Capture Screenshots

In this lesson, we will discuss multiple ways to capture screenshots using Selenium WebDriver.

In this lesson, we will discuss multiple ways to capture screenshots using Selenium WebDriver. The below example code can be downloaded and run locally; it is included as a part of the Sample UI test framework, please refer.

`WebDriver` allows us to take a screenshot of the whole window, or a particular element, as it is implementing interface `org.openqa.selenium.TakesScreenshot`.

Screenshot can be saved as `File` or `byte[]` or `Base64` String:

```
import org.openqa.selenium.TakesScreenshot;
import java.io.File;
import org.openqa.selenium.OutputType;
import java.nio.file.Paths;
import org.openqa.selenium.By;

// taking a screenshot of the whole window as a file
public File takeScreenshot() {

        // Create a WebDriver object
        WebDriver driver = DriverManager.getWebDriver();

        // open the web url
        driver.get("http://codetoautomate.com/educative-selenium-demo/");

        // take screenshot of the whole window
        File source = ((TakesScreenshot) driver).getScreenshotAs(OutputTyp
e.FILE);
        File destination = new File("screenshot.png");
        source.renameTo(destination);

        Assert.assertTrue(destination.exists(), "screenshot file does no
t exist");
        Assert.assertTrue(destination.length() > 0, "screenshot file siz
e is zero");
```

```
        return destination;
}

// taking screenshot of whole window as byte[]
public File takeScreenshot() {

        // Create a WebDriver object
        WebDriver driver = DriverManager.getWebDriver();

        // open the web url
        driver.get("http://codetoautomate.com/educative-selenium-demo/");

        // take screenshot of the whole window
        byte[] source = ((TakesScreenshot) driver).getScreenshotAs(OutputT
ype.BYTES);
        File destination = Files.write(Paths.get("screenshot.png"), source
)).toFile();

        Assert.assertTrue(destination.exists(), "screenshot file does no
t exist");
        Assert.assertTrue(destination.length() > 0, "screenshot file siz
e is zero");

        return destination;
}

// taking screenshot of a particular element as File
public File takeScreenshot() {

        // Create a WebDriver object
        WebDriver driver = DriverManager.getWebDriver();

        // open the web url
        driver.get("http://codetoautomate.com/educative-selenium-demo/");

        // take screenshot of the WebElement
        WebElement element = driver.findElement(By.id("drag1"));
        File source = element.getScreenshotAs(OutputType.FILE);
        File destination = new File("screenshot.png");
        source.renameTo(destination);

        Assert.assertTrue(destination.exists(), "screenshot file does no
t exist");
        Assert.assertTrue(destination.length() > 0, "screenshot file siz
e is zero");
```

```
        return destination;
}


// taking screenshot of a particular element as byte[]
public File takeScreenshot() {

        // Create a WebDriver object
        WebDriver driver = DriverManager.getWebDriver();

        // open the web url
        driver.get("http://codetoautomate.com/educative-selenium-demo/");

        WebElement element = driver.findElement(By.id("drag1"));
        byte[] source = element.getScreenshotAs(OutputType.BYTES);
        File destination = Files.write(Paths.get("screenshot.png"), source
)).toFile();

        Assert.assertTrue(destination.exists(), "screenshot file does no
t exist");
        Assert.assertTrue(destination.length() > 0, "screenshot file siz
e is zero");

        return destination;
}
```

Now you are familiar with WebDriver and its capabilities. Let’s take a quiz in the next lesson to test your knowledge.