# 1. Experimental requirements

1. Install Selenium with Eclipse or IntelliJ IDEA.
2. Install Firefox/Chrome (Chrome is recommended) and SeleniumIDE plugin.
3. Try to record and export scripts using SeleniumIDE.
4. Please complete the following task using Selenium Webdriver:

"user_info.csv" contains information about the students, and http://118.178.137.170:8080/ can view someone's information after logging in (simplified student id). Please check each record in the csv file to make sure that each student's information is consistent with the information on the website.
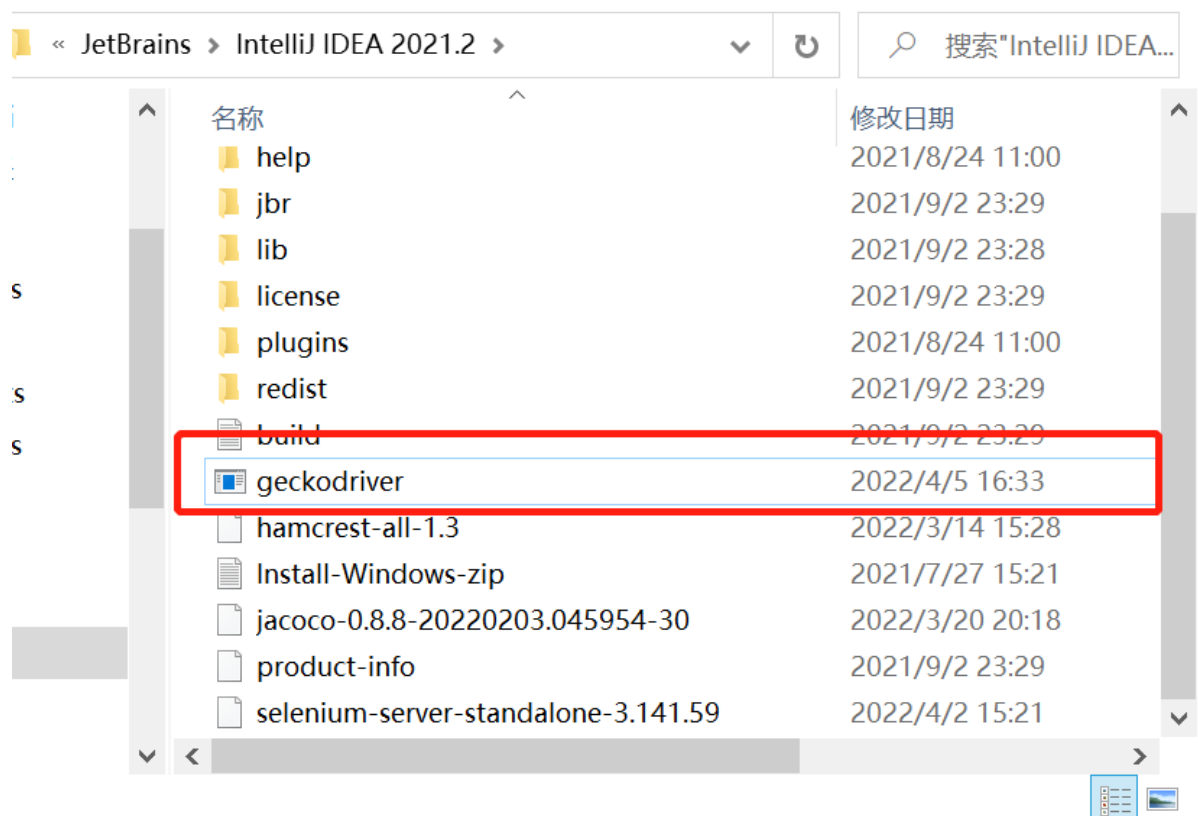
2. Configuration

(1) 在Firefox上配置Selenium IDE

搜索Firefox插件，安装
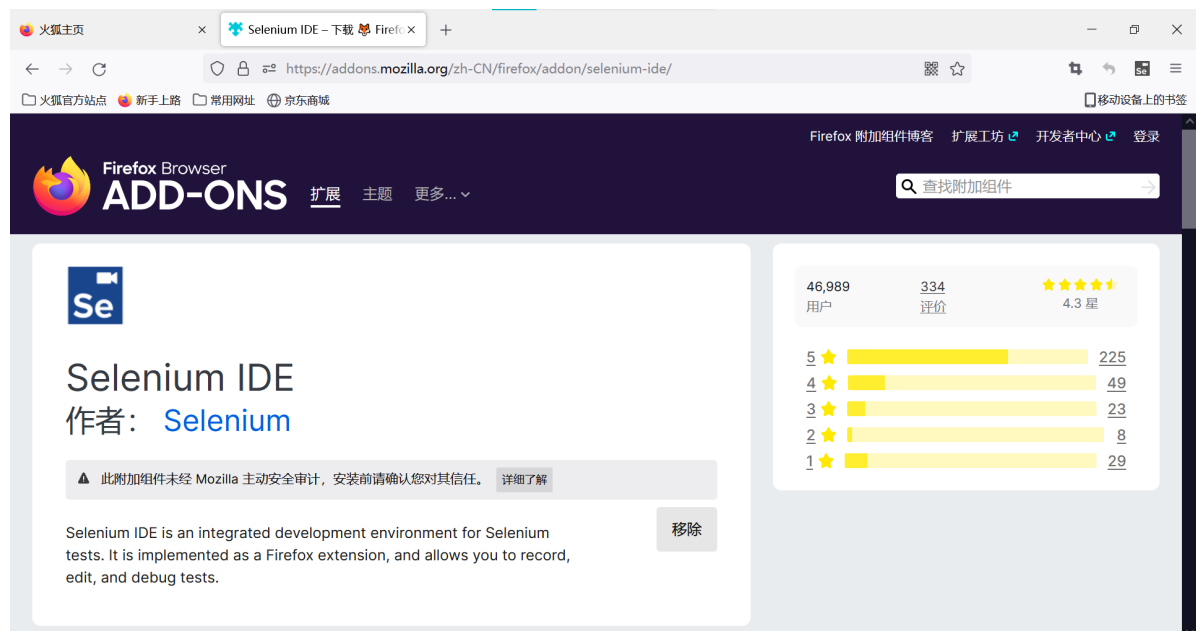
下载geckodriver.exe

(2) 录制selenium

扩展： (Selenium IDE) - Selenium IDE — Mozilla Firefox

Project:

Tests

Search tests...

Playback base URL

Welcome to Selenium IDE!
Version 3.17.4

What would you like to do?

Record a new test in a new project

Open an existing project

Create a new project

Close Selenium IDE

To learn more on Selenium IDE and how to use it visit the the Selenium IDE project page.

Log   Reference

(3) 导出java代码

Project: lab5_test

Tests ▾   +

Search tests...   🔍

test1

	Rename
	Duplicate
	Delete
	Export

http://118.178.137.170:8080   ▾

	Command	Target	Value
1	*open*	/	
2	*set window size*	1295x695	
3	*click*	id=username	
4	*type*	id=username	韩睿倩

Command   open   ▾   //   ↗

Target   /   ⬚   🔍

Value

Description

Log   Reference   ⊘

(4) 编写测试代码

3. Result analysis

运行测试，会自动填充username
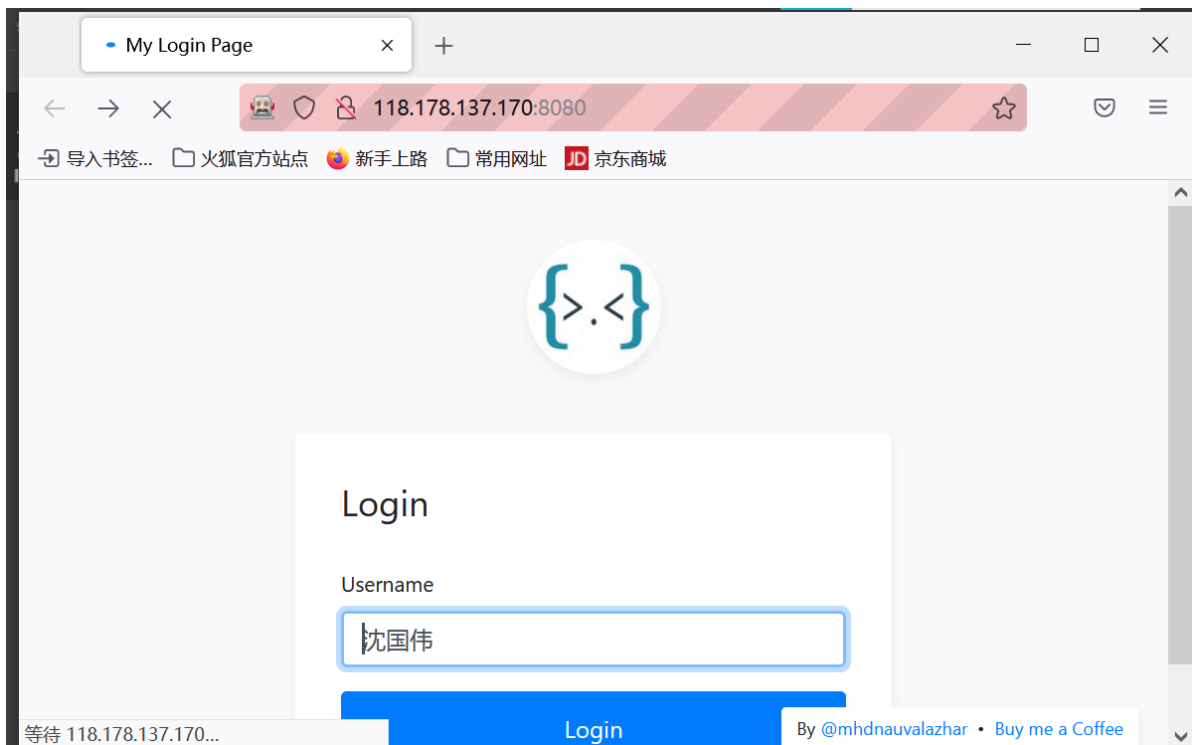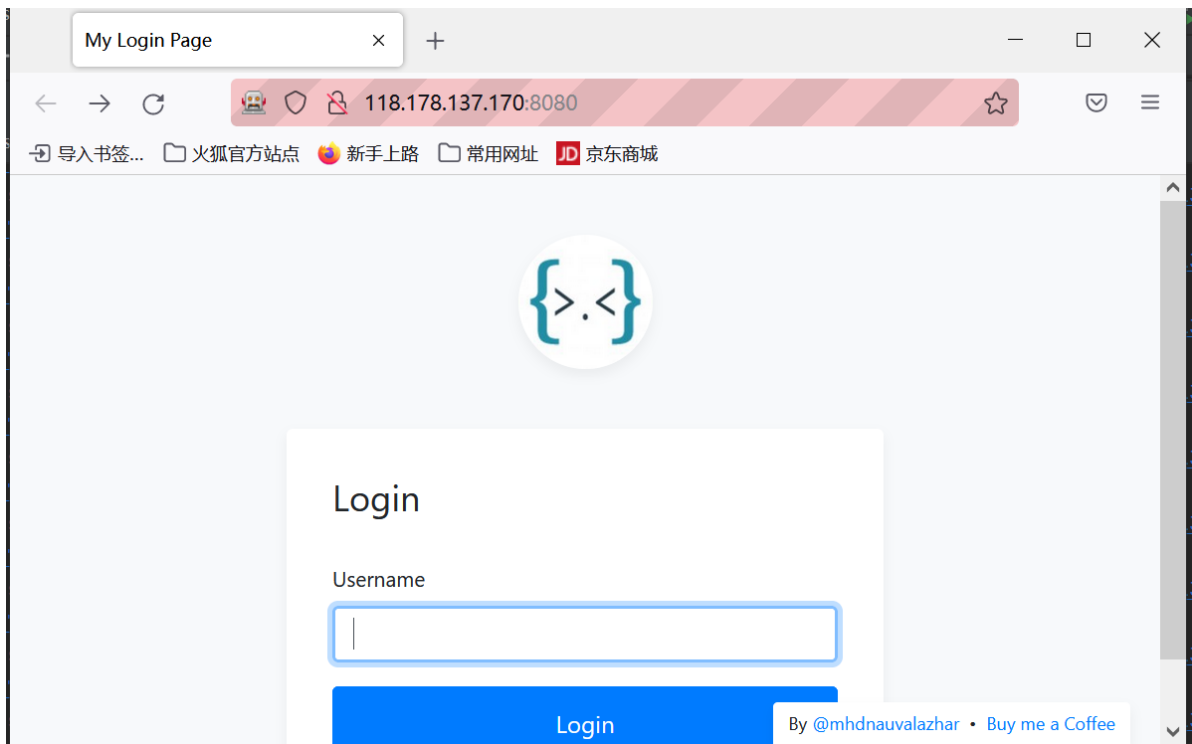
Tests passed: 77 of 77 tests – 4 min 4 sec

77个测试用例全部通过

4. Source code

```
1  import org.junit.*;
2  import org.junit.runner.RunWith;
3  import org.junit.runners.Parameterized;
4  import org.openqa.selenium.By;
5  import org.openqa.selenium.Dimension;
6  import org.openqa.selenium.firefox.FirefoxDriver;
7
```

```java
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;
import java.util.Arrays;
import java.util.Collection;

/**
 * @author Han Ruiqian
 * @date 2022/4/5
 */
@RunWith(Parameterized.class)
public class TestSelenium {
    private static FirefoxDriver driver;
    private final String testName;
    private final String testNumber;

    public TestSelenium(String testName, String testNumber) {
        this.testName = testName;
        this.testNumber = testNumber;

    }

    @BeforeClass
    public static void beforeClass(){
        System.setProperty("webdriver.gecko.driver","C:\\Program
Files\\JetBrains\\IntelliJ IDEA 2021.2\\geckodriver.exe");
        driver = new FirefoxDriver();
        driver.manage().window().setSize(new Dimension(800, 500));
    }

    @Parameterized.Parameters
    public static Collection<Object[]> getData(){
        Object[][] objects = new Object[77][];
        FileReader fileReader;
        try {
            fileReader = new FileReader("C:\\Users\\Han
Ruiqian\\Desktop\\major\\软件测试技术\\Lab-Selenium\\Lab-
Selenium\\user_info.csv");
            BufferedReader bufferedReader = new BufferedReader(fileReader);
            bufferedReader.readLine();
            String line;
            int count = 0;
            while ((line = bufferedReader.readLine()) != null) {
                String[] item = line.split(",");
                String name = item[1];
                String number = item[0];
                objects[count] = new Object[]{name, number};
//                System.out.println(Arrays.asList(objects[count]));
                count++;
            }

        } catch (IOException e) {
            e.printStackTrace();
        }
//        System.out.println(Arrays.asList(objects));
        return Arrays.asList(objects);

    }
```

```java
    @Test
    public void test(){
        driver.get("http://118.178.137.170:8080/");
        driver.findElement(By.id("username")).sendKeys(testName);
        driver.findElement(By.cssSelector(".btn")).click();
        String checkStr =
driver.findElement(By.xpath("/html/body/section/div/div/div/div/div/table/tbody/tr/td[2]")).getText();
        Assert.assertEquals(this.testNumber,checkStr);
    }

    @After
    public void tearDown() {
        driver.navigate().back();
        driver.navigate().refresh();
    }
}
```