p(deviceName.get(i).getText());
```

```
}
```

```
}
```

Q. Write a script to print all the phone names from phone finder section of gsmarena application.

Q. Write a script to perform following actions-

- Open any browser & enter the url of gsmarena app & verify the landing page.
- select Samsung phone from phone finder section & validate the page is open or not.
- Verify whether this page has page initiation or not. If yes, then print all the page initiation link.   
 Size > 0 or not.