How to setup browsers for cross browser testing using Gauge

Sunday, August 26, 2018   1:14 PM

Browser	Version
Chrome	68.0.3440.106 (Official Build) (64-bit)
Firefox	61.0.2 (64-bit)
IE	11.228.17134.0
Edge	42.17134.1.0

Tested on Windows 10 Core i7 Machine.

For IE 11 on Windows

1. Open Registry Editor
2. For 32-bit Windows installations, the key you must examine in the registry editor is *HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\Main\FeatureControl\FEATURE_BFCACHE*

   For 64-bit Windows installations, the key is *HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Internet Explorer\Main\FeatureControl\FEATURE_BFCACHE*

   Please note that the *FEATURE_BFCACHE* subkey may or may not be present, and should be created if it is not present.

   Important: Inside this key, create a **DWORD** value named **iexplore.exe** with the value of **0**.

References

https://stackoverflow.com/questions/24746777/selenium-nosuchwindowexception-in-ie-11
https://github.com/SeleniumHQ/selenium/wiki/InternetExplorerDriver#required-configuration

pom.xml

```xml
<dependencies>
    <dependency>
        <groupId>com.thoughtworks.gauge</groupId>
        <artifactId>gauge-java</artifactId>
        <version>0.6.8</version>
    </dependency>
    <dependency>
        <groupId>junit</groupId>
        <artifactId>junit</artifactId>
        <version>4.12</version>
        <scope>test</scope>
    </dependency>
    <dependency>
        <groupId>org.seleniumhq.selenium</groupId>
        <artifactId>selenium-java</artifactId>
        <version>3.12.0</version>
    </dependency>
    <dependency>
        <groupId>io.github.bonigarcia</groupId>
        <artifactId>webdrivermanager</artifactId>
```

```xml
            <version>2.2.0</version>
        </dependency>
        <dependency>
            <groupId>com.google.guava</groupId>
            <artifactId>guava</artifactId>
            <version>22.0</version>
        </dependency>
        <dependency>
            <groupId>org.reflections</groupId>
            <artifactId>reflections</artifactId>
            <version>0.9.10</version>
        </dependency>
    </dependencies>
```

DriverFactory.java

```java
package com.maxsoft.webautomationdemo.util.driver;

import io.github.bonigarcia.wdm.ChromeDriverManager;
import io.github.bonigarcia.wdm.EdgeDriverManager;
import io.github.bonigarcia.wdm.FirefoxDriverManager;
import io.github.bonigarcia.wdm.InternetExplorerDriverManager;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.edge.EdgeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.ie.InternetExplorerDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.safari.SafariDriver;

/**
 * Project Name : MaxSoft-Web-Cross-Browser-Automation-Demo
 * Developer : Osanda Deshan
 * Version : 1.0.0
 * Date : 8/25/2018
 * Time : 2:37 PM
 * Description :
 **/

public class DriverFactory {

    private static final String BROWSER = System.getenv("browser");
    private static final String CHROME = "chrome";
    private static final String FIREFOX = "firefox";
    private static final String IE = "ie";
    private static final String EDGE = "edge";
    private static final String SAFARI = "safari";

    private static WebDriver driver;

    // Get a new WebDriver Instance.
    // There are various implementations for this depending on browser. The required BROWSER can be set as
    an environment variable.
    // Refer http://getgauge.io/documentation/user/current/managing_environments/README.html

    public static WebDriver getDriver() {

        if (BROWSER == null) {
        ChromeDriverManager.getInstance().setup();
        return new ChromeDriver();
        }

        switch (BROWSER.toLowerCase())
        {
```

```java
            case CHROME:
                ChromeDriverManager.getInstance().setup();
                return new ChromeDriver();
            case FIREFOX:
                FirefoxDriverManager.getInstance().setup();
                return new FirefoxDriver();
            case IE:
                InternetExplorerDriverManager.getInstance().setup();
                return new InternetExplorerDriver();
            case EDGE:
                EdgeDriverManager.getInstance().setup();
                return new EdgeDriver();
            case SAFARI:
                driver = new SafariDriver();
                return new SafariDriver();
            default:
                ChromeDriverManager.getInstance().setup();
                return new ChromeDriver();
        }
    }


}
```