

LABORATORIO 5: Pruebas Funcionales con Selenium y xUnit

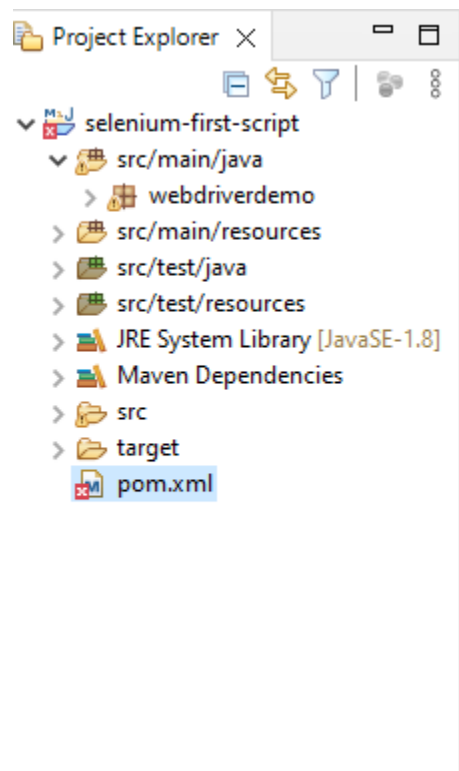
Nombre: Randú Jean Franco Cerpa García

Curso: Ingeniería de Software II

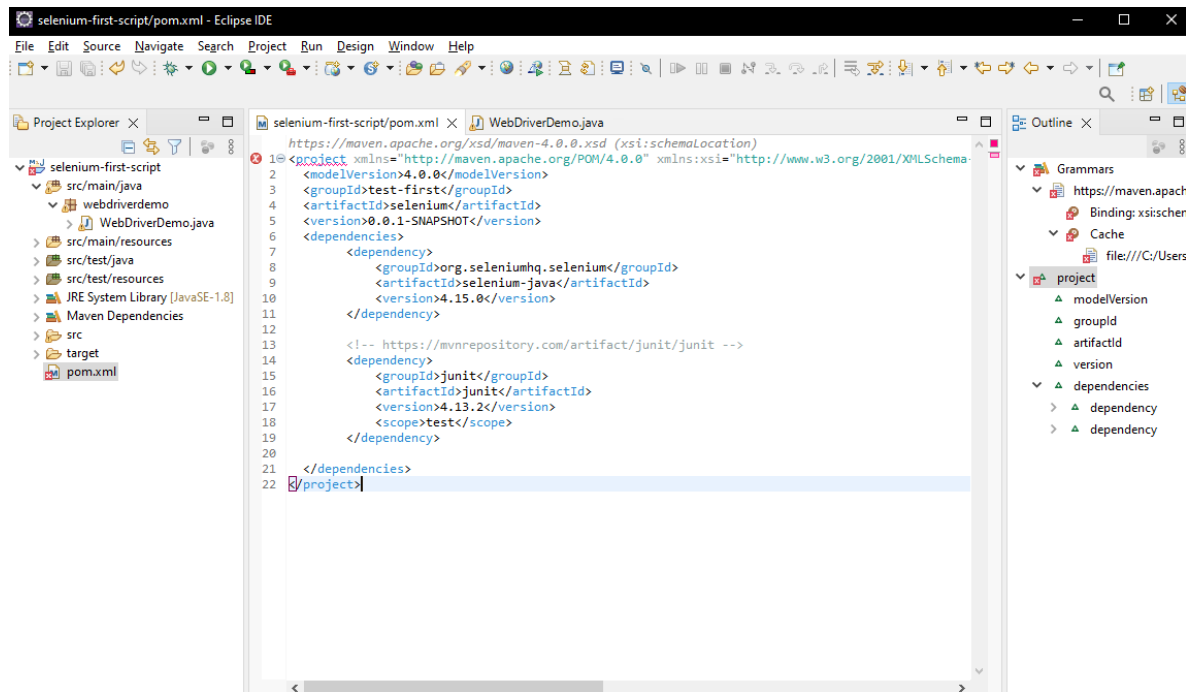
Fecha: 15/11/2023

Actividades:

1. Crear un proyecto de pruebas funcionales (de acuerdo al lenguaje elegido)

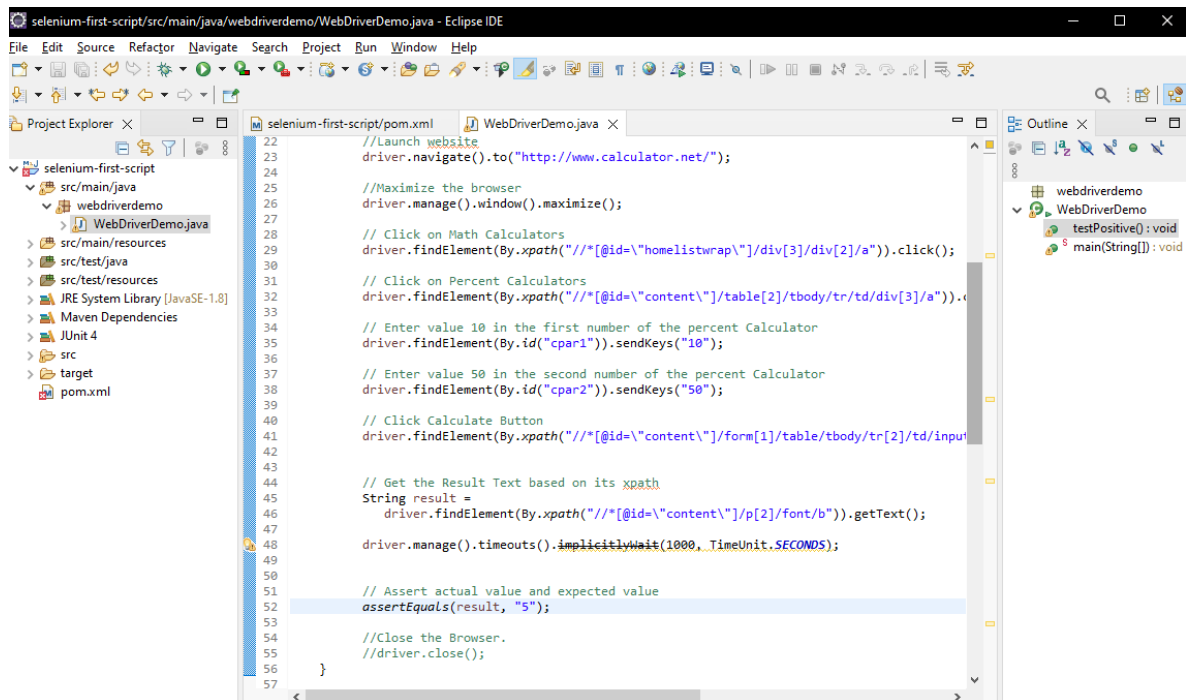


2. Gestionar las dependencias necesarias (Selenium Web Driver y xUnit):



[3. Configurar driver de navegador (Browser-specific WebDriver)

4. Implementar las pruebas funcionales de la siguiente funcionalidad:



```
selenium-first-script/pom.xml WebDriverDemo.java X
62
63 WebDriver driver = new ChromeDriver();
64 //Puts an Implicit wait, Will wait for 10 seconds before throwing exception
65 driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
66
67 //Launch website
68 driver.navigate().to("http://www.calculator.net/");
69
70 //Maximize the browser
71 driver.manage().window().maximize();
72
73 // Click on Math Calculators
74 driver.findElement(By.xpath("//*[@id=\"homelistwrap\"]/div[3]/div[2]/a")).click();
75
76 // Click on Percent Calculators
77 driver.findElement(By.xpath("//*[@id=\"content\"]/table[2]/tbody/tr/td/div[3]/a")).click();
78
79 // Enter value 10 in the first number of the percent Calculator
80 driver.findElement(By.id("cpar1")).sendKeys("10");
81
82 // Enter value 50 in the second number of the percent Calculator
83 driver.findElement(By.id("cpar2")).sendKeys("-50");
84
85 // Click Calculate Button
86 driver.findElement(By.xpath("//*[@id=\"content\"]/form[1]/table/tbody/tr[2]/td/input")).click();
87
88
89 // Get the Result Text based on its xpath
90 String result =
91     driver.findElement(By.xpath("//*[@id=\"content\"]/p[2]/font/b")).getText();
92
93 driver.manage().timeouts().implicitlyWait(1000, TimeUnit.SECONDS);
94
95
96 // Assert actual value and expected value
97 assertEquals(result, "5");
```

```

103 @Test
104 public void testA() {
105     //Set up web driver (chrome, firefox,...)
106     //System.setProperty("webdriver.gecko.driver", "C:\\...\\Selenium\\Selenium WebDriver\\");
107
108     WebDriver driver = new ChromeDriver();
109     //Puts an Implicit wait, Will wait for 10 seconds before throwing exception
110     driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
111
112     //Launch website
113     driver.navigate().to("http://www.calculator.net/");
114
115     //Maximize the browser
116     driver.manage().window().maximize();
117
118     // Click on Math Calculators
119     driver.findElement(By.xpath("//*[@id=\"homelistwrap\"]/div[3]/div[2]/a")).click();
120
121     // Click on Percent Calculators
122     driver.findElement(By.xpath("//*[@id=\"content\"]/table[2]/tbody/tr/td/div[3]/a")).click();
123
124     // Enter value 10 in the first number of the percent Calculator
125     driver.findElement(By.id("cpar1")).sendKeys("20");
126
127     // Enter value 50 in the second number of the percent Calculator
128     driver.findElement(By.id("cpar2")).sendKeys("200");
129
130     // Click Calculate Button
131     driver.findElement(By.xpath("//*[@id=\"content\"]/form[1]/table/tbody/tr[2]/td/input")).click();
132
133
134     // Get the Result Text based on its xpath
135     String result =
136         driver.findElement(By.xpath("//*[@id=\"content\"]/p[2]/font/b")).getText();
137

```

```

148 @Test
149 public void testB() {
150     //Set up web driver (chrome, firefox,...)
151     //System.setProperty("webdriver.gecko.driver", "C:\\...\\Selenium\\Selenium WebDriver\\");
152
153     WebDriver driver = new ChromeDriver();
154     //Puts an Implicit wait, Will wait for 10 seconds before throwing exception
155     driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
156
157     //Launch website
158     driver.navigate().to("http://www.calculator.net/");
159
160     //Maximize the browser
161     driver.manage().window().maximize();
162
163     // Click on Math Calculators
164     driver.findElement(By.xpath("//*[@id=\"homelistwrap\"]/div[3]/div[2]/a")).click();
165
166     // Click on Percent Calculators
167     driver.findElement(By.xpath("//*[@id=\"content\"]/table[2]/tbody/tr/td/div[3]/a")).click();
168
169     // Enter value 10 in the first number of the percent Calculator
170     driver.findElement(By.id("cpar1")).sendKeys("50");
171
172     // Enter value 50 in the second number of the percent Calculator
173     driver.findElement(By.id("cpar2")).sendKeys("12");
174
175     // Click Calculate Button
176     driver.findElement(By.xpath("//*[@id=\"content\"]/form[1]/table/tbody/tr[2]/td/input")).click();
177
178
179     // Get the Result Text based on its xpath
180     String result =
181         driver.findElement(By.xpath("//*[@id=\"content\"]/p[2]/font/b")).getText();
182

```

Problems Servers Terminal Data Source Explorer Properties Console Progress JUnit x

Finished after 15,986 seconds

Runs: 4/4 Errors: 0 Failures: 1

webdriverdemo.WebDriverDemo [Runner: JUnit 4] (15,971 s)

- testA (4,317 s)
- testB (4,092 s)
- testPositive (3,835 s)
- testNegative (3,727 s)

Failure Trace

- org.junit.ComparisonFailure: expected:<[-]5> but was:<[]5>
- at org.junit.Assert.assertEquals(Assert.java:117)
- at webdriverdemo.WebDriverDemo.testNegative(WebDriverDemo.java:97)

Result Comparison

testNegative(webdriverdemo.WebDriverDemo)

Expected	Actual
1 5	1 5

?

OK