



# **CP08**

# **SEMESTER**

# **V**

## **Software Testing**

## **Lab Manual**

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Subject Code : CP08522P  
Released Date: 24-06-2020

## SOFTWARE TESTING LAB

SUBJECTCODE	CP08522P
SEMESTER	V
SEMESTER HOUR	60h
REV. NO.	0
REV. DATE	24-06-2020

### COURSE OUTCOME:


**After completion of the course, the trainee should be able to:**

1. Understand how to write the manual test cases for different scenarios.
2. Understand how to apply automation test tool to validate the software project.

### LIST OF EXERCISE:

SLNO	MAJOR TOPICS	ALLOTTED HOURS
	<b>Manual Testing</b>	
1	Write the Test cases for Login Page of Gmail, Facebook.	4
2	Write all the test cases using the appropriate testing techniques wherever applicable for the below requirement.	
	<b>REQUIREMENT 1:</b> Here is a KSRTC application. This application is used to search KSRTC Buses for travelling different locations. The below screen will help the user to search KSRTC Buses based on Trip, Date, Time, Number of Passengers, Ladies, Service Class. Fields: Trip - Radio button (One Way or Round Trip) From: Text Box is alphanumeric, This field can accept 256 characters. The values that is available in the current database is "Bangalore, Chennai, Mumbai, Pune" To: Text Box, This field can accept 256 characters. Text box is alpha numeric. The values that is available in the current database is "Bangalore, Chennai, Mumbai, Pune"	4

	<p><b>REQUIREMENT 2:</b></p> <p>Here is a KSRTC application. This application is used to search KSRTC Buses for travelling different locations. The below screen will help the user to search KSRTC Buses based on Trip, Date, Time, Number of Passengers, Ladies, Service Class.</p> <p>1. Onward Date: Text is view only; On clicking calendar Icon, Calendar will be displayed and user can select the date of travel. Date is displayed in DD/MM/YYYY format. Time: Dropdown. Current values displayed in database is (9 a.m, 10a.m, 11a.m, 12p.m, 1p.m, 2p.m) Return Date: Text is view only; On clicking calendar Icon, Calendar will be displayed and user can select the date of travel. Date is displayed in DD/MM/YYYY format.</p>	6
	<p><b>REQUIREMENT 3:</b></p> <p>Here is a KSRTC application. This application is used to search KSRTC Buses for travelling different locations. The below screen will help the user to search KSRTC Buses based on Trip, Date, Time, Number of Passengers, Ladies, Service Class.</p> <p>&gt; Time: Dropdown. Current values displayed in database is (9 a.m, 10a.m, 11a.m, 12p.m, 1p.m, 2p.m) &gt; Number of Passengers: Drop down. Current values in database is (1, 2, 3, 4) &gt; All Ladies Checkbox &gt; Service Class: Drop down. Current values in database is (Premium, Luxury, Deluxe, Express) &gt; On submitting the form by clicking "Search available services", "Search results of all the KSRTC buses based on the criteria should be displayed in "KSRTC Search Results " page along with query provided by the user.</p>	6
	UI screenshot	

		
	<b>Selenium</b>	
1	Introduction to Selenium & its components.	4
2	Write a selenium web driver script for opening a login page of demo.actitime.com	4
3	Demonstrate Title check point Text Checkpoint	4
4	Demonstrate URL check point	4
5	Demonstrate element checkpoint	4
6	Demonstrate working with single select dropdown	4
7	Demonstrate working with multi select dropdown.	4
8	Demonstrate selecting and deselecting option from multi select dropdown	4
9	Demonstrate to get all the option which are there in the dropdown and print it in the console.	4
10	Demonstrate Synchronization	4
	<b>Total Hours</b>	<b>60h</b>

## Reference:

1. Testing in 30+ Open Source Tools, Rahul Shende, Shroff Publishers & Distributor Pvt. Ltd, ISBN 13: 9789350231005 ( page numbers from 15 to 117 )
2. <http://seleniumhq.org/>
3. <http://sourceforge.net/projects/sahi/>
4. The art of software Testing: MyersGJ, Published by John Wiley & Sons

# Manual Testing

## 1. Write the Test Cases for Login Page of Gmail

### Test Case:

Test Case ID	Test Case Description	Test Case Steps	Input Data	Expected Result	Actual Result	Status
Login 01	Checking whether username & password are entered	Enter username, password & press Submit Button	"admin","admin"	It Should navigate to home page.	It has navigated to home page	Pass
Login 02	Checking whether username & password are entered	Enter username, password & press Submit Button	"admin"," "	It Should not navigate to home page.	It has navigated to home page	Pass
Login 03	Checking whether username & password are entered	Enter username, password & press Submit Button	" ","admin"	It Should not navigate to home page.	It has not navigated to home page	Pass
Login 04	Checking whether username & password are entered	Enter username, password & press Submit Button	" "," "	It Should not navigate to home page.	It has not navigated to home page	Pass
Pass 01	Checking whether Masking for password is implemented or not	Enter Password	"admin"	The Password should be displayed in special characters	The Password is displayed in special characters	Pass
Login 05	Checking whether login is correct	Enter username, password & press Submit	"admin","admin"	It Should navigate to home page.	It has navigated to home page	Pass

		Button				
Login 06	Checking whether login is correct	Enter username, password & press Submit Button	"admin","user"	It Should not navigate to home page and should display an error message.	It has not navigated to home page and error message is displayed	Pass

## 2. Write the Test Cases for Login Page of KSRTC Application

Aim: Write different Test Cases for Gmail Login Page

Test id	Test Name	Test Description	Test Steps	Expected Output	Actual Output	Pass /fail
TC-001	Check if the source address is accepted	On the page of KSRTC check the source address is accepted .	* Go to the home page of KSRTC website *Click on the source address tab and check if values are accepted or not.	* The Values should be accepted and a dropdown box of the name should be shown	*The Values are accepted	Pass
TC-002	Check if the destination address is accepted	On the page of KSRTC check the destination address is accepted .	* Go to the home page of KSRTC website *Click on the destination address tab and check if values are accepted or not.	* The Values should be accepted and a dropdown box of the name should be shown	*The Values are accepted	Pass
TC-003	Check if the departure date is accepted	On the page of KSRTC check the departure date field is accepted .	* Go to the home page of KSRTC website *Click on the date icon and check if values are accepted or not.	* A calendar should be shown where the departure date is accepted	*The Values are accepted	Pass

TC-004	Check if the return date is accepted	On the page of KSRTC check the return date field is accepted .	<p>* Go to the home page of KSRTC website</p> <p>*Click on the return date icon and check if values are accepted or not.</p>	* A calendar should be shown where the return date is accepted	*The Values are accepted	Pass
TC-005	Check if the single lady checkbox	On the page of KSRTC check the single lady field is accepted .	<p>* Go to the home page of KSRTC website</p> <p>*Click on the single lady option and check if its being checked</p>	* The Single Lady option will be selected	*The checkbox is selected	Pass

	Selenium	
1	Introduction to Selenium & its components.	3
2	Write a selenium web driver script for opening a login page of demo.actitime.com	2
3	Demonstrate Title check point Text Checkpoint	4
4	Demonstrate URL check point	4
5	Demonstrate element checkpoint	4
6	Demonstrate working with single select and multi select dropdown	4
7	Demonstrate selecting and deselecting option from multi select dropdown	4
8	Demonstrate Synchronization	3

1. Introduction to Selenium & its components.

package First;

```
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class Exp1 {
```

```
    public static void main(String[] args) {
        // TODO Auto-generated method stub
```

```
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selenium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
```

```
        driver.get("https://www.google.com");
```

```
        driver.findElement(By.name("q")).sendKeys("Selenium");
        driver.findElement(By.name("q")).sendKeys(Keys.RETURN);
```

```
    }
```

```
}
```



2. Introduction to Selenium & its components.

```
package First;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class Exp1 {
```

```
    public static void main(String[] args) {
        // TODO Auto-generated method stub
```

```
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selnium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
```

```
        driver.get("https://www.google.com");
```

```
        driver.findElement(By.name("q")).sendKeys("Selenium");
        driver.findElement(By.name("q")).sendKeys(Keys.RETURN);
```

```
    }
```

```
}
```

3. Write a selenium web driver script for opening a login page of demo.actitime.com

```
package First;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class Ex2 {
```

```
    public static void main(String[] args) throws InterruptedException {
        // TODO Auto-generated method stub
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selnium\\chromedriver_win32\\chromedriver.exe");
```

```
        WebDriver driver=new ChromeDriver();
        driver.get("https://demo.actitime.com");
```

```
        driver.findElement(By.id("username")).sendKeys("admin");
        driver.findElement(By.name("pwd")).sendKeys("manager");
```

```
        driver.findElement(By.linkText("Login")).click();
```

```
        Thread.sleep(10000);
```

```
        String expectedText=driver.findElement(By.xpath("//td[text()='Enter Time-Track']")).getText();
```

```
        System.out.println(expectedText);
```

```

        String actualText="Enter Time-Track";
        if (expectedText.equals(actualText)) {
            System.out.println("Pass");
        }else{
            System.out.println("fail");
        }
    }
}

```

4. Demonstrate Title check point Text Checkpoint  
package First;

```

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class Exp2 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        System.setProperty("webdriver.chrome.driver",

            "E:\\2021\\Selenium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://www.google.com");

        String expectedTitle = "Googles";
        String actualTitle = "";

        actualTitle = driver.getTitle(); // get the actual value of the title

        /*
         * compare the actual title of the page with the expected one and print
         * the result as "Passed" or "Failed"
         */
        if (actualTitle.contentEquals(expectedTitle)){
            System.out.println("Test Passed!");
        } else {
            System.out.println("Test Failed");
        }
        driver.close();
    }
}

```

5. Demonstrate URL check point

```

package First;

import org.openqa.selenium.By;

```

```

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class Exp3 {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selnium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();

        //driver.get("https://www.google.com");
        driver.get("https://en.wikipedia.org/wiki/Main_Page");

        driver.findElement(By.className("portal-hmid")).click();

        //Storing URL in String variable
        String actualUrl = driver.getCurrentUrl();
        System.out.println(actualUrl);

        if (actualUrl.equals("https://en.wikipedia.org/wiki/Portal:History")){
            System.out.println("Verification Successful - The correct Url is opened.");
        }
        else{

            System.out.println("Verification Failed - An incorrect Url is opened.");
        }
        driver.close();
    }
}

```

6. Demonstrate element checkpoint  
package First;

```

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class Exp4 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selnium\\chromedriver_win32\\chromedriver.exe");
    }
}

```

```

        WebDriver driver=new ChromeDriver();
        driver.get("https://en.wikipedia.org/wiki/Wikipedia");
        WebElement element=driver.findElement(By.id("pt-createaccount"));
        if(element.isDisplayed())
            System.out.println("Visiblity: "+true);
        else
            System.out.println("Visiblity: "+false);

        if(element.isEnabled())
            System.out.println("Enabled: "+true);
        else
            System.out.println("Enabled: "+false);
        driver.close();
    }
}

```

#### 7. Demonstrate working with single select and multi options in dropdown list

```

package First;

import java.util.List;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.Select;

public class Exp6 {

    public static void main(String[] args) throws InterruptedException {
        // TODO Auto-generated method stub
        System.setProperty("webdriver.chrome.driver",
            "E:\\2021\\Selenium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("file:///E:/2021/Selenium/SampleTest.html");

        //find the Testing drop down using driver.findElement
        WebElement test=driver.findElement(By.id("testingDropdown"));

        //pass the WebElement city as an argument to the constructor of the Select
        class
        Select dd=new Select(test);

        //Using the object of select class, select option
        dd.selectByIndex(2);
        //Thread.sleep(5000);

        //dd.selectByValue("Performance");
    }
}

```

```

        Thread.sleep(5000);
        //dd.selectByVisibleText("Database Testing");

        //to know all options in a select drop down
        List<WebElement> allOptions=dd.getOptions();
        int k=allOptions.size();
        System.out.println(k);
        for (int i = 0; i < k; i++) {
            // to get each element from list
            WebElement option=allOptions.get(i);
            String text=option.getText();
            // Print the text of each element4
            System.out.println(text);
        }
    }
}

```

#### 8. Demonstrate handling radiobuttons

```

package First;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class Exp7 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        System.setProperty("webdriver.chrome.driver",
"E:\\2021\\Selenium\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("file:///E:/2021/Selenium/SampleTest.html");
        driver.findElement(By.xpath("//input[@value='male']")).click();
        String
exceptedResult=driver.findElement(By.xpath("//input[@value='male']")).getText();
        String actualResult="";
        if (exceptedResult.contentEquals(actualResult)){
            System.out.println("No concession!");
        } else {
            System.out.println("ok");
        }
    }
}

```