```
methods of WebDriver and its significance

1) void get(String url) : This method is used to load new web page

2) String getCurrentUrl() : This method returns current page URL

3) String getTitle() : This method returns current page Title

4) String getPageSource() : This method returns current page source code

5) void close() This method close current active window.
   If it's the last window currently opened then close the browser.
```

```
6)void quit() This method stop the driver and close all associated window with that driver

7) String getWindowHandle() : This method returns current active window ID

8) Set<String> getWindowHandles() : This method return all windows ID opened by Driver

9) WebElement findElement(By by)

   This method is used to find the web element by using some locating mechanism
   like
   i) find by id attribute -> driver.findElement(By.id("txtUsername"));

   ii) find by name attribute -> driver.findElement(By.name("txtUsername"));

   iii) find by class attribute -> driver.findElement(By.className("form-hint"));

   iv) find by linktext  -> driver.findElement(By.linkText("Forgot your password?"));

   v)  find by partial link text -> driver.findElement(By.partialLinkText("Forgot your"));
```

```
vi) find by tag name ---------> driver.findElement(By.tagName("input"));

vii) find by css selectors

   Syntax : //tagname[@attribute_name='attribute_value']

      <input type="submit" name="Submit" class="button" id="btnLogin" value="LOGIN">

viii) find by xpath(xml path)

  Syntax for relative path : //tagname[@Attribute='value']
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Url for Testing Purpose :

https://login.yahoo.com/account/create
```
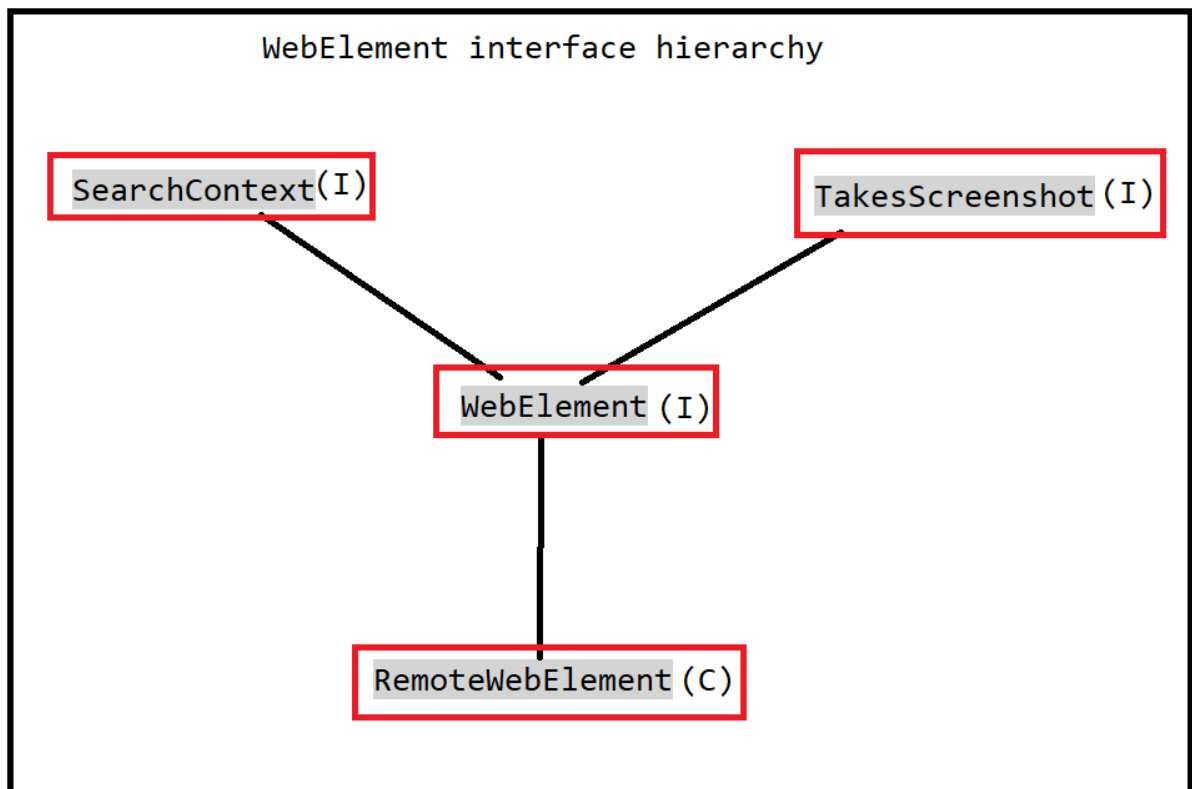
## WebElement interface hierarchy

```
SearchContext(I)                    TakesScreenshot(I)


                    WebElement(I)


              RemoteWebElement(C)
```

1) WebElement interface is extending two interfaces
   a) SearchContext b) TakeScreenshot

2) WebElement interface present in org.openqa.selenium

3) RemoteWebElement is implemention class of WebElement
   interface

4) Weblement Represents an HTML element

5) To perform operations on web element required
   methods are declared inside this interface.

# Demo program to Login to: https://www.saucedemo.com/

```java
public class LaunchBrowser {
    public static void main(String[] args) {
        System.setProperty("webdriver.edge.driver", "E:\\SeleniumWebDriver\\msedgedriver.exe");
        WebDriver driver=new EdgeDriver();
        driver.get("https://www.saucedemo.com/");
        WebElement username=driver.findElement(By.id("user-name"));
        username.sendKeys("problem_user");

        WebElement password=driver.findElement(By.id("password"));
        password.sendKeys("secret_sauce");

        WebElement clickLogin=driver.findElement(By.id("login-button"));
        clickLogin.click();

    }
}
```