Cross Browser Testing Selenium Grid

```xml
<project xmlns="http://maven.apache.org/POM/4.0.0"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <groupId>SeleniumWithMultipleBrowsers</groupId>
    <artifactId>CrossBrowserTesting</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <name>CrossBrowserTesting</name>

    <dependencies>
        <dependency>
            <groupId>org.seleniumhq.selenium</groupId>
            <artifactId>selenium-java</artifactId>
            <version>3.141.59</version>
        </dependency>
        <dependency>
            <groupId>org.testng</groupId>
            <artifactId>testng</artifactId>
            <version>6.14.3</version>
            <scope>test</scope>
        </dependency>

    </dependencies>
</project>

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">

<suite name = "Suite" parallel = "tests">
   <test name = "FirefoxTest">
   <parameter name = "browser" value = "firefox" />
      <classes>
         <class name = "CrossBrowserTesting.LauchBrowsers" />
      </classes>
   </test>

   <test name = "ChromeTest">
   <parameter name = "browser" value = "chrome" />
      <classes>
         <class name = "CrossBrowserTesting.LauchBrowsers" />
      </classes>
   </test>

   <test name = "IETest">
   <parameter name = "browser" value = "ie" />
      <classes>
         <class name = "CrossBrowserTesting.LauchBrowsers" />
      </classes>
   </test>
</suite>
```

```java
package CrossBrowserTesting;

import org.openqa.selenium.*;
import org.openqa.selenium.chrome.ChromeOptions;
import org.openqa.selenium.firefox.FirefoxOptions;
import org.openqa.selenium.ie.InternetExplorerOptions;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Parameters;
import java.net.URL;
import java.util.concurrent.TimeUnit;
import java.net.MalformedURLException;

public class LauchBrowsers {
        public WebDriver driver;
        public String URL, Node;
        protected ThreadLocal<RemoteWebDriver> threadDriver = null;

        @Parameters({"browser"})
        @BeforeTest
        public void launchapp(String browser) throws MalformedURLException {
                String URL = "http://www.calculator.net";

                if (browser.equalsIgnoreCase("firefox")) {
                        System.out.println("Application Running on ...." + browser);
                        String Node = "http://localhost:4444/wd/hub";
                        DesiredCapabilities cap =new DesiredCapabilities();
                        cap.setBrowserName("firefox");

                        FirefoxOptions options = new FirefoxOptions();
                        options.merge(cap);

                        driver = new RemoteWebDriver(new URL(Node), options);
                        driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);

                } else if (browser.equalsIgnoreCase("chrome")) {
                        System.out.println("Application Running on ...." + browser);
                        DesiredCapabilities cap = new DesiredCapabilities();
                        cap.setBrowserName("chrome");

                        ChromeOptions options = new ChromeOptions();
                        options.merge(cap);
                        String Node = "http://localhost:4444/wd/hub";
                        driver = new RemoteWebDriver(new URL(Node), options);
                        driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);

                } else if (browser.equalsIgnoreCase("ie")) {
                        System.out.println("Application Running on ...." + browser);
                        DesiredCapabilities cap = new DesiredCapabilities();
                        cap.setBrowserName("ie");

                        InternetExplorerOptions options = new InternetExplorerOptions();
                        options.merge(cap);
```

```java
                String Node = "http://localhost:4444/wd/hub";
                driver = new RemoteWebDriver(new URL(Node), options);
                driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);

        } /*else {
                throw new IllegalArgumentException("The Browser Type is
Undefined");
        }*/

        driver.navigate().to(URL);
        driver.manage().window().maximize();
    }

    @AfterTest
    public void closeBrowser() {
        driver.quit();
    }
}
```