How To ByPass System.setProperty

Table of Contents

Introduction

Hello everybody, Welcome to Selenium 4 Beginners. My name is Rex Allen Jones II. In this video, I am going to demonstrate How To ByPass Writing System.setProperty. One of the ways we bypass writing System.setProperty is when we use Maven. If we use a framework, we can write System.setProperty one time for each driver. However most of the videos on Social Media do not use Maven or a framework. I will show you how to bypass writing System.setProperty by adding our drivers to Environment Variables.

Demo

Currently, we have 2 methods. One method is called executeWithSystemDotSetProperty and the other method is executeWithOutSystemDotSetProperty.

Let's start with executeWithSystemDotSetProperty and show you how our Test Script Fails if we do not add System.setProperty.

WebDriver driver = new FirefoxDriver (). Import both classes "WebDriver and FirefoxDriver" using the shortcut keys CTRL + SHIFT + O.

driver.get – loads a new webpage. This is the benefit of adding Javadoc and/or source code. It gives us a description of the method. I created a video showing how to add Javadoc and source code.

We are going to load Google by writing https://www.google.com/. For now, I am going to only run the first method by selecting its name then clicking Run. We see our Test Script Failed due to an IllegalStateException. The path to the driver executable must be set by the webdriver.gecko.driver system property.

The same exception happens for ChromeDriver and InternetExplorerDriver. Let me show you ChromeDriver. I will change FirefoxDriver to ChromeDriver then hit Run.

IllegalStateException. The only difference is Firefox must be set by webdriver.gecko.driver and Chrome must be set by webdriver.chrome.driver.

In layman terms, we need to set our system property by establishing a key and a value. The key is the name of the system property while value is the path of the driver executable. We establish a key and its value using System.setProperty before writing WebDriver driver = new ChromeDriver.

System.setProperty – we see the setProperty method receives 2 parameters: String key and String value. This means the key and value will be a String meaning there will be double quotes around the data.

First, I will write the key: webdriver.chrome.driver. Next, I will add the value. Let's go to my Downloads folder and open the Drivers folder. Here we see 3 driver executables. We are going to copy the path of chromedriver.exe. A short cut to copying the path is select SHIFT key + right mouse click then select Copy as path.

Paste the path. Now, let's Run. We see Google Search page loaded and our Test Script Passed. I will go ahead and close the window by writing driver.close().

Let me show you my preferred way of writing a Selenium Test Script without writing System.setProperty. Either way is okay, write System.setProperty or not write System.setProperty. However, I like to bypass writing that statement every single time.

Within the second method, I will write

WebDriver driver = new ChromeDriver ()

driver.navigate().to – navigate.to is another method that loads a new webpage.

This time, let's load Amazon by writing https://www.amazon.com/.

driver.quit()

There is a difference between driver.close and driver.quit that I will talk about in a subsequent video. In a nutshell, both methods close the browser window.

We go back to the Drivers folder.

This time, I will copy the Drivers folder path. Go to System, select Advanced system setting, click Environment Variables, navigate to Path, click Edit, click New, then paste the Drivers folder path. That one path will take care of all driver executables.

Why add the path to Environment Variables? We add the path to Environment Variables so the program can access the driver executables when running. That's how we bypass writing System.setProperty.

Click OK, Click OK, and Click OK again. Now we must restart the system. The method will Fail if we do not restart our system. Let me show you right quick. FAILED: executeWithOutSystemDotSetProperty. I am getting ready to restart.

Okay, I'm back. Now, let's run. Google Search and Amazon loaded without a problem. Both methods PASSED: executeWithOutSystemDotSetProperty and executeWithSystemDotSetProperty

My goal in this video was to show you how to execute your Test Scripts without writing System.setProperty.

I created a reference document for you. The document is called "How To ByPass System.setProperty". If you are interested, go to https://tinyurl.com/ByPass-System-setProperty and download the document.

Thank You for watching How To ByPass System.setProperty.