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/*
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 */

package SeleniumSessions;

import java.io.File;
import java.io.IOException;
import java.util.concurrent.TimeUnit;

import org.apache.commons.io.FileUtils;
import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.OutputType;
import org.openqa.selenium.TakesScreenshot;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class JavaScriptExecutorConcept {

    public static void main(String[] args) throws IOException {

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

        WebDriver driver = new ChromeDriver(); //launch chrome

        driver.manage().window().maximize(); //maximize window
        driver.manage().deleteAllCookies(); //delete all the cookies

        //dynamic wait
        driver.manage().timeouts().pageLoadTimeout(40, TimeUnit.SECONDS);
        driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);

        driver.get("https://www.freecrm.com"); //enter URL

        driver.findElement(By.name("username")).sendKeys("naveenk");
        driver.findElement(By.name("password")).sendKeys("test@1234");
        //driver.findElement(By.xpath("//input[contains(@type,'submit')]")).click();

        //executeScript -- to execute JavaScript code

        WebElement loginBtn = driver.findElement(By.xpath("//input[contains(@type,'submit')]"));
//login button

        flash(loginBtn, driver); //highlight the element

        drawBorder(loginBtn, driver); //draw a border
        //take screenshot:
        // Take screenshot and store as a file format
        File src = ((TakesScreenshot) driver).getScreenshotAs(OutputType.FILE);
        // now copy the screenshot to desired location using copyFile //method
        FileUtils.copyFile(src, new
File("/Users/naveenkhunteta/Documents/workspace/MorningSessions/src/SeleniumSessions/element.png"));

        //generate Alert
        //generateAlert(driver, "There is an issue with Login button on Login Page");

        //click on any element by using JS executor
        clickElementByJS(loginBtn, driver);
    }
}

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//refresh the page:
//1. by using selenium:
driver.navigate().refresh();

//2. by using JS executor:
refreshBrowserByJS(driver);

//get the title of the page by JS:
System.out.println(getTitleByJS(driver));

//get the page text:
System.out.println(getPageInnerText(driver));

//scroll page down:
//scrollPageDown(driver);

WebElement forgotPwdLink = driver.findElement(By.xpath("//a[contains(text(),'Forgot
Password?')]"));
scrollIntoView(forgotPwdLink, driver);

}

public static void flash(WebElement element, WebDriver driver) {
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    String bgcolor = element.getCssValue("backgroundColor");
    for (int i = 0; i < 10; i++) {
        changeColor("rgb(0,200,0)", element, driver); //1
        changeColor(bgcolor, element, driver); //2
    }
}

public static void changeColor(String color, WebElement element, WebDriver driver) {
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    js.executeScript("arguments[0].style.backgroundColor = '"+color+"'", element);

    try {
        Thread.sleep(20);
    } catch (InterruptedException e) {
    }
}

public static void drawBorder(WebElement element, WebDriver driver){
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    js.executeScript("arguments[0].style.border='3px solid red'", element);
}

public static void generateAlert(WebDriver driver, String message){
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    js.executeScript("alert('"+message+"')");
}

public static void clickElementByJS(WebElement element, WebDriver driver){
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    js.executeScript("arguments[0].click();", element);
}

public static void refreshBrowserByJS(WebDriver driver){
    JavascriptExecutor js = ((JavascriptExecutor) driver);
    js.executeScript("history.go(0)");
}

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public static String getTitleByJS(WebDriver driver){  
    JavascriptExecutor js = ((JavascriptExecutor) driver);  
    String title = js.executeScript("return document.title;").toString();  
    return title;  
}
```

```
public static String getPageInnerText(WebDriver driver){  
    JavascriptExecutor js = ((JavascriptExecutor) driver);  
    String pageText = js.executeScript("return document.documentElement.innerText;").toString();  
    return pageText;  
}
```

```
public static void scrollPageDown(WebDriver driver){  
    JavascriptExecutor js = ((JavascriptExecutor) driver);  
    js.executeScript("window.scrollTo(0,document.body.scrollHeight);");  
}
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```
public static void scrollIntoView(WebElement element, WebDriver driver){  
    JavascriptExecutor js = ((JavascriptExecutor) driver);  
    js.executeScript("arguments[0].scrollIntoView(true);", element);  
}
```

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}
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