SOFTWARE TESTING LAB MANUAL

RJS Polytechnic, Koramangala

According to DTE Syllabus 2015-16

Software Testing Lab

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SOFTWARE TESTING LAB MANNUAL

6th SEM COMPUTER SCIECNCE

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By

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1. Understand the Automation Testing Approach (Theory Concept) Introduction:

Introduction:

What is Automation?

- Automation is making a process automatic, eliminating the need for human intervention.
- Is a self-controlling or self-moving process.
- Automation software offers automation wizard and commands of its own in addition to
- providing task recording and re-play capabilities.
- Using these tools, we can record the task.
- Then if needed use the editor to edit the task, add new commands or using GUI
- automation wizards
- Automation testing is a Software testing technique to test and compare the actual outcome with the expected outcome.
- This can be achieved by writing test scripts or using any automation testing tool.
- Test automation is used to automate repetitive tasks and other testing tasks which are difficult to perform manually.

Benefits of Automation

Fast: Test automation runs faster than human users, which leads to increased throughput or productivity.

Reliable: It performs precisely the same operations at each time elimination human errors and increases consistency of output.

Repeatable: It performs the same operation with different combination of data in a less time.

Programmable: We can use sophisticated tests that brings out hidden information about bugs.

Reusable: We can develop reusable components which can run on different versions of application under test, once we record our actions on one of the versions of the product.

Regression testing: Easy to conduct regression test, which is a boring task if tools are not used.

Enabling 24*7 testing: Test can be scheduled and it supports unattended recovery, which reduces direct human labour costs and expenses.

Robust Verification: Supports robust verification mechanism than any other testing methods, so that improved quality or increased predictability of quality is achieved. Hence it Improves robustness (consistency), of processes or product.

What Tests should be Automated?

- Tests executed for each software build
- Tests which can be easily automated
- Business critical tests
- Tests that are difficult to perform manually

Test artefacts (tools):

Requirements: the requirements that are being tested are stored into the repository. This feature enables us to map the requirements to test cases and test scripts.

Test Plan: Design the tests and build the test plan on it using the test management tool. The test plan will be maintained in a central repository. This will help to produce reusable tests cases in future. The information is sharable and preserved.

Test case: Contains description of test case and test steps.

Test script: Automated test script associated with each test case will be stored in the quality centre repository.

Test sets: this will be a set of selected test cases and associated test scripts. The tests sets are executed from the quality centre onto remote machines. The status of each execution is stored in the respective test case execution status. The status can be either pass/fail, it doesn.t maintain exact details of execution.

Test logs: The test script execution logs are stored in global repository. It contains the status of each test case.

Reusable components: The repetitive functions that are invoked in most of the functions are stored, which reduces the coding redundancies.

Object repository: contains the declaration of the application objects. Data sheets: contains the test data used for execution. it can be populated by the database or manually.

Automation Activity:

Record the application GUI Write Script Execute Script Review the script Modify script if any changes. Execute scripts on at least two machines Store the script in central repository Execute the script from central repository Verify the execution status in central repository Verify the test logs on common server Prepare the test reports.

INTRODUCTION TO SELENIUM

1. History of Selenium

• In 2004 invented by Jason R. Huggins and team.
• Original name is JavaScript Functional Tester [JSFT]
• Open source browser-based integration test framework built originally by Thoughtworks.
• 100% JavaScript and HTML
• Web testing tool
• That supports testing Web 2.0 applications
• Supports for Cross-Browser Testing (ON Multiple Browsers)
• And multiple Operating Systems
• Cross browser – IE 6/7, Firefox .8+, Opera, Safari 2.0+

2. What is Selenium?

• It is an Acceptance Testing tool for web-applications.
• Tests run directly in browser.

- Selenium can be deployed on Windows, Linux, and Macintosh.
- Implemented entirely using browser technologies such as -
  - JavaScript
  - DHTML
  - Frames

3. Which are the components of Selenium?

– Selenium IDE
– Selenium Core
– Selenium RC (which is now repudiated)
– Selenium Grid

Selenium IDE

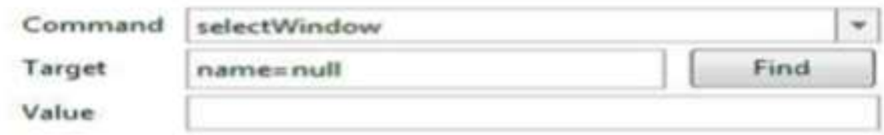
- The Selenium-IDE (Integrated Development Environment) is the tool you use to develop your Selenium test cases.
- It is a browser plug-in
- Firefox/Chrome extension which allows record/play testing paradigm
- Automates commands, but asserts must be entered by hand
- Creates the simplest possible Locator
- Based on Selenese

Overview of Selenium IDE:

A.Test Case Pane
B.Toolbar
C.Menu Bar
D.Log/Reference/UI-Element/Rollup Pane

A. Test Case Pane:

- Your script is displayed in the test case pane.
- It has two tabs.
- one for displaying the command (source)
- and their parameters in a readable “table” format.



Command: selectWindow
Target: name=null
Value:

B. Toolbar:

The toolbar contains buttons for controlling the execution of your test cases.

C. Menu Bar:

- File Menu: The File menu allows you to create, open and save test case and test suite files.
- Edit Menu: The Edit menu allows copy, paste, delete, undo and select all operations for editing the commands in your test case.
- Options Menu: The Options menu allows the changing of settings. You can set the timeout value for certain commands, add user-defined user extensions to the base set of Selenium commands, and specify the format (language) used when saving your test cases.

D. Help Menu:

It has help information.

Introducing Selenium Commands

The command set is often called selenese. Selenium commands come in three “flavors”: Actions, Accessory and Assertions.

a. Actions: user actions on application / Command the browser to do something.
  Actions are commands that generally manipulate the state of the application.
 1. Click link- click / Clickandwait
 2. Selecting items

b. Accessors: Accessors examine the state of the application and store the results in variables, e.g. "storeTitle".

c. Assertions: For validating the application we are using Assertions
  1. For verifying the web pages
  2. For verifying the text
  3. For verifying alerts

Assertions can be used in 3 modes:

- assert
- verify
- waitFor

Example: "assertText","verifyText" and "waitForText".

NOTE:
1. When an "assert" fails, the test is aborted.
2. When a "verify" fails, the test will continue execution
3. "waitFor" commands wait for some condition to become true

Commonly Used Selenium Commands

These are probably the most commonly used commands for building test.

open - opens a page using a URL.

click/clickAndWait - performs a click operation, and optionally waits for a new page to load.

verifyTitle/assertTitle - verifies an expected page title.

verifyTextPresent- verifies expected text is somewhere on the page.

verifyElementPresent -verifies an expected UI element, as defined by its HTML tag, is present on the page.

verifyText - verifies expected text and it’s corresponding HTML tag are present on the page.

verifyTable - verifies a table’s expected contents.

waitForPageToLoad - pauses execution until an expected new page loads. Called automatically when clickAndWait is used.

waitForElementPresent -pauses execution until an expected UI element, as defined by its HTML tag, is present on the page.

Recording and Run settings

When Selenium-IDE is first opened, the record button is ON by default. During recording, Selenium-IDE will automatically insert commands into your test case based on your actions.

a. Remember Base URL MODE - Using Base URL to Run Test Cases in Different Domains

b. Record Absolute recording mode – Run Test Cases in Particular Domain.

Running Test Cases

Run a Test Case

Click the Run button to run the currently displayed test case. Run a Test Suite Click the Run All button to run all the test cases in the currently loaded test suite.

Stop and Start

The Pause button can be used to stop the test case while it is running. The icon of this button then changes to indicate the Resume button. To continue click Resume.

Stop in the Middle

You can set a breakpoint in the test case to cause it to stop on a particular command. This is useful for debugging your test case. To set a breakpoint, select a command, right-click, and from the context menu select Toggle Breakpoint.

Start from the Middle

You can tell the IDE to begin running from a specific command in the middle of the test case. This also is used for debugging. To set a start point, select a command, right-click, and from the context menu select Set/Clear Start Point.

Run Any Single Command

Double-click any single command to run it by itself. This is useful when writing a single command. It lets you immediately test a command you are constructing, when you are not sure if it is correct. You can double-click it to see if it runs correctly. This is also available from the context menu.

Test Suite: A test suite is a collection of tests. Often one will run all the tests in a test suite as one continuous batch-job. When using Selenium-IDE, test suites also can be defined using a simple HTML file. The syntax again is simple. An HTML table defines a list of tests where each row defines the filesystem path to each test.

2. Using Selenium IDE, Write a test suite containing minimum 4 test cases.

Requirements

- Download Selenium IDE 1.5 or above addon for google chrome.
- The webpage used in this example is a java Script program 'Menu Driven Arithmetic Operations'
- A java Script for Arithmetic operation.
- Eclipse IDE for web developers.
- Apache Tomcat 7.0 server.

Procedure:-

- Type the html code in eclipse and save as arithmetic.html
- Open Chrome browser→selenium IDE
- Enter project name and url of the arithmetic.html
- Click on Start recording →minimize the selenium window
- Run the Arithmetic program by giving values
- Execution will be recorded in the Selinium IDE
- In Selenium IDE, add 3 more test cases and test suites will be generated.
- Click on the RUN ALL TESTS button in order to run the test suite.

```
<html>
 <head>
  <title> Arithmatic Operation </title>
 <script type="text/javascript">
  var n1,n2,r;
 function add()
   {
      n1=document.myform.n1.value;
      n2=document.myform.n2.value;
       n1=parseFloat(n1);
       n2=parseFloat(n2);
       r=n1+n2;
      document.myform.result.value=r;
    }
 function sub()
 {
  n1=document.myform.n1.value;
  n2=document.myform.n2.value;
  n1=parseFloat(n1);
  n2=parseFloat(n2);
  r=n1-n2;
  document.myform.result.value=r;
 }
 function mul()
{
   n1=document.myform.n1.value;
  n2=document.myform.n2.value;
  n1=parseFloat(n1);
  n2=parseFloat(n2);
  r=n1*n2;
  document.myform.result.value=r;
 }
 function divide()
{
   n1=document.myform.n1.value;
   n2=document.myform.n2.value;
   n1=parseFloat(n1);
   n2=parseFloat(n2);
   r=n1/n2;
   document.myform.result.value=r;
 }
</script>
 </head>
 <body>
 <form name="myform">
 <h1 align="center"> Arithmatic Operations</h1> <hr color="red"> <center>
<u>Enter a number in each text box </u>
<br><br>
Number 1:<input type="text" name="n1" value="">
 <br><br>
Number 2:<input type="text" name="n2" value="">
<br><br>
<input type="button" value="Add" onClick="add()">
<input type="button" value="Subtract" onClick="sub()">
<input type="button" value="Multiply" onClick="mul()" >
<input type="button" value="Divide" onClick="divide()">
<br><br>
<font color="red">Result is:  <input type="text" name="result" value="">
</center>
</font>
</form>
</body>
</html>
```

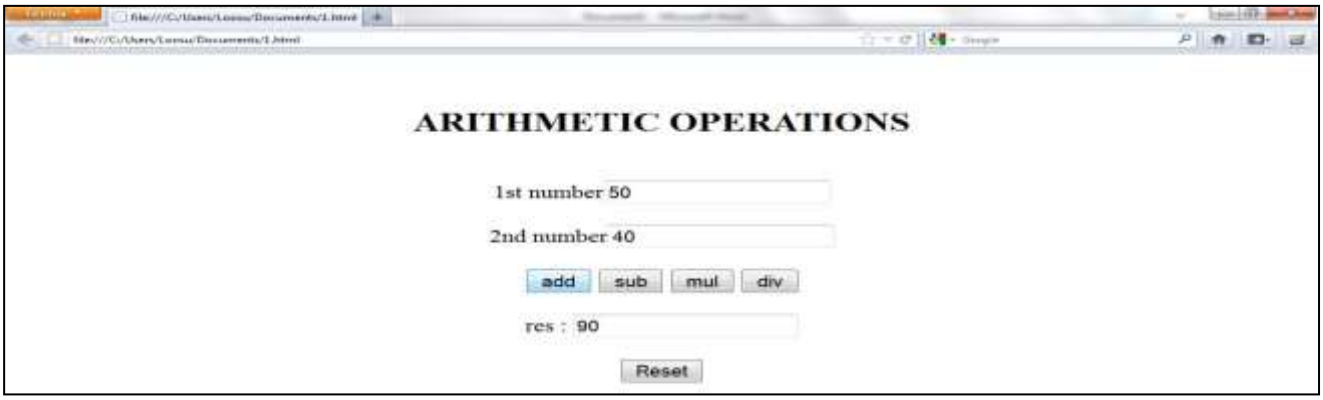
Test case 1	Command	Target	Value
1	open	/st/arithmetic.html	
2	set window size	1050x708	
3	click	name =n1	
4	type	name=n1	4
5	click	name =n2	
6	type	name=n2	2
7	click	css=input:nth-child(10)	
8	store value	name=result	sum
9	echo		‘Addition result is ${sum}’
10	close		

Test case 2	Command	Target	Value
1	open	/st/arithmetic.html	
2	set window size	1050x708	
3	click	name =n1	
4	type	name=n1	4
5	click	name =n2	
6	type	name=n2	2
7	click	css=input:nth-child(11)	
8	store value	name=result	difference
9	echo		‘Substraction result is ${difference}’
10	close		

Test case 3	Command	Target	Value
1	open	/st/arithmetic.html	
2	set window size	1050x708	
3	click	name =n1	
4	type	name=n1	4
5	click	name =n2	
6	type	name=n2	2
7	click	css=input:nth-child(12)	
8	store value	name=result	product
9	echo		‘Multiplication result is ${product}’
10	close		

Test case 4	Command	Target	Value
1	open	/st/arithmetic.html	
2	set window size	1050x708	
3	click	name =n1	
4	type	name=n1	4
5	click	name =n2	
6	type	name=n2	2
7	click	css=input:nth-child(13)	
8	store value	name=result	quotient
9	echo		‘Division result is ${quotient}’
10	close		

OUTPUT:

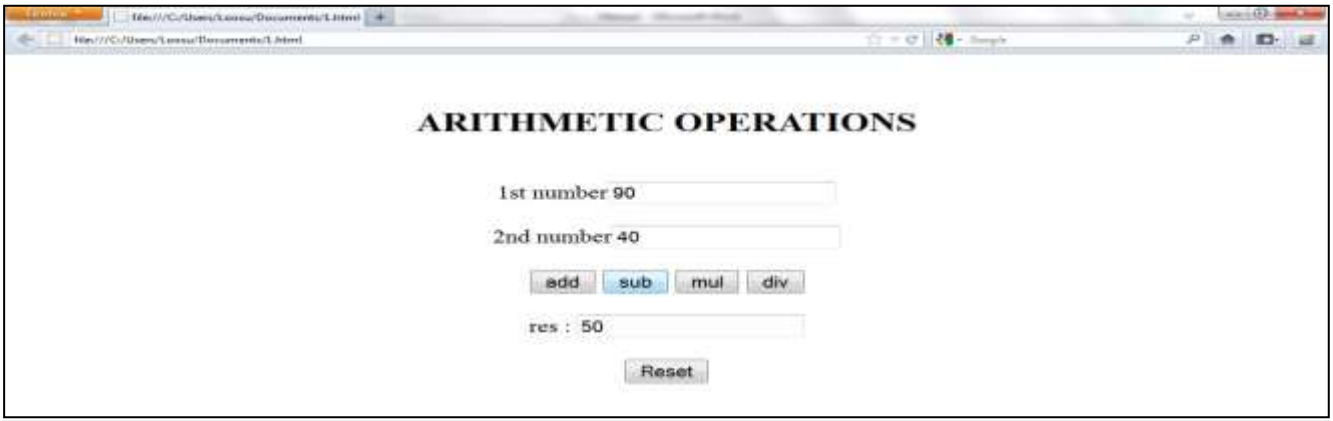


ARITHMETIC OPERATIONS

1st number 50

2nd number 40

res : 90

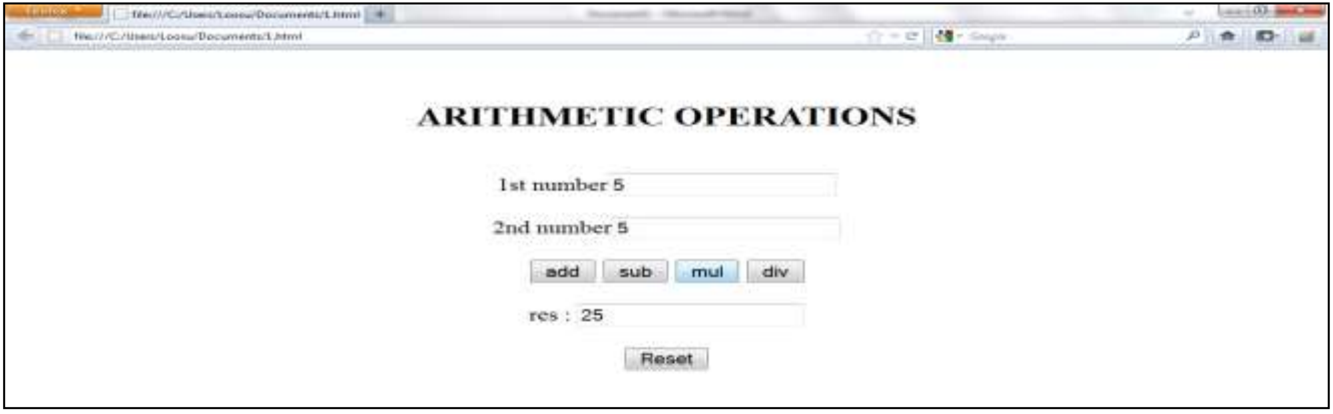


ARITHMETIC OPERATIONS

1st number 90

2nd number 40

res : 50

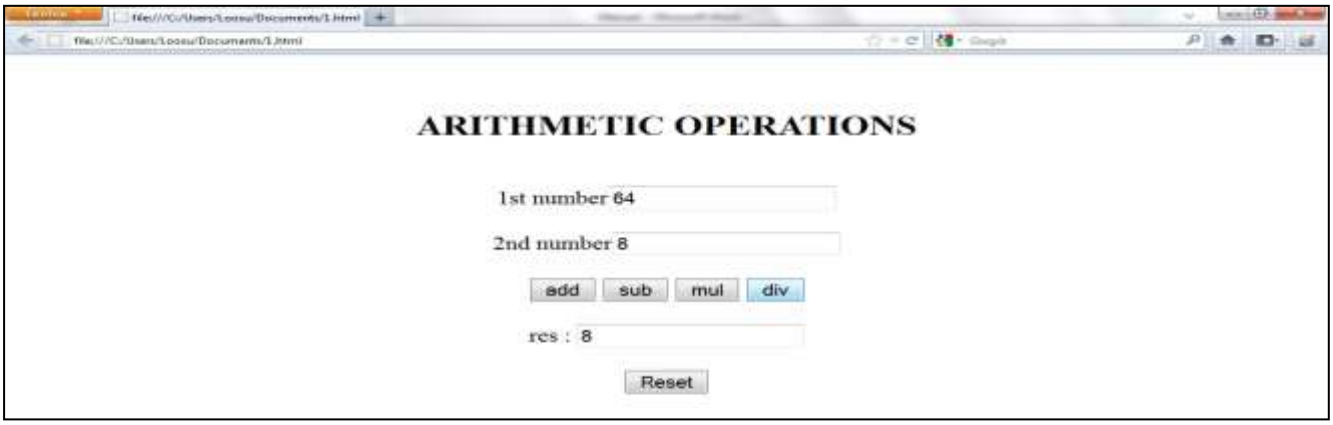


ARITHMETIC OPERATIONS

1st number 5

2nd number 5

res : 25



ARITHMETIC OPERATIONS

1st number 64

2nd number 8

res : 8

3.Understanding Test Automation. Using Selenium write a simple test script to validate each field of the registration page (Eg: Face book Registration Page)

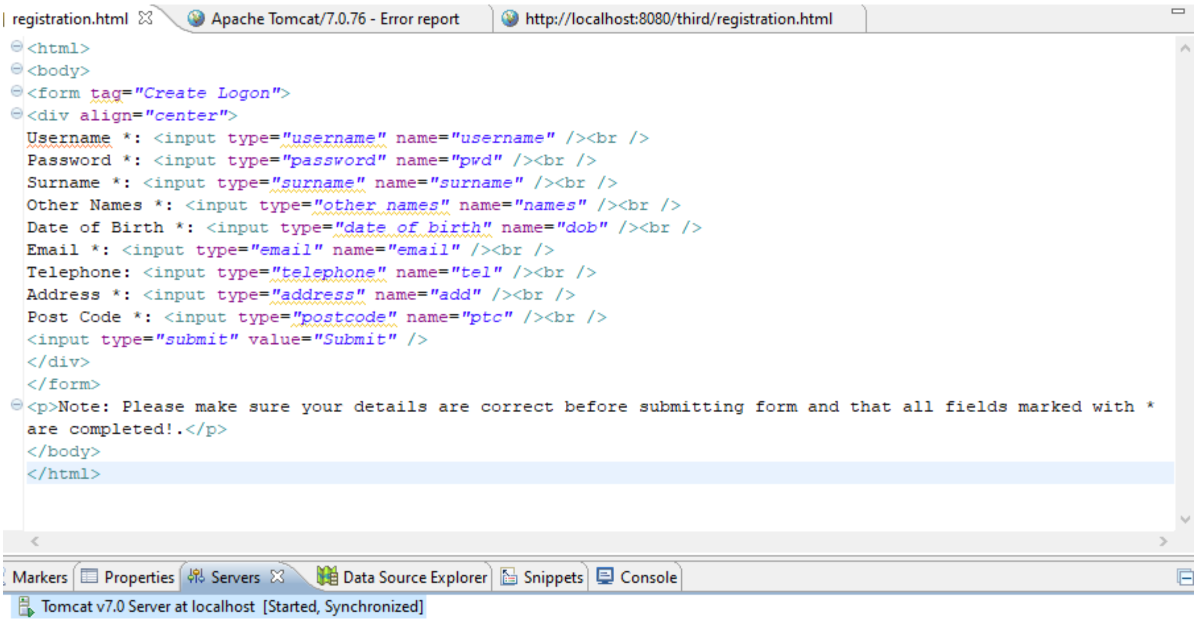
Requirements

- Download Selenium IDE 1.5 or above addon for chrome from http://seleniumhq.org/download/
- The webpage used in this example is a java Script program ‘Menu Driven Arithmetic Operations’
- A java Script for Arithmetic operation.
- Google Chrome

Procedure:-

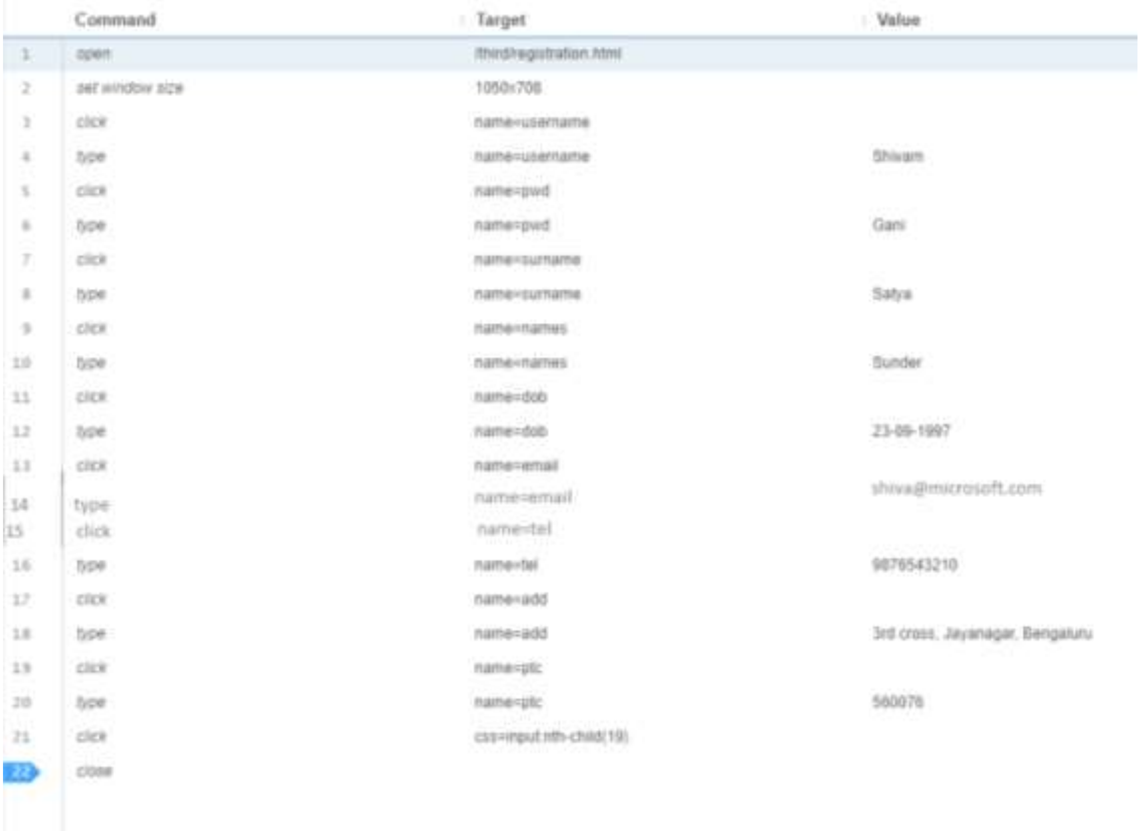
- Type the html code in eclipse and save as registration.html
- Open Chrome browser→selenium IDE
- Enter project name and url of the arithmetic.html
- Click on Start recording →minimize the selenium window
- Run the Registration program and giving values in each text box press submit button.
- Execution will be recorded in the Selinium IDE
- Click on the RUN TEST button in order to run the test suite.

```
    <html>
    <body>
            <form tag="Create Logon">
                    <div align="center">
                            Username *: <input type="username" name="username" /><br />
                            Password *: <input type="password" name="pwd" /><br />
                            Surname *: <input type="surname" name="surname" /><br />
                            Other Names *: <input type="other names" name="names" /><br />
                            Date of Birth *: <input type="date of birth" name="dob" /><br />
                            Email *: <input type="email" name="email" /><br />
                            Telephone: <input type="telephone" name="tel" /><br />
                            Address *: <input type="address" name="add" /><br />
                            Post Code *: <input type="postcode" name="ptc" /><br />
                    <input type="submit" value="Submit" />
                    </div>
            </form>
    <p>Note: Please make sure your details are correct before submitting form and that all fields marked with * are completed!.</p>
    </body>
</html>
```


registration.html
Apache Tomcat/7.0.76 - Error report
http://localhost:8080/third/registration.html
Markers
Properties
Servers
Data Source Explorer
Snippets
Console

```
<html>
<body>
<form tag="Create Logon">
<div align="center">
Username *: <input type="username" name="username" /><br />
Password *: <input type="password" name="pwd" /><br />
Surname *: <input type="surname" name="surname" /><br />
Other Names *: <input type="other names" name="names" /><br />
Date of Birth *: <input type="date of birth" name="dob" /><br />
Email *: <input type="email" name="email" /><br />
Telephone: <input type="telephone" name="tel" /><br />
Address *: <input type="address" name="add" /><br />
Post Code *: <input type="postcode" name="ptc" /><br />
<input type="submit" value="Submit" />
</div>
</form>
<p>Note: Please make sure your details are correct before submitting form and that all fields marked with *
are completed!.</p>
</body>
</html>
```

Tomcat v7.0 Server at localhost [Started, Synchronized]



	Command	Target	Value
1	open	/third/registration.html	
2	set window size	1050x708	
3	click	name=username	
4	type	name=username	Shivam
5	click	name=pwd	
6	type	name=pwd	Gani
7	click	name=surname	
8	type	name=surname	Satya
9	click	name=names	
10	type	name=names	Sunder
11	click	name=dob	
12	type	name=dob	23-09-1997
13	click	name=email	
14	type	name=email	shiva@microsoft.com
15	click	name=tel	
16	type	name=tel	9876543210
17	click	name=add	
18	type	name=add	3rd cross, Jayanagar, Bengaluru
19	click	name=ptc	
20	type	name=ptc	560078
21	click	css=input:nth-child(19)	
22	close		

4. Install Selenium server and demonstrate it using a script in Java/PHP.

Requirements:

- Download the following :
  selenium-server-standalone-2.32.0 selenium-java-client-driver from http://seleniumhq.org/download/ save these 2 jar files under
  C:\Program Files (x86)\java\jdk1.6.0\bin
  (You can use jdk6 and above versions of java)
- Download 'Eclipse IDE for java developers' from http://www.eclipse.org/downloads/. This is not an installable file. So just copy the file under C: drive. whenever you need to write test code in eclipse just double click on the eclipse application inside the eclipse folder.
- Firefox version 10 is required.

Procedure:-

- Type the html code in the notepad and save that as GCD.html
- Open eclipse application → give the folder name where you want to store your files. the default will be ' workspace '
- Then go to file→new→java project.
- You will get Create java project window , Name the project to st → click finish. Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class → you will get new java class window →name the class as Gcd → click finish. After writing this code if u get red lines under the selenium then include the selenium-server-standalone-2.32.0.jar and selenium-java-clientdriver.jar files
- The steps are :
- Right click on the st folder → click on properties → click on Java Build path → then select the libraries tab → click on Add External JARs → browse for selenium-serverstandalone-2.32.0.jar → click open → again click on Add External JARs → browse for selenium-java-clientdriver.jar → click open → click ok.
- To run the above program
  First open the command prompt, go to the C:\Program Files (x86)\java\jdk1.6.0_25\bin folder ->run/write the command java –jar selenium-server-standalone-2.32.0.jar 4444
- Click on run button in eclipse the output will be displayed the console.

Java script to develop a web page which calculates the GCD of 2 numbers. Save this file on desktop and save as GCD.html

```
<html>
<head>
<script type="text/javascript">
 function gcd()
   {
    var x,y;
    x=parseInt(document.myform.n1.value);
    y=parseInt(document.myform.n2.value);
    while(x!=y)
   {
   if(x>y)
          x=x-y;
   else
          y=y-x;
   }
  document.myform.result.value=x;
 }
 </script>
 </head>
<body>
<h1 align="center"> Program to calculate gcd of two numbers </h1> <hr color="red">
<center> Enter two numbers : <form name="myform">
 Number 1 : <input type="text" name="n1" value=""> <br> <br>
 Number 2 : <input type="text" name="n2" value=""> <br> <br>
 <input type="button" value="Get GCD" onClick="gcd()"> <br> <br>
  GCD is : <input type="text" name="result" value="">
 </form>
 </body>
 </html>
```

Java test script for testing the GCD webpage. (write this code in eclipse environment).

```
import com.thoughtworks.selenium.*;
import org.junit.After;
import org.junit.Before;
import org.junit.Test;
@SuppressWarnings("deprecation")

public class GcdTest extends SeleneseTestCase {

   @Before

 public void setUp() throws Exception {

 selenium = new DefaultSelenium ("localhost", 4444, "*firefox", "file:///C:/Users/RJSP/Desktop/GCD.html");

selenium.start();

 }


 @Test

 public void testGcd() throws Exception {

   selenium.setSpeed("2000");

   selenium.open("file:///C:/Users/RJSP/Desktop/GCD.html");

   selenium.windowMaximize();

   selenium.type("name=n1", "5");

   selenium.type("name=n2", "6");

   selenium.click("css=input[type=\"button\"]");

   String result = selenium.getValue("name=result");

   System.out.println("the gcd is : " +result);

  }


 @After

 public void tearDown() throws Exception {

 selenium.stop();

 }

 }
```

Write the Above code in eclipse by following the below steps

- Open eclipse application-> give the folder name where you want to store your files. the default will be ‘ workspace ‘
- Then go to file□new□java project.
- You will get Create java project window , Name the project to st □ click finish.
- Double click on the new project st on the package explorer
- you will get src folder and JRE System Library
- right click on the src folder□go to new□click on the class
- you will get new java class window, name the class as GcdTest
- click finish.

Note: Make sure that the path of your GCD.html file must be correct , in this example it is file:///C:/Users/RJSP/Desktop/GCD.html

After writing this code if you get red lines under the selenium then include the selenium-server-standalone-2.32.0.jar and selenium-java-clientdriver.jar files.

The steps are : Right click on the st folder→ click on properties→click on Java Build path→ then select the libraries tab → click on Add External JARs → browse for

selenium-server-standalone-2.32.0→ click open→ again click on Add External JARs → browse for

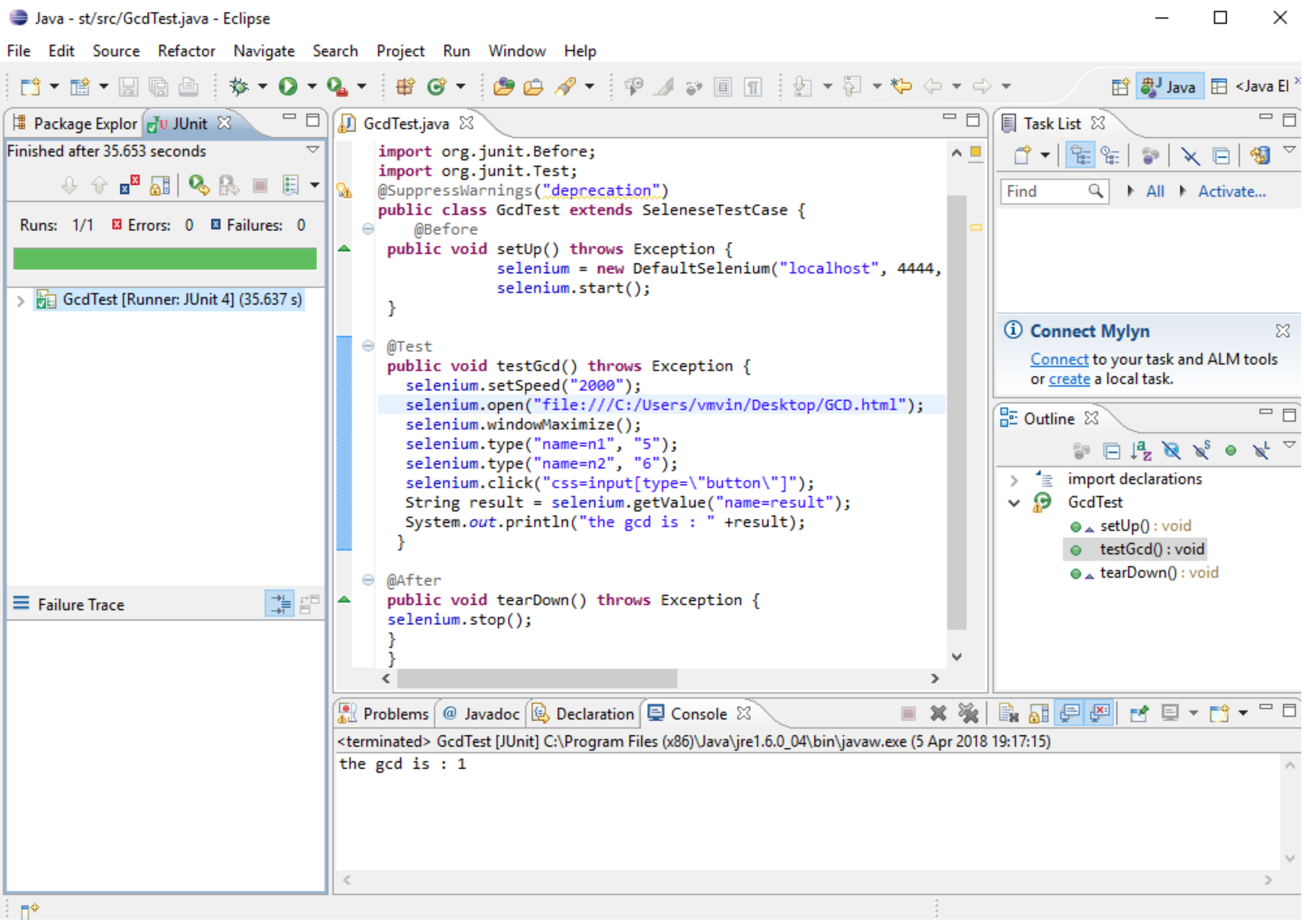
selenium-java-clientdriver → click open → click ok.

To run the above program

- First open the command prompt
- go to the jdk1.6.0_26\bin folder
- run/write the command

```
java  –jar  selenium-server-standalone-2.32.0.jar   4444
```

Then click on run button in eclipse



Finished after 35.653 seconds

Runs: 1/1 Errors: 0 Failures: 0

GcdTest [Runner: JUnit 4] (35.637 s)

```
import org.junit.Before;
import org.junit.Test;
@SuppressWarnings("deprecation")
public class GcdTest extends SeleneseTestCase {
    @Before
 public void setUp() throws Exception {
            selenium = new DefaultSelenium("localhost", 4444,
            selenium.start();
 }

 @Test
 public void testGcd() throws Exception {
   selenium.setSpeed("2000");
   selenium.open("file:///C:/Users/vmvin/Desktop/GCD.html");
   selenium.windowMaximize();
   selenium.type("name=n1", "5");
   selenium.type("name=n2", "6");
   selenium.click("css=input[type=\"button\"]");
   String result = selenium.getValue("name=result");
   System.out.println("the gcd is : " +result);
  }

 @After
 public void tearDown() throws Exception {
 selenium.stop();
 }
 }
```

```
<terminated> GcdTest [JUnit] C:\Program Files (x86)\Java\jre1.6.0_04\bin\javaw.exe (5 Apr 2018 19:17:15)
the gcd is : 1
```

5. Conduct a test suite for any two web sites.

Requirements

- Download Selenium IDE 1.5 or above addon for chrome from http://seleniumhq.org/download/
- Google Chrome
- URLs of any two websites.

Procedure:-

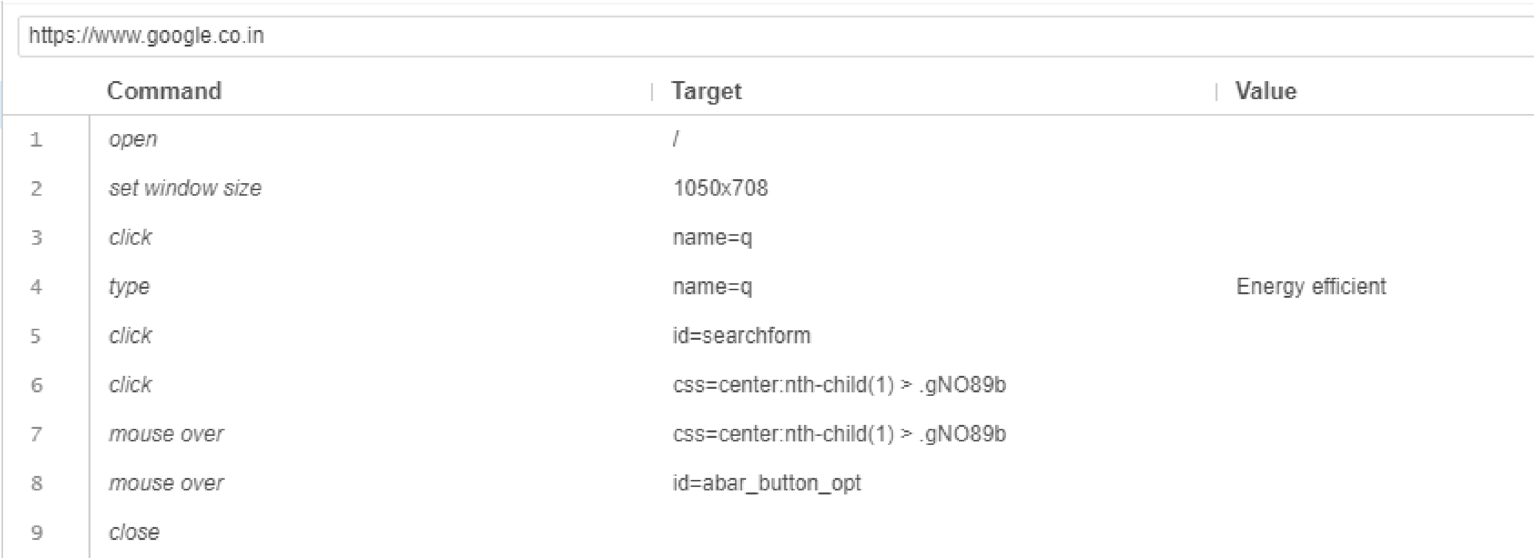
- Open Chrome browser→selenium IDE.
- Type the project name and URL of the first website.
- Click on Start recording →minimize the selenium window.
- Click the text boxes and other components of the website → stop recording and save testcase as website1.
- Create new testcase → start recording and visit another website →click the components in the website and stop recording→ save testcase as website2.
- Click on play all test cases button in the selenium IDE.

TC'S #1:

- Open selenium IDE and type URL (Example : Type www.google.co.in)
- Type “energy efficient” in the Google Search Input Box
- Click outside on an empty spot
- Click Search Button
- Verify the Text Present as “energy efficient”
- Assert the Title as “energy efficient - Google Search”
- Save the test case as google website.

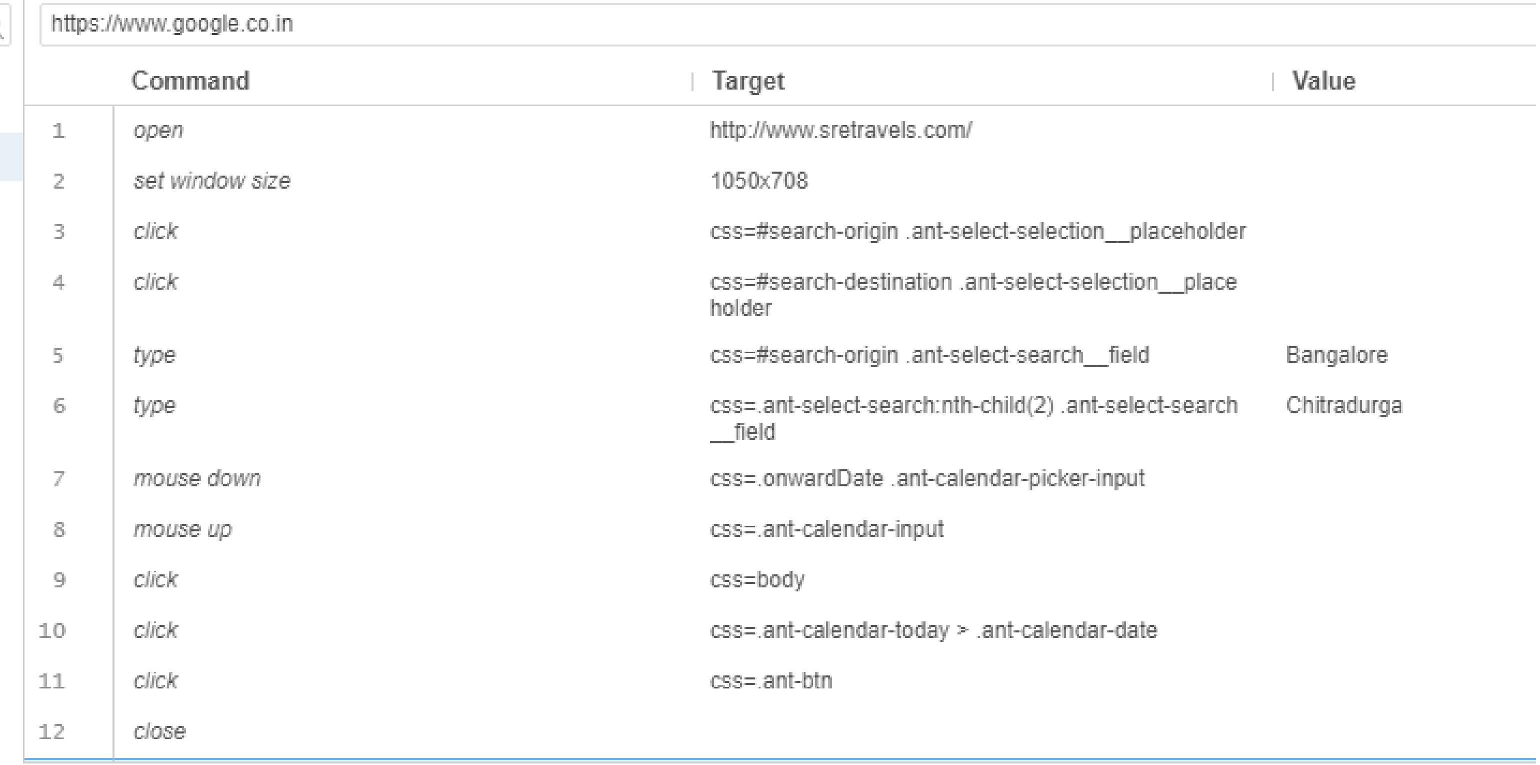
TC#2:

1: Press on + button to add another test case→ start recording
2: In the address bar, Type http://www.sretravels.com
3: Close advertisement→select source and destination cities
4: Click on the date → select today's date → click on search button
5: Wait for Search Results to come
6: Stop recording.
7. Save the test case as sretravels website.



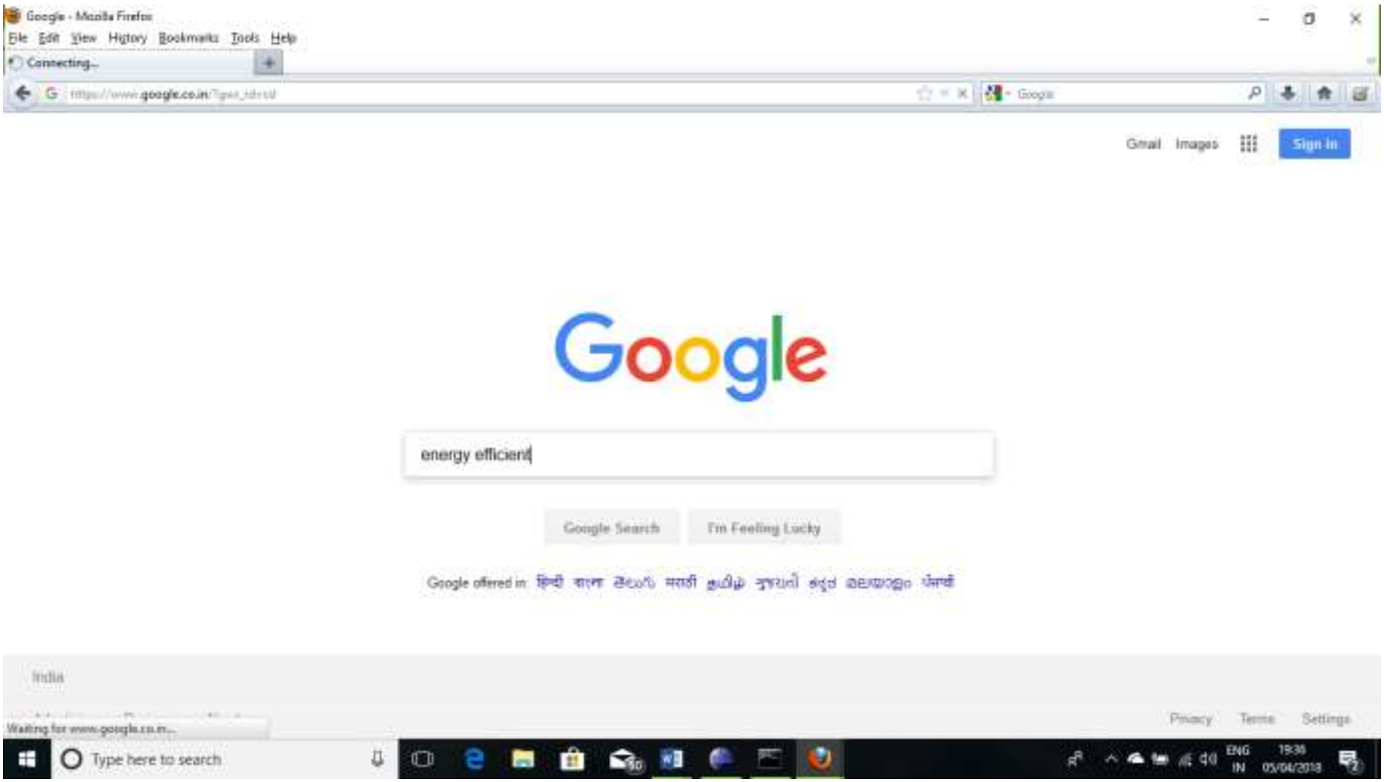
https://www.google.co.in

	Command	Target	Value
1	*open*	/	
2	*set window size*	1050x708	
3	*click*	name=q	
4	*type*	name=q	Energy efficient
5	*click*	id=searchform	
6	*click*	css=center:nth-child(1) > .gNO89b	
7	*mouse over*	css=center:nth-child(1) > .gNO89b	
8	*mouse over*	id=abar_button_opt	
9	*close*		

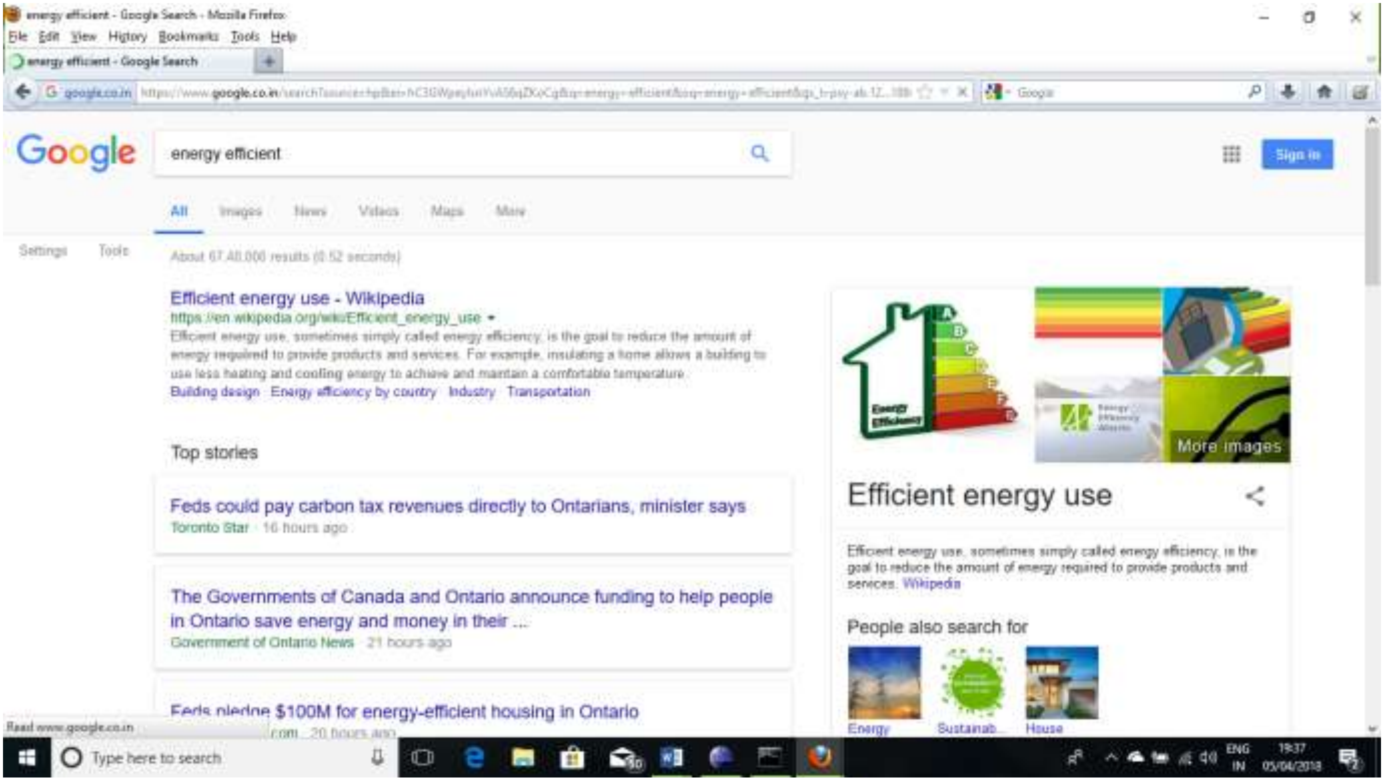


https://www.google.co.in

	Command	Target	Value
1	*open*	http://www.sretravels.com/	
2	*set window size*	1050x708	
3	*click*	css=#search-origin .ant-select-selection__placeholder	
4	*click*	css=#search-destination .ant-select-selection__placeholder	
5	*type*	css=#search-origin .ant-select-search__field	Bangalore
6	*type*	css=.ant-select-search:nth-child(2) .ant-select-search__field	Chitradurga
7	*mouse down*	css=.onwardDate .ant-calendar-picker-input	
8	*mouse up*	css=.ant-calendar-input	
9	*click*	css=body	
10	*click*	css=.ant-calendar-today > .ant-calendar-date	
11	*click*	css=.ant-btn	
12	*close*		


Google - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Connecting...
https://www.google.co.in/?gws_rd=ssl
Google
Gmail
Images
Sign in
Google
Google Search
I'm Feeling Lucky
Google offered in: हिन्दी বাংলা తెలుగు मराठी தமிழ் ગુજરાતી ಕನ್ನಡ മലയാളം ਪੰਜਾਬੀ
India
Privacy
Terms
Settings
Waiting for www.google.co.in...
Type here to search
ENG IN 19:36 05/04/2018

energy efficient



energy efficient

About 67,40,000 results (0.52 seconds)

Efficient energy use - Wikipedia

https://en.wikipedia.org/wiki/Efficient_energy_use

Efficient energy use, sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. For example, insulating a home allows a building to use less heating and cooling energy to achieve and maintain a comfortable temperature.

Building design · Energy efficiency by country · Industry · Transportation

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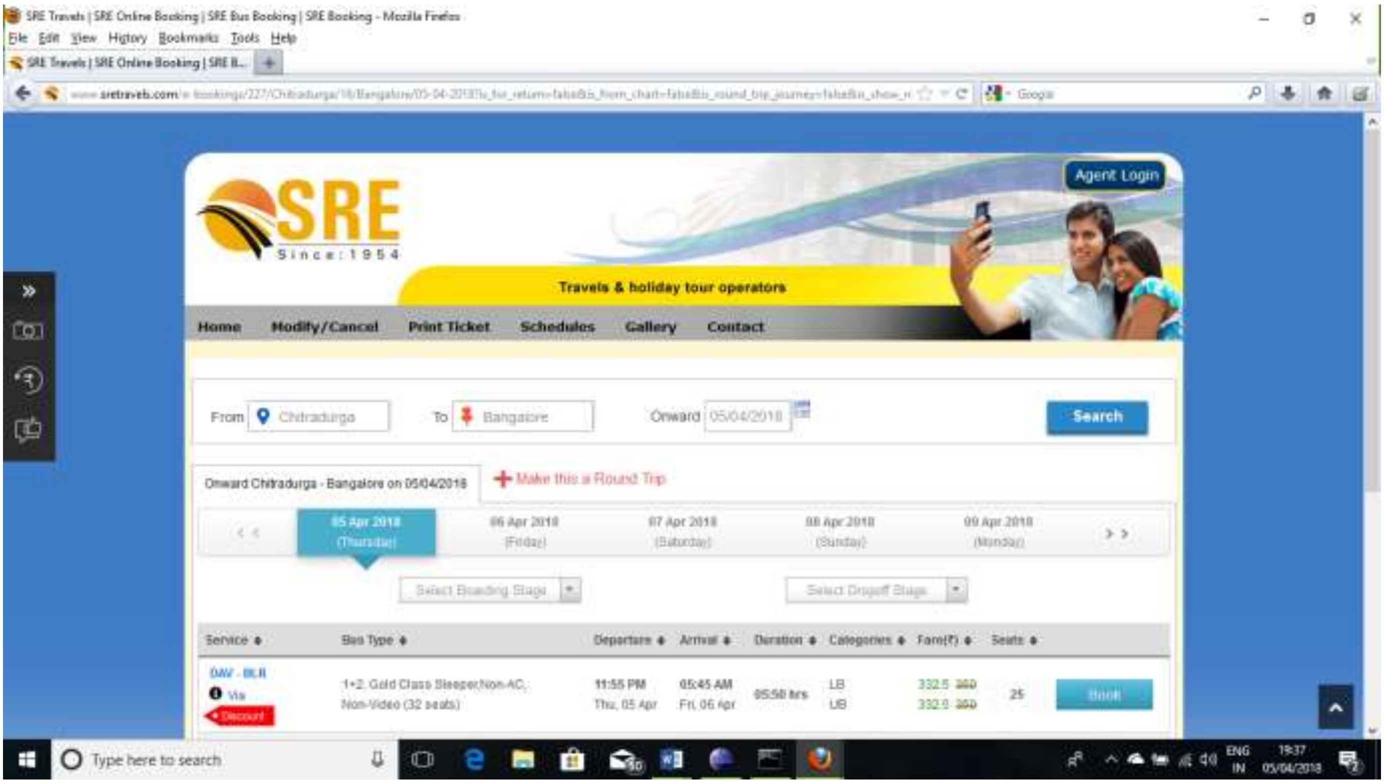
.com · 20 hours ago

Efficient energy use

Efficient energy use, sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Wikipedia

People also search for

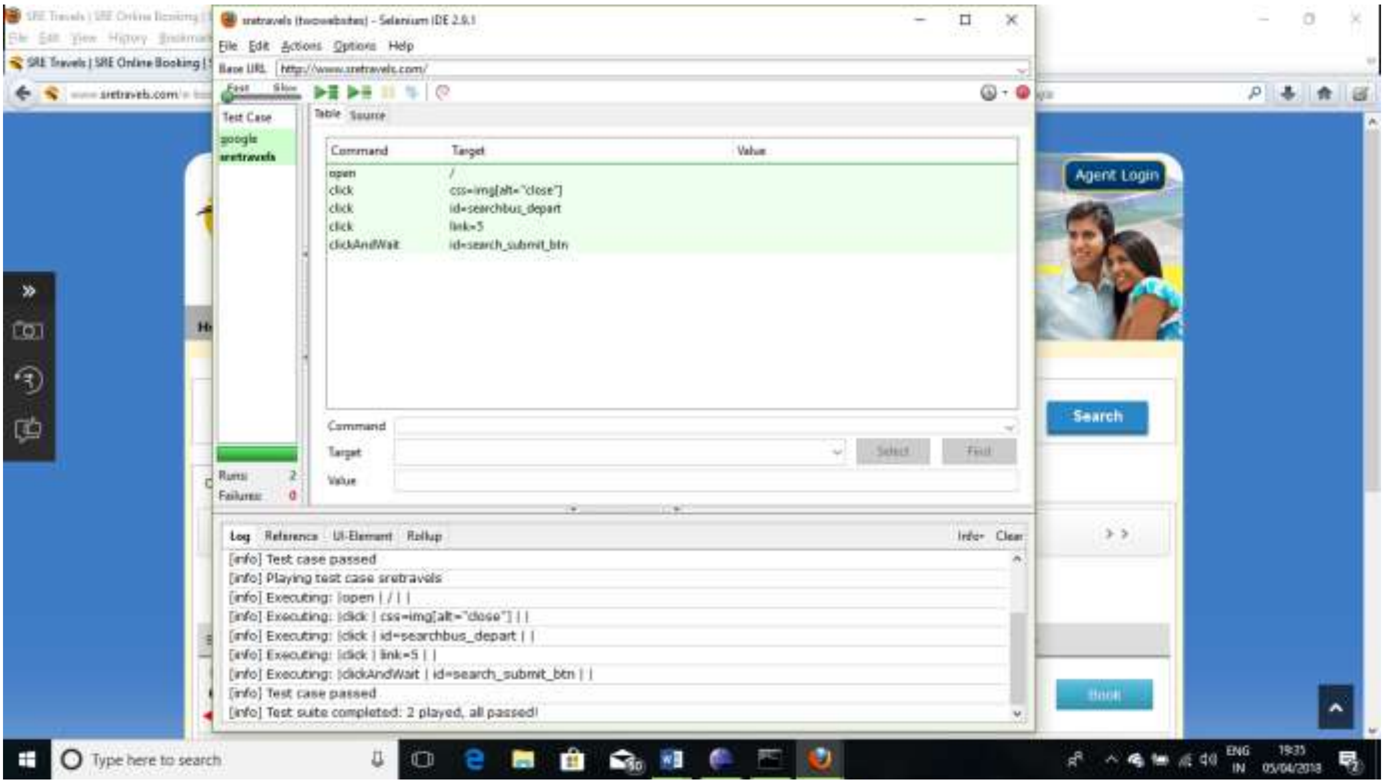

SRE Travels | SRE Online Booking | SRE Bus Booking | SRE Booking - Mozilla Firefox
File Edit View History Bookmarks Tools Help
SRE Travels | SRE Online Booking | SRE B...
SRE
Since:1954
Agent Login
Travels & holiday tour operators
Home
Modify/Cancel
Print Ticket
Schedules
Gallery
Contact
Search
+ Make this a Round Trip
Select Boarding Stage
Select Dropoff Stage
Book
Type here to search

From: Chitradurga To: Bangalore Onward: 05/04/2018

Onward Chitradurga - Bangalore on 05/04/2018

05 Apr 2018 (Thursday) | 06 Apr 2018 (Friday) | 07 Apr 2018 (Saturday) | 08 Apr 2018 (Sunday) | 09 Apr 2018 (Monday)

Service	Bus Type	Departure	Arrival	Duration	Categories	Fare(₹)	Seats
DAV - BLR Via Discount	1+2, Gold Class Sleeper,Non-AC, Non-Video (32 seats)	11:55 PM Thu, 05 Apr	05:45 AM Fri, 06 Apr	05:50 hrs	LB UB	332.5 ~~350~~ 332.5 ~~350~~	25



Base URL: http://www.sretravels.com/

Command	Target	Value
open	/	
click	css=img[alt="close"]	
click	id=searchbus_depart	
click	link=5	
clickAndWait	id=search_submit_btn	

Runs: 2
Failures: 0

```
[info] Test case passed
[info] Playing test case sretravels
[info] Executing: |open | / | |
[info] Executing: |click | css=img[alt="close"] | |
[info] Executing: |click | id=searchbus_depart | |
[info] Executing: |click | link=5 | |
[info] Executing: |clickAndWait | id=search_submit_btn | |
[info] Test case passed
[info] Test suite completed: 2 played, all passed!
```

6. Write and test a program to login a specific web page.

Requirements:

- Eclipse for java developers.
- Selenium RC.
- Before running the code in eclipse make sure your selenium RC server is running
  - First open the command prompt, go to the C:\Program Files (x86)\java\jdk1.6.0_25\bin folder ->run/write the command java –jar selenium-server-standalone-2.32.0.jar 4444

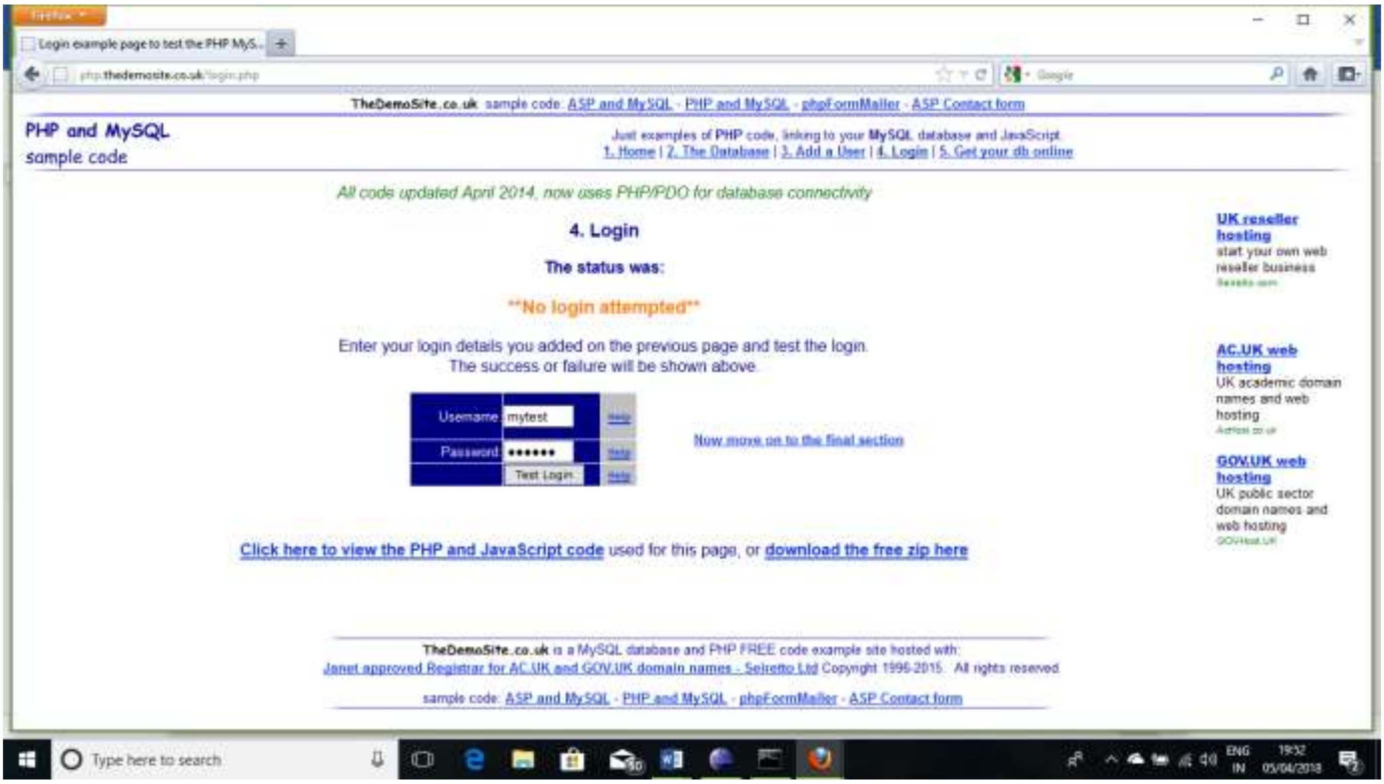
Procedure:-

- Open eclipse application → give the folder name where you want to store your files. the default will be ‘ workspace ‘
- Then go to file→new→java project.
- You will get Create java project window , Name the project to st → click finish.
- Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class →you will get new java class window →name the class as Login →click finish.
- Type in the java code in that Login.java file
- After writing this code if you get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are :
- Right click on the st folder→ click on properties→ click on Java Build path→ then select the tab libraries→click on Add External JARs→ browse for

  selenium-serverstandalone-2.32.0→click open→again click on Add External JARs →browse for selenium-java-clientdriver→click open→ click ok.
- To run the above program
  First open the command prompt→
  Go to the C:\Program Files (x86)\java\jdk1.6.0_26\bin folder → run/write the command java –jar selenium-server-standalone-2.32.0.jar 4444
- Click on run the output will be displayed the console

```
import com.thoughtworks.selenium.*;
@SuppressWarnings("deprecation")
public class login extends SeleneseTestCase
{
public void setUp() throws Exception
        {
          setUp("http://php.thedemosite.co.uk/","*firefox");
        }
        public void testloginlogout()
        {
         selenium.setSpeed("2000");
         selenium.open("/login.php");
         selenium.windowMaximize();
         selenium.type("//input[@name='username']", "mytest");
         selenium.type("//input[@name='password']", "mytest");
         selenium.click("//input[@type='button']");
         selenium.waitForPageToLoad("50000"); }
}
```

OUTPUT:


Firefox
Login example page to test the PHP MyS...
php.thedemosite.co.uk/login.php
Google
Type here to search
ENG
IN
19:32
05/04/2018

TheDemoSite.co.uk sample code: ASP and MySQL - PHP and MySQL - phpFormMailer - ASP Contact form

PHP and MySQL
sample code

Just examples of PHP code, linking to your MySQL database and JavaScript
1. Home | 2. The Database | 3. Add a User | 4. Login | 5. Get your db online

All code updated April 2014, now uses PHP/PDO for database connectivity

4. Login

The status was:

No login attempted

Enter your login details you added on the previous page and test the login.
The success or failure will be shown above.

Username: mytest Help
Password: •••••• Help
Test Login Help

Now move on to the final section

Click here to view the PHP and JavaScript code used for this page, or download the free zip here

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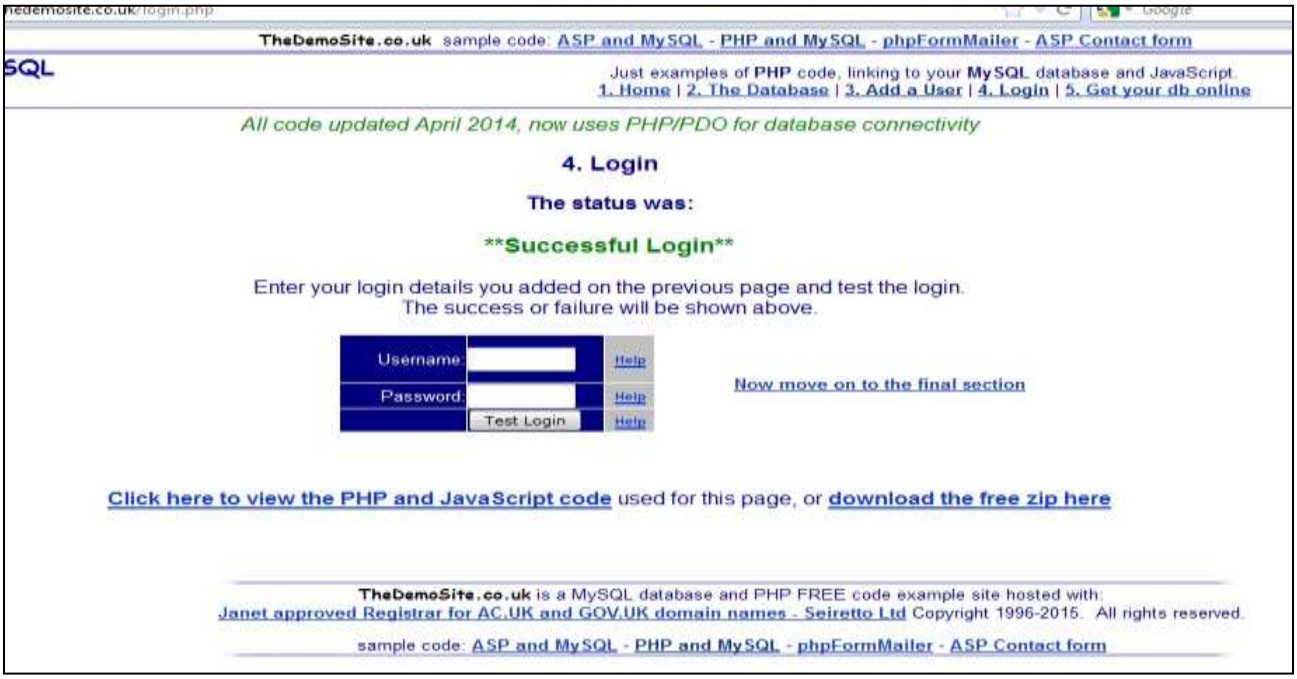
sample code: ASP and MySQL - PHP and MySQL - phpFormMailer - ASP Contact form



hedemosite.co.uk/login.php

TheDemoSite.co.uk sample code: ASP and MySQL - PHP and MySQL - phpFormMailer - ASP Contact form

SQL

Just examples of PHP code, linking to your MySQL database and JavaScript.
1. Home | 2. The Database | 3. Add a User | 4. Login | 5. Get your db online

All code updated April 2014, now uses PHP/PDO for database connectivity

4. Login

The status was:

Successful Login

Enter your login details you added on the previous page and test the login.
The success or failure will be shown above.

Now move on to the final section

Click here to view the PHP and JavaScript code used for this page, or download the free zip here

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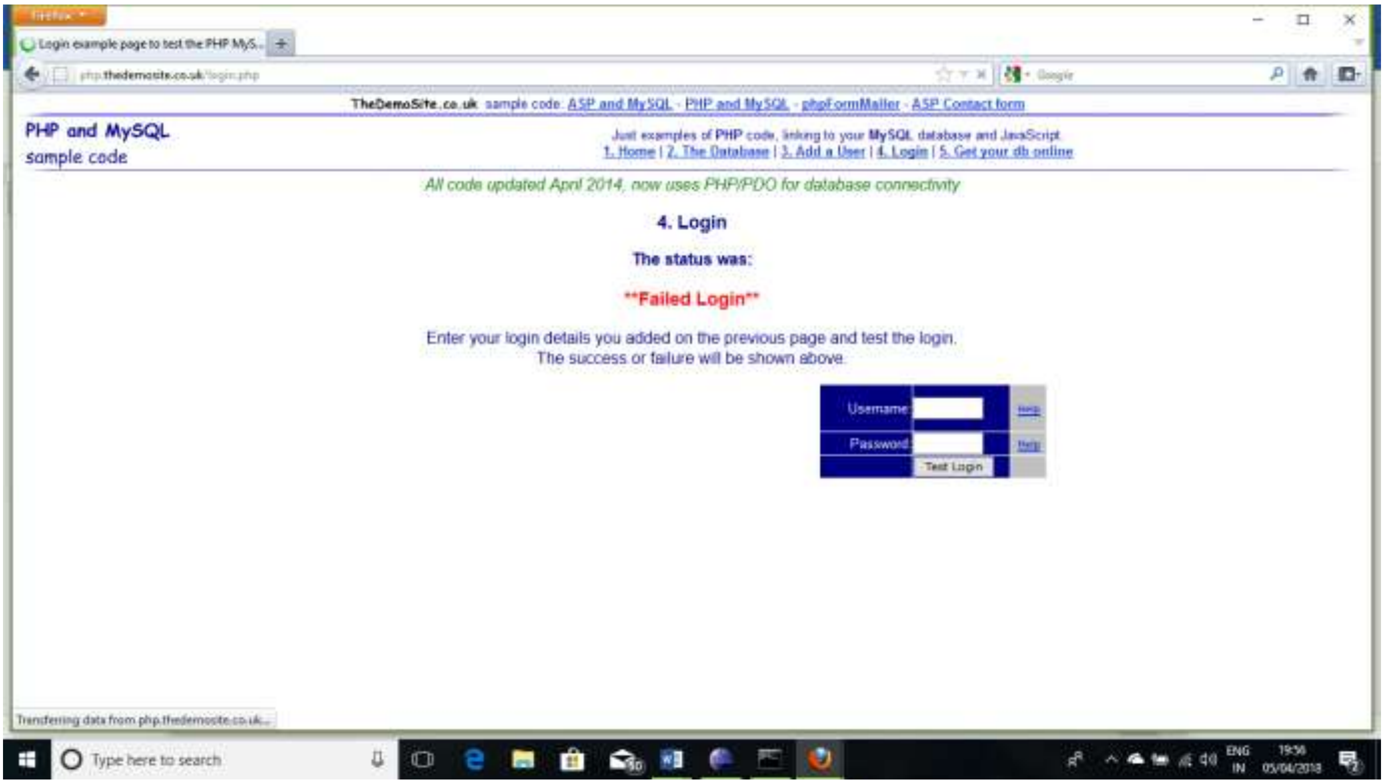
sample code: ASP and MySQL - PHP and MySQL - phpFormMailer - ASP Contact form



Firefox
Login example page to test the PHP MyS...
php.thedemosite.co.uk/login.php
Google

TheDemoSite.co.uk sample code: ASP and MySQL - PHP and MySQL - phpFormMailer - ASP Contact form

PHP and MySQL
sample code

Just examples of PHP code, linking to your MySQL database and JavaScript.
1. Home | 2. The Database | 3. Add a User | 4. Login | 5. Get your db online

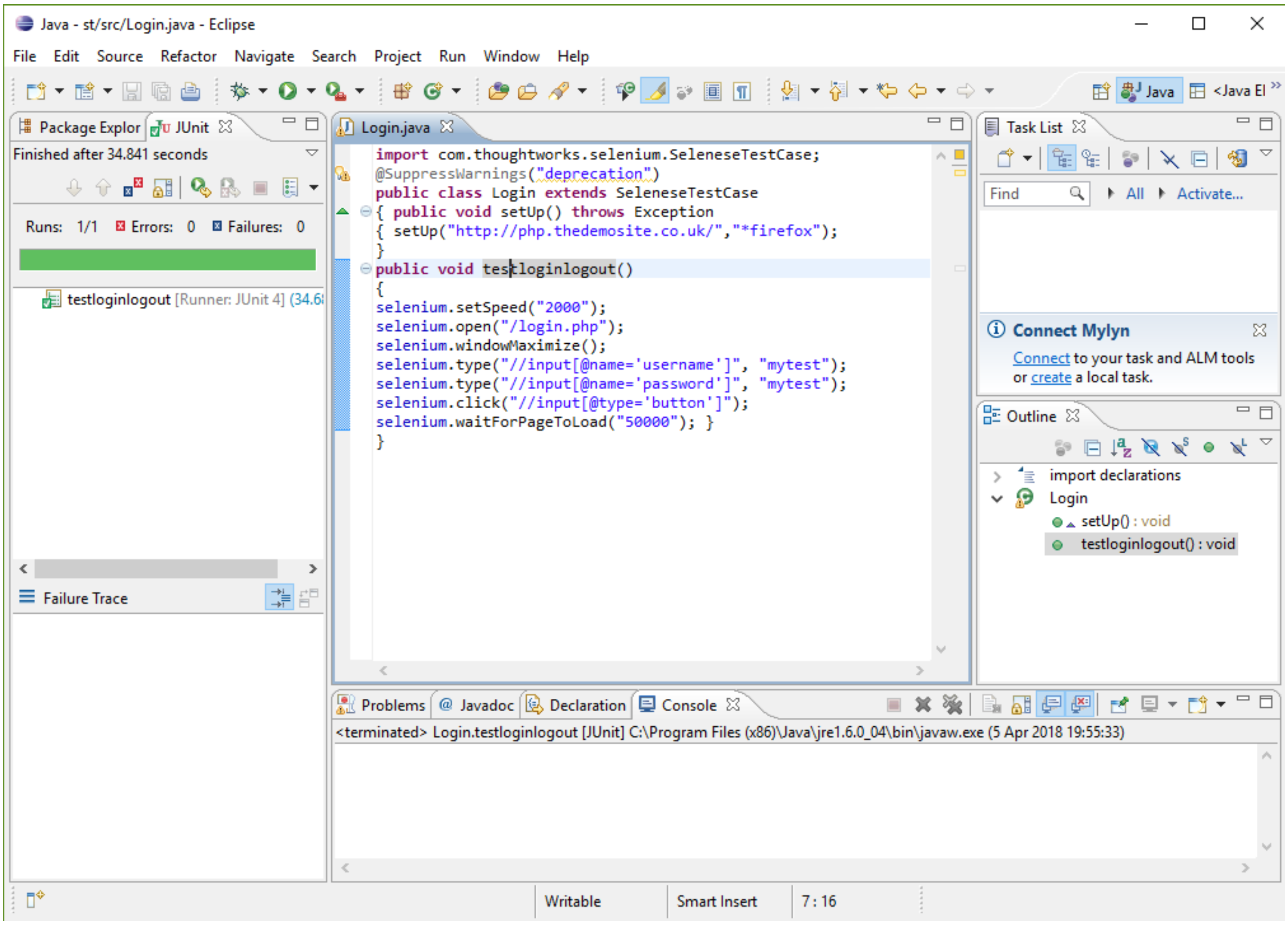
All code updated April 2014, now uses PHP/PDO for database connectivity

4. Login

The status was:

Failed Login

Enter your login details you added on the previous page and test the login.
The success or failure will be shown above.



Finished after 34.841 seconds

Runs: 1/1 Errors: 0 Failures: 0

testloginlogout [Runner: JUnit 4] (34.6

```
import com.thoughtworks.selenium.SeleneseTestCase;
@SuppressWarnings("deprecation")
public class Login extends SeleneseTestCase
{ public void setUp() throws Exception
{ setUp("http://php.thedemosite.co.uk/","*firefox");
}
public void testloginlogout()
{
selenium.setSpeed("2000");
selenium.open("/login.php");
selenium.windowMaximize();
selenium.type("//input[@name='username']", "mytest");
selenium.type("//input[@name='password']", "mytest");
selenium.click("//input[@type='button']");
selenium.waitForPageToLoad("50000"); }
}
```

```
<terminated> Login.testloginlogout [JUnit] C:\Program Files (x86)\Java\jre1.6.0_04\bin\javaw.exe (5 Apr 2018 19:55:33)
```

07.Write test cases to validate a mobile number using one-time pin identification (OTP)

Requirements :

- Eclipse for java developers.

Test Cases for OTP:

1) OTP should be generated within time period.

2) Limitations of number of OTP generation for single authentication.

3) It is received only on registered Mobile Number.

4) Network delay for expiry of One-Time Password.

5) Verify that once expired, it should not be used for any authentication.

6) Verify that once used, it should not be allowed to use again.

7) Verify that resend OTP functionality is working properly.

8) Verify that once user resent the OTP, the old one should be of no use.

9) How many times user can provide invalid OTP?

10) Provide an invalid Phone Number and submit the OTP. Check the validation.

To implement a test case to verify that we get unique OTP every time when we generate it, we are writing a java program:

```
import java.util.*;

public class NewClass
{
    static char[] OTP(int len)
    {
        System.out.println("Generating OTP using random() : ");
        System.out.print("You OTP is : ");

        // Using numeric values
        String numbers = "0123456789";

        // Using random method
        Random rndm_method = new Random();

        char[] otp = new char[len];
        for (int i = 0; i < len; i++)
        {
            // Use of charAt() method : to get character value
            // Use of nextInt() as it is scanning the value as int
            otp[i]=numbers.charAt(rndm_method.nextInt(numbers.length()));
        }
        return otp;
    }
    public static void main(String[] args)
    {
        int length = 4;
        System.out.println(OTP(length));
    }
}
```

Note :

The OTP we are generating will change every time. As we have used random() method to generate the OTP.

Output to be pasted:

```
Generating OTP using random() :

You OTP is : 5291
```

```
Generating OTP using random() :

You OTP is : 8976
```

```
Generating OTP using random() :

You OTP is : 3657
```

```
Generating OTP using random() :

You OTP is : 2640
```

8. Write and Test a program to find out list of employees having salary greater than ₹ 50,000 and age between 30 to 40 years.

Requirements:

- Write this java test code in eclipse. Since we are not using any Selenium object here no need of selenium RC Server to run at the command prompt for this program.
- Since we are dealing with the excel, we need to add the external jar file jxl-2.6 in to the java project.
- Download jxl-2.6.jar and past it in C:\Program Files (x86)\java\jdk1.6.0_25\bin and Follow the same steps as we used to add selenium server and selenium java driver to our java project.

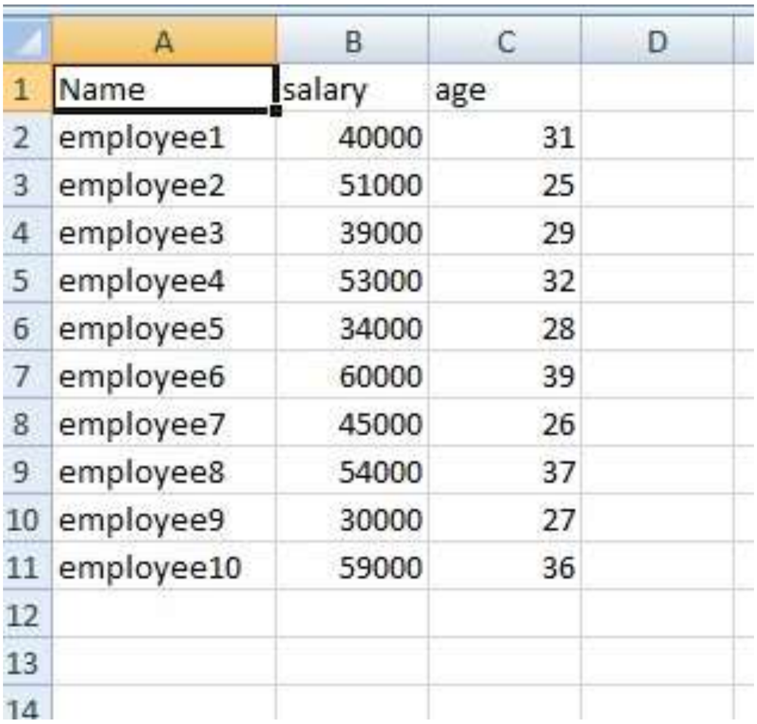
Procedure:-

- Create the Microsoft excel document containing the name of employees and their salary details in the Microsoft excel and save that file as Emp.xls
- Open eclipse application→ give the folder name where you want to store your files. The default workspace will be ‘ workspace ‘
- Then go to file→new→java project.
- You will get Create java project window, Name the project to st → click finish. Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class →you will get new java class window →name the class as Emp → click finish.
- Type in the java code in that Emp.java file
- After writing this code if u get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are:
- Right click on the st folder→ click on properties→ click on Java Build path→ then select the tab libraries→click on Add External JARs→ browse for jxl-2.6.jar
- Click open → Click ok.
- Click on run in eclipse, the output will be displayed the console.

```
import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.CellType;
import jxl.Sheet;
import jxl.Workbook;
import jxl.read.biff.BiffException;
public class Emp
{
              private String inputFile;
                public void setInputFile(String inputFile)
           {
                        this.inputFile = inputFile;
           }
                public void read() throws IOException
           {
                     File inputWorkbook = new File(inputFile);
                     Workbook w;
                     boolean flag=false;
                     boolean flag2=false;
                     int count=0;
                     try
                     {
                               w = Workbook.getWorkbook(inputWorkbook);
                               Sheet sheet = w.getSheet(0);
                                   for (int j = 0; j < sheet.getRows(); j++)
                               {
                                             for (int i = 0; i < sheet.getColumns(); i++)
                                         {
                                                   Cell cell = sheet.getCell(i, j);
                                              if (cell.getType() == CellType.NUMBER)
                                                   {
                                                                  if(Integer.parseInt(cell.getContents())>50000)
                                                             {
                                                                       flag = true;

                                                             }
                                                   }


 if (cell.getType() == CellType.NUMBER)
 {
  if(Integer.parseInt(cell.getContents())>30 && Integer.parseInt(cell.getContents())< 40)
                                                             {
                                                                       flag2 = true;
                                                                        if(flag == true && flag2==true)
```

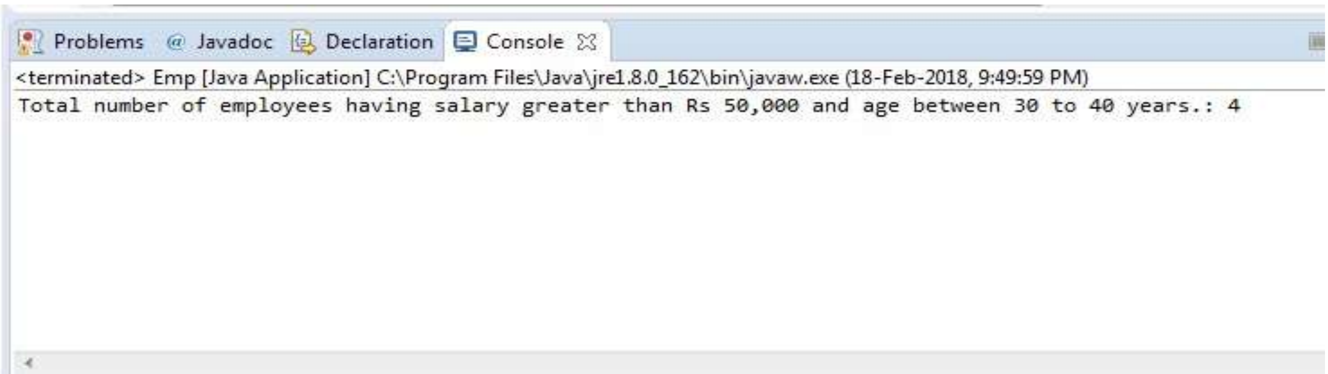
```
                                                                {
                                                                        count++;

                                                                }
                                                                break;
                                                        }
                                                }
                                        }
                                }
System.out.println("Total number of employees having salary greater than ₹ 50,000 and age between 30 to
40 years: " +count);
                        }
                          catch (BiffException e)
                        {
                                  e.printStackTrace();
                        }
                }
 public static void main(String[ ] args) throws IOException
 {
                        Emp test = new Emp();
                        test.setInputFile("C:/Users/RJSP/Desktop/Emp.xls");
                        test.read();
 }
}
```

INPUT FILE : Located in “C:/Users/RJSP/Desktop/Emp.xls”



	A	B	C	D
1	Name	salary	age	
2	employee1	40000	31	
3	employee2	51000	25	
4	employee3	39000	29	
5	employee4	53000	32	
6	employee5	34000	28	
7	employee6	60000	39	
8	employee7	45000	26	
9	employee8	54000	37	
10	employee9	30000	27	
11	employee10	59000	36	
12				
13				
14				

OUTPUT:



```
<terminated> Emp [Java Application] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (18-Feb-2018, 9:49:59 PM)
Total number of employees having salary greater than Rs 50,000 and age between 30 to 40 years.: 4
```

9. Write and test a program to update 10 student records into table into Excel file.

- Write this java test code in eclipse. Since we are not using any Selenium object here no need of selenium RC Server to run at the command prompt for this program.
- This program will create an Excel file Student.xls under the desktop.
- Since we are dealing with the excel, we need to add the external jar file jxl-2.6 in to the java project.
- Download jxl-2.6 and Follow the same steps as we used to add selenium server and selenium java driver to our java project.

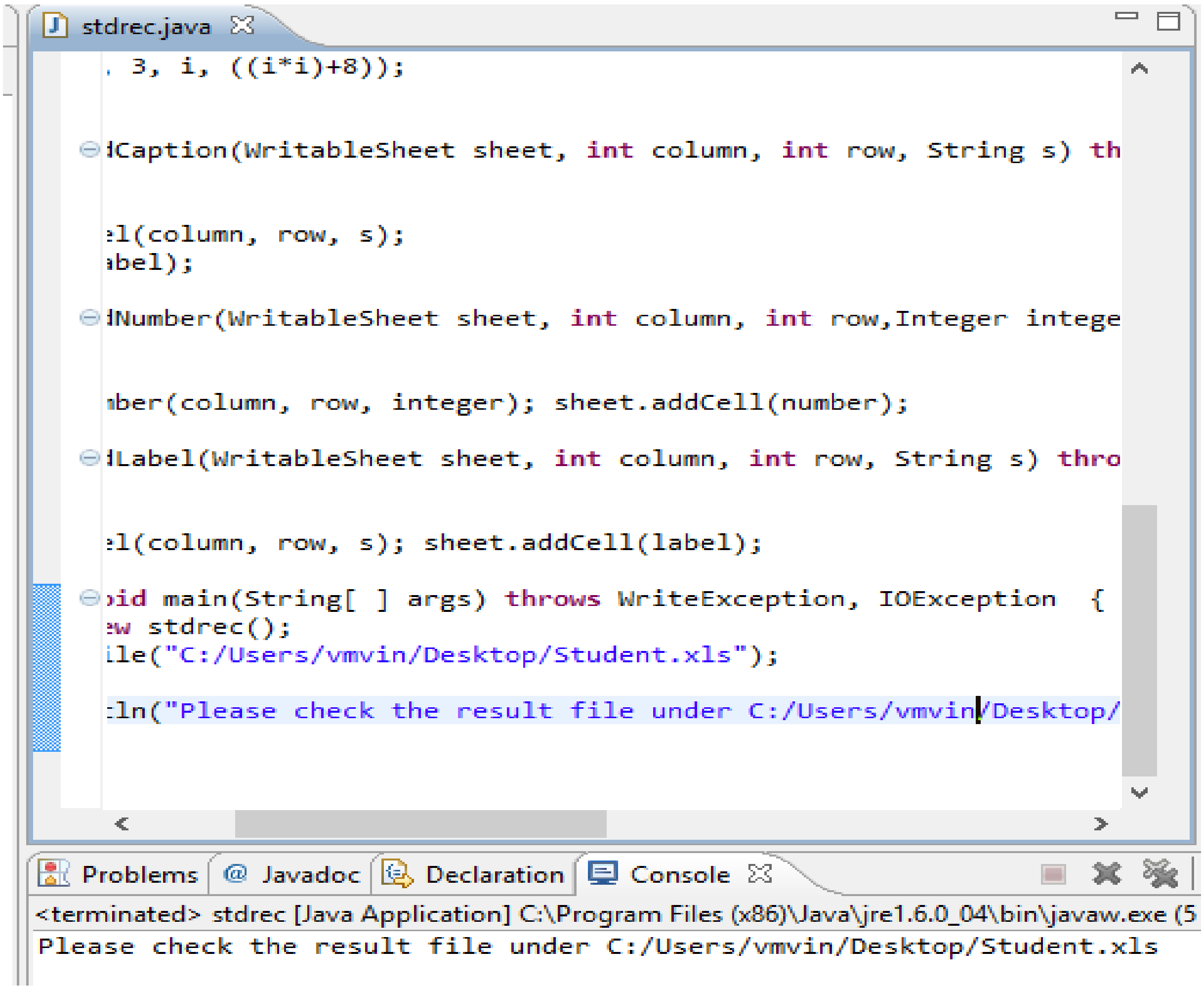
Procedure:-

- Create the blank excel document in the Microsoft excel and save that file as Student.xls
- Open eclipse application→ give the folder name where you want to store your files. The default will be ‘ workspace ‘
- Then go to file→new→java project.
- You will get Create java project window , Name the project to st → click finish. Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class →you will get new java class window →name the class as Student →click finish.
- Type in the java code in that Student.java file
- After writing this code if u get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are:
- Right click on the st folder→ click on properties→ click on Java Build path→ then select the tab libraries→click on Add External JARs→ browse for jxl-2.6.jar file →Click open→ Click ok.
- Click on run button in eclipse, the output will be displayed the console.

```
import java.io.File;
import java.io.IOException;
import jxl.Workbook;
import jxl.write.Label;
import jxl.write.Number;
import jxl.write.WritableSheet;
import jxl.write.WritableWorkbook;
import jxl.write.WriteException;
import jxl.write.biff.RowsExceededException;
public class Stdrec
{
   private String inputFile;
          public void setOutputFile(String inputFile)
          {
            this.inputFile = inputFile;
          }
          public void write() throws IOException, WriteException
          {
                    File file = new File(inputFile);
                    WritableWorkbook workbook = Workbook.createWorkbook(file);
                    workbook.createSheet("Report", 0);
                    WritableSheet    excelSheet    =    workbook.getSheet(0);
                    createLabel(excelSheet);
                    createContent(excelSheet);
                    workbook.write();
                    workbook.close();
          }


          private void createLabel(WritableSheet sheet) throws WriteException
          {
                    addCaption(sheet,    0,    0,    "Name");
                    addCaption(sheet,   1,   0,   "Subject   1");
                    addCaption(sheet,   2,   0,   "Subject   2");
                    addCaption(sheet, 3, 0, "Subject 3");
          }
private void createContent (WritableSheet sheet) throws WriteException, RowsExceededException
          {
                    // Write a few number
                    for (int i = 1; i <10; i++)
                     {
                              // First column
                              addLabel(sheet, 0, i, "Student " + i);
                              // Second column
                              addNumber(sheet, 1, i, ((i*i)+10));
                              addNumber(sheet, 2, i, ((i*i)+6));
```

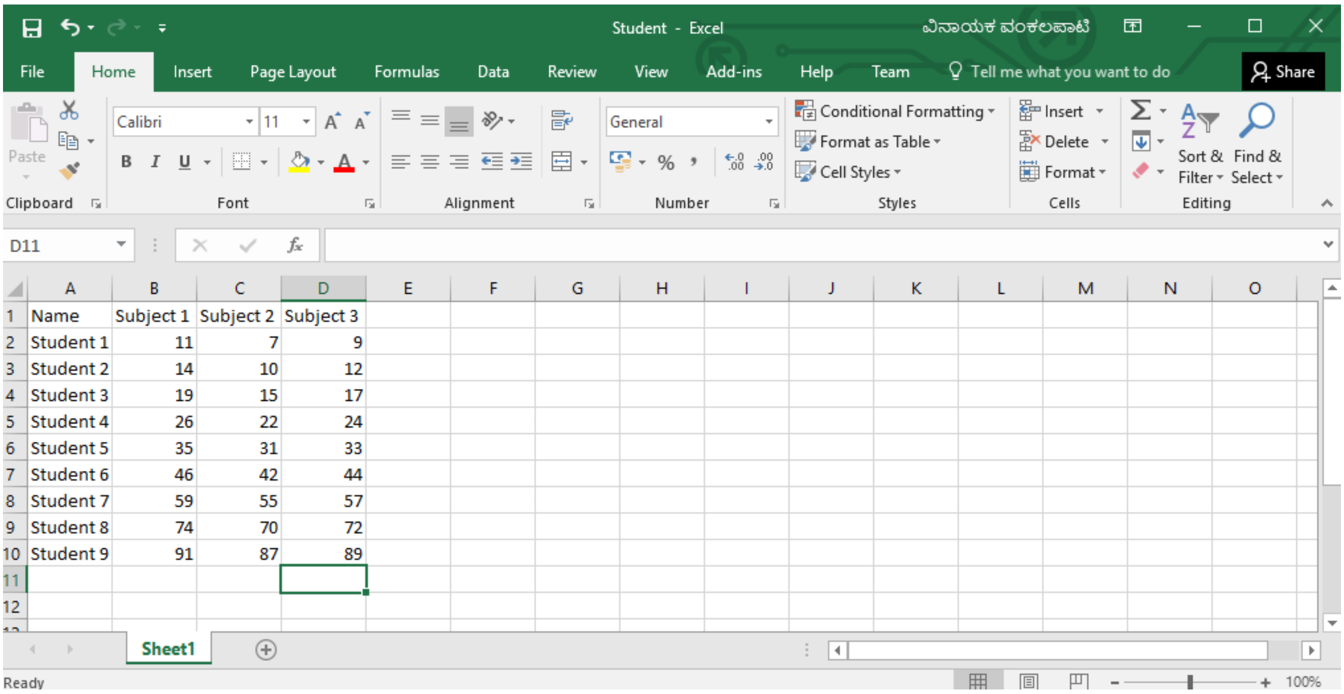
```
                        addNumber(sheet, 3, i, ((i*i)+8));
                }
        }
        private void addCaption(WritableSheet sheet, int column, int row, String s) throws
        RowsExceededException, WriteException
        {
                Label label;
                label = new Label(column, row, s);
                sheet.addCell(label);
        }
        private void addNumber(WritableSheet sheet, int column, int row,Integer integer) throws
        WriteException, RowsExceededException
        {
                Number number;
                number = new Number(column, row, integer);
                sheet.addCell(number);
        }
        private void addLabel(WritableSheet sheet, int column, int row, String s) throws WriteException,
        RowsExceededException
        {
                Label label;
                label = new Label(column, row, s);
                sheet.addCell(label);
        }
        public static void main(String[ ] args) throws WriteException, IOException  {
                Stdrec test = new Stdrec();
                test.setOutputFile("C:/Users/RJSP/Desktop/Student.xls");
                test.write();
                System.out.println("Please check the result file under C:/Users/RJSP/Desktop/Student.xls");
         }
}
```

OUTPUT:



```
. 3, i, ((i*i)+8));

iCaption(WritableSheet sheet, int column, int row, String s) th

el(column, row, s);
abel);

iNumber(WritableSheet sheet, int column, int row,Integer intege

aber(column, row, integer); sheet.addCell(number);

iLabel(WritableSheet sheet, int column, int row, String s) thro

el(column, row, s); sheet.addCell(label);

oid main(String[ ] args) throws WriteException, IOException  {
ew stdrec();
ile("C:/Users/vmvin/Desktop/Student.xls");

tln("Please check the result file under C:/Users/vmvin/Desktop/
```

```
<terminated> stdrec [Java Application] C:\Program Files (x86)\Java\jre1.6.0_04\bin\javaw.exe (5
Please check the result file under C:/Users/vmvin/Desktop/Student.xls
```



Name	Subject 1	Subject 2	Subject 3
Student 1	11	7	9
Student 2	14	10	12
Student 3	19	15	17
Student 4	26	22	24
Student 5	35	31	33
Student 6	46	42	44
Student 7	59	55	57
Student 8	74	70	72
Student 9	91	87	89

10.Write and test a program to select the number of students who have scored more than 60 in any one subject (or all subjects).

Requirements :

- Write this java test code in eclipse. Since we are not using any Selenium object here no need of selenium RC Server to run at the command prompt for this program.
- Since we are dealing with the excel, we need to add the external jar file jxl-2.6 in to the java project.
- Download jxl-2.6 and Follow the same steps as we used to add selenium server and selenium java driver to our java project.

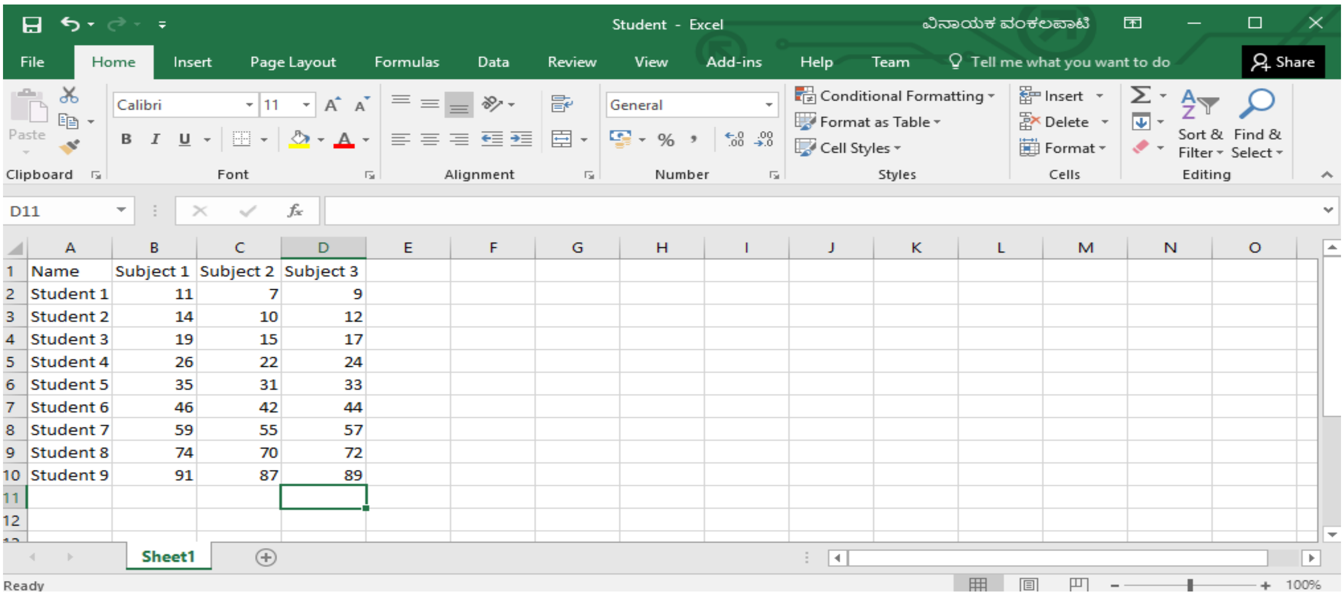
Procedure:

- Create the excel document containing the details about the students and their marks in the Microsoft excel and save that file as Student.xls
- Open eclipse application→ give the folder name where you want to store your files. the default will be ‘ workspace ‘
- Then go to file→new→java project.
- You will get Create java project window , Name the project to st → click finish. Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class →you will get new java class window →name the class as Student →click finish.
- Type in the java code in that Student.java file
- After writing this code if u get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are:
- Right click on the st folder → click on properties → click on Java Build path→ then select the tab libraries→click on Add External JARs→ browse for jxl-2.6.jar file →Click open → Click ok.
- Click on run the run button in eclipse, output will be displayed the console.

```
import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.CellType;
import jxl.Sheet;
import jxl.Workbook;
import jxl.read.biff.BiffException;
public class student_excel_read
{
private String inputFile;
    public void setInputFile(String inputFile)
    {
     this.inputFile = inputFile;
    }
    public void read() throws IOException
    {
        File inputWorkbook = new File(inputFile);
        Workbook w;
        boolean flag=false;
        int count=0;
        try
        {
            w = Workbook.getWorkbook(inputWorkbook);
            Sheet sheet = w.getSheet(0);
            for (int j = 0; j < sheet.getRows(); j++)
            {
             for (int i = 0; i < sheet.getColumns(); i++)
                {
                 Cell cell = sheet.getCell(i, j);
                    if (cell.getType() == CellType.NUMBER)
                    {
                     if(Integer.parseInt(cell.getContents())>60)
                        {
                         flag = true;
                         if(flag == true)
                            {
                            count++;
                                flag=false;
                            } break;
                        }
                    }
                }
            }
            System.out.println("Total number of students who scored more than 60 in one or
        more subjects is: " +count);
        }
```

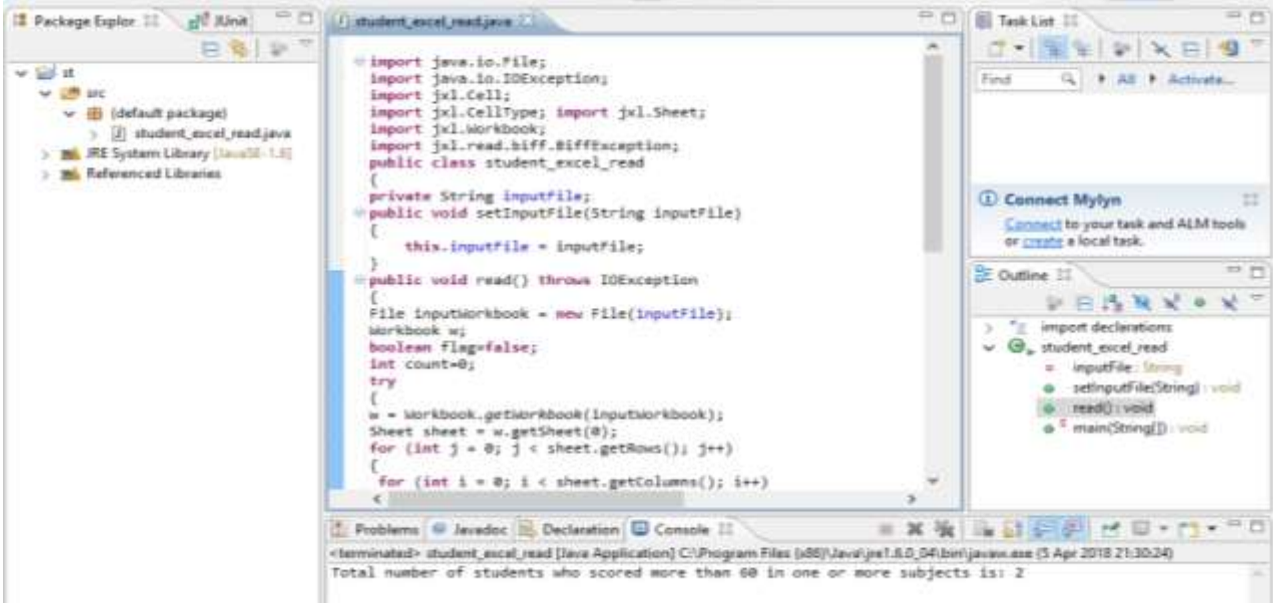
```
                catch (BiffException e)
                {
                        e.printStackTrace();
                }
        }
        public static void main(String[ ] args) throws IOException
        { student_excel_read test = new student_excel_read();
                test.setInputFile("C:/Users/RJSP/Desktop/Student.xls");
                test.read();
        }
}
```

INPUT FILE:



Name	Subject 1	Subject 2	Subject 3
Student 1	11	7	9
Student 2	14	10	12
Student 3	19	15	17
Student 4	26	22	24
Student 5	35	31	33
Student 6	46	42	44
Student 7	59	55	57
Student 8	74	70	72
Student 9	91	87	89

OUTPUT :



```
import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.CellType; import jxl.Sheet;
import jxl.Workbook;
import jxl.read.biff.BiffException;
public class student_excel_read
{
private String inputFile;
public void setInputFile(String inputFile)
{
    this.inputFile = inputFile;
}
public void read() throws IOException
{
File inputWorkbook = new File(inputFile);
Workbook w;
boolean flag=false;
int count=0;
try
{
w = Workbook.getWorkbook(inputWorkbook);
Sheet sheet = w.getSheet(0);
for (int j = 0; j < sheet.getRows(); j++)
{
 for (int i = 0; i < sheet.getColumns(); i++)
```

```
<terminated> student_excel_read [Java Application] C:\Program Files (x86)\Java\jre1.8.0_04\bin\javaw.exe (5 Apr 2018 21:30:24)
Total number of students who scored more than 60 in one or more subjects is: 2
```

11. Write and test a program to provide total number of objects present / available on the page.

Requirements:

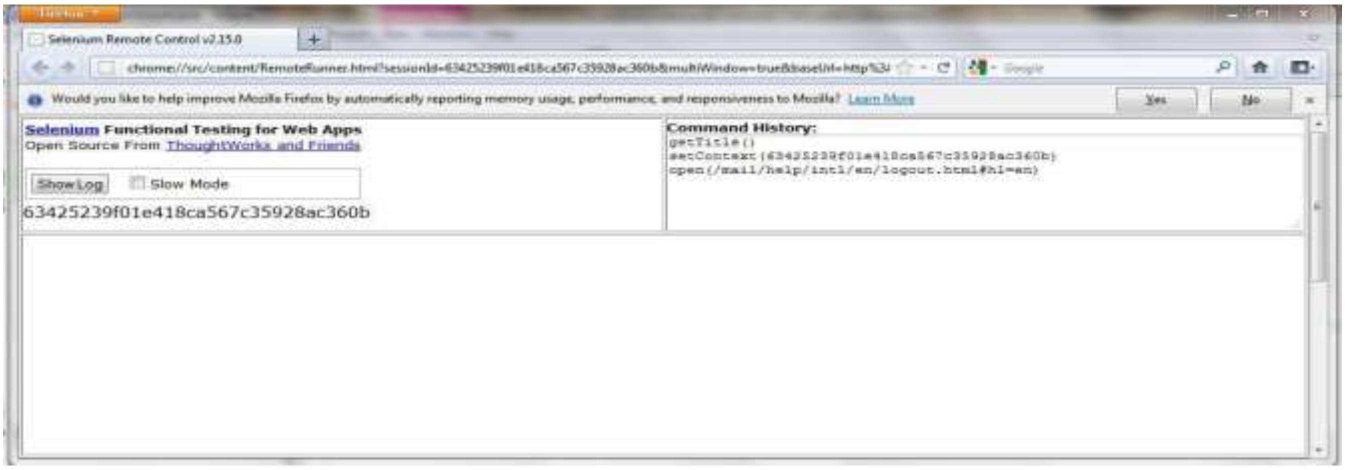
- Write this java test code in eclipse. before running this code makes sure your selenium RC server is running
- Firefox version 10.0 required.
- Internet access required.

Procedure:-

- Write the Above code in eclipse by following the below steps
- Open eclipse application →give the folder name where you want to store your files→ the default will be 'workspace 'Then go to file→new→java project.
- You will get Create java project window →Name the project to st→ click finish.
- Double click on the new project st on the package explorer you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class → you will get new java class window →name the class as Obj → click finish.
- After writing this code if u get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are:
- Right click on the st folder→click on properties→ click on Java Build path→then select the tab libraries→ click on Add External JARs→browse for selenium-serverstandalone-2.32.0→Click open→ again click on Add External JARs →browse for selenium-java-clientdriver
- click open-> click ok->To run the above program
- First open the command prompt-> go to the C:\Program Files (x86)\java\jdk1.6.0_26\bin folder →run/write the command java –jar selenium-server-standalone-2.32.0.jar 4444
- The number of objects available on the web page will be displayed as output in the console when you click run button in eclipse.

```
import com.thoughtworks.selenium.*;
 @SuppressWarnings("deprecation")
 public class objectcount extends SeleneseTestCase
 {
 public void setUp() throws Exception {
   setUp("http://www.dte.kar.nic.in/","*firefox");
                }
public void testloginlogout()
{
      selenium.setSpeed("1000");
      selenium.open("index.shtml/");
      selenium.waitForPageToLoad("30000");
      selenium.windowMaximize();
      int num = selenium.getXpathCount("//p").intValue();
      System.out.println("The number of option elements present are " +num);
  }
 }
```

OUTPUT:


Firefox
Selenium Remote Control v2.15.0
chrome://src/content/RemoteRunner.html?sessionId=63425239f01e418ca567c35928ac360b&multiWindow=true&baseUrl=http%3
Google
Yes
No
Show Log
☐ Slow Mode

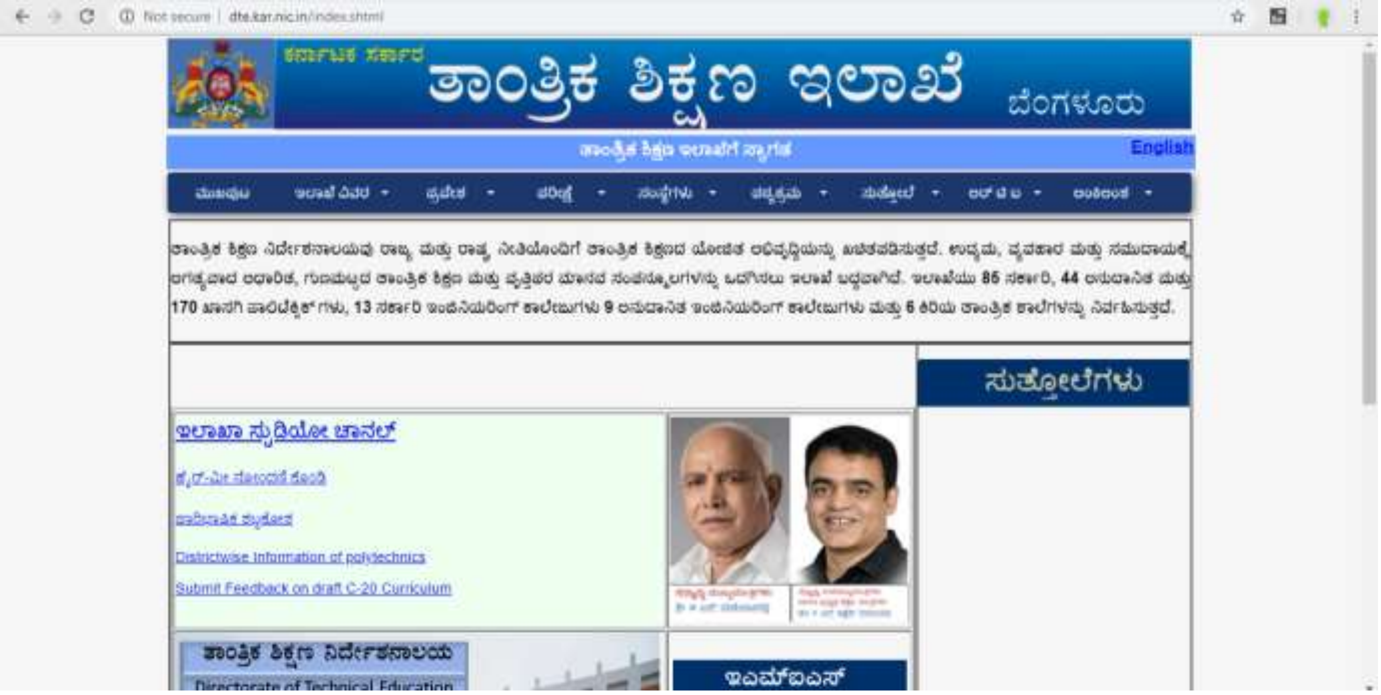
Would you like to help improve Mozilla Firefox by automatically reporting memory usage, performance, and responsiveness to Mozilla? Learn More

Selenium Functional Testing for Web Apps
Open Source From ThoughtWorks and Friends

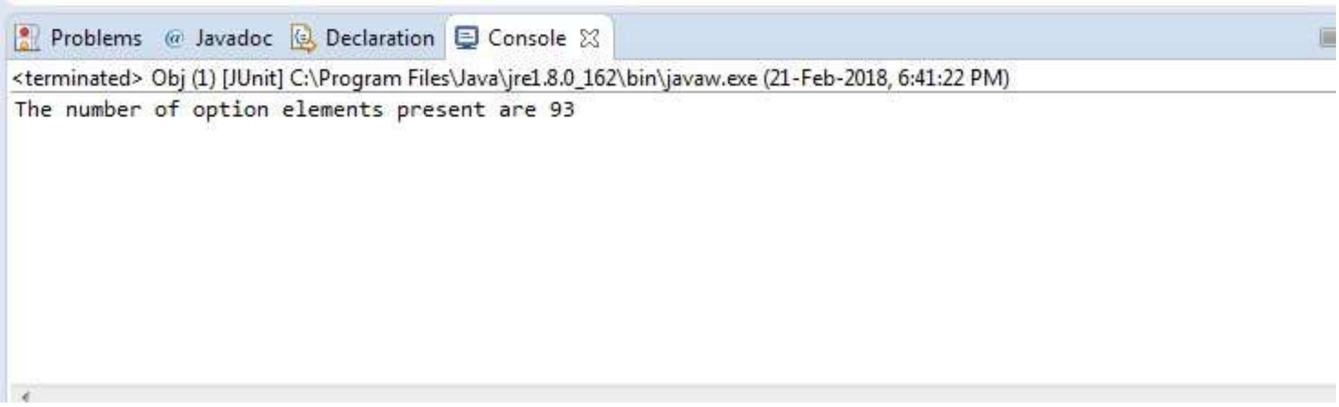
63425239f01e418ca567c35928ac360b

Command History:

```
getTitle()
setContext(63425239f01e418ca567c35928ac360b)
open(/mail/help/intl/en/logout.html#hl=en)
```


Not secure | dte.kar.nic.in/index.shtml
ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ
ಬೆಂಗಳೂರು
ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆಗೆ ಸ್ವಾಗತ
English
ಸುತ್ತೋಲೆಗಳು
ಇಲಾಖಾ ಸ್ಟುಡಿಯೋ ಚಾನಲ್
Districtwise Information of polytechnics
Submit Feedback on draft C-20 Curriculum
ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ನಿರ್ದೇಶನಾಲಯ
Directorate of Technical Education
ಇಎಮ್ಐಎಸ್

ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ನಿರ್ದೇಶನಾಲಯವು ರಾಜ್ಯ ಮತ್ತು ರಾಷ್ಟ್ರ ನೀತಿಯೊಂದಿಗೆ ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣದ ಯೋಜಿತ ಅಭಿವೃದ್ಧಿಯನ್ನು ಖಚಿತಪಡಿಸುತ್ತದೆ. ಉದ್ಯಮ, ವ್ಯವಹಾರ ಮತ್ತು ಸಮುದಾಯಕ್ಕೆ ಅಗತ್ಯವಾದ ಆಧಾರಿತ, ಗುಣಮಟ್ಟದ ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಮತ್ತು ವೃತ್ತಿಪರ ಮಾನವ ಸಂಪನ್ಮೂಲಗಳನ್ನು ಒದಗಿಸಲು ಇಲಾಖೆ ಬದ್ಧವಾಗಿದೆ. ಇಲಾಖೆಯು 86 ಸರ್ಕಾರಿ, 44 ಅನುದಾನಿತ ಮತ್ತು 170 ಖಾಸಗಿ ಪಾಲಿಟೆಕ್ನಿಕ್ ಗಳು, 13 ಸರ್ಕಾರಿ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜುಗಳು 9 ಅನುದಾನಿತ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜುಗಳು ಮತ್ತು 6 ಕಿರಿಯ ತಾಂತ್ರಿಕ ಶಾಲೆಗಳನ್ನು ನಿರ್ವಹಿಸುತ್ತದೆ.



```
<terminated> Obj (1) [JUnit] C:\Program Files\Java\jre1.8.0_162\bin\javaw.exe (21-Feb-2018, 6:41:22 PM)
The number of option elements present are 93
```

12. Write and test a program to get the number of list items in a list / combo box.

Requirements:

- Write this java test code in eclipse. before running this code makes sure your selenium RC server is running)
- Write Combocount.html as shown below and save under desktop.

Procedure:-

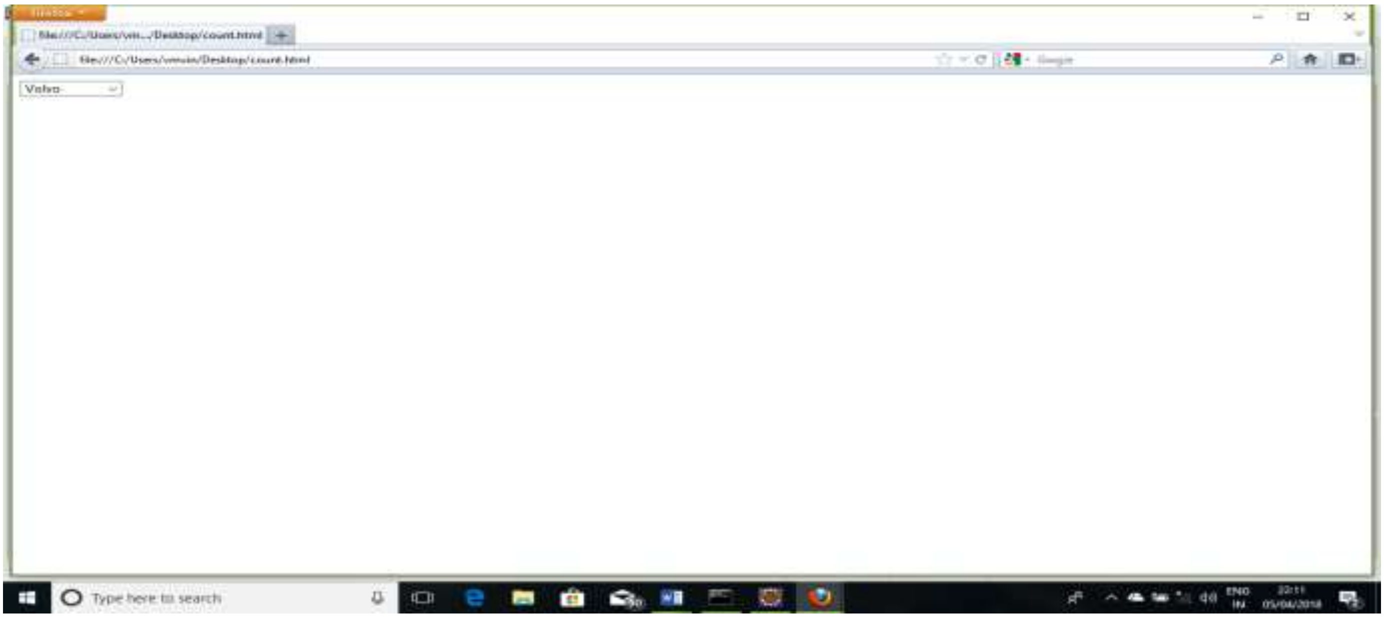
- Type the html code in notepad and save that as combo.html
- Open eclipse application→ give the folder name where you want to store your files. The default will be ‘ workspace ‘
- Then go to file→new→java project.
- You will get Create java project window , Name the project to st → click finish. Double click on the new project st on the package explorer → you will get src folder and JRE System Library
- right click on the src folder→go to new→click on the class →you will get new java class window →name the class as Comboitemcount →click finish.
- Type in the java code in that Comboitemcount.java file
- After writing this code if u get red lines under the selenium then include the selenium server and selenium java driver jar file. The steps are:
- Right click on the st folder→ click on properties→ click on Java Build path→ then select the tab libraries→click on Add External JARs→ browse for selenium-serverstandalone-2.32.0→click open→again click on Add External JARs →browse for selenium-java-clientdriver→click open→ click ok.
- To run the above program
- First open the command prompt→ go to the jdk1.6.0_26\bin folder →run/write the command java –jar selenium-server-standalone-2.32.0.jar 4444
- Click on run in eclipse, the output will be displayed the console.

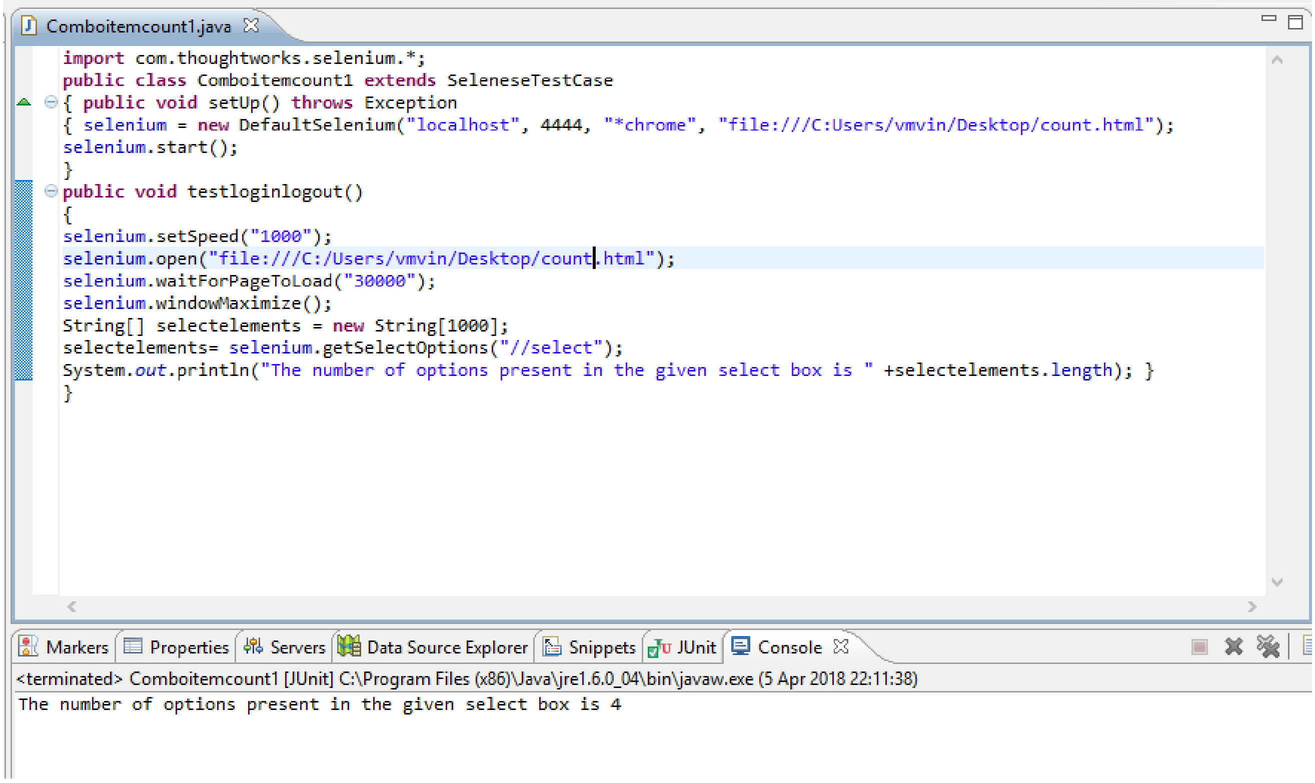
```
<html>
<body>
<select>
<option>Volvo</option>
<option>Express</option>
<option>Mercedes</option>
<option>Lamborghini</option>
</select>
</body>
</html>
```

- Type the below code in eclipse

```
import com.thoughtworks.selenium.*;
public class Comboitemcount extends ~~SeleneseTestCase~~
{
public void setUp() throws Exception
        {
~~selenium~~ = new DefaultSelenium("localhost", 4444,
"*chrome","file:///C:/combocount.html");
                ~~selenium~~.start();
        }
        public void testloginlogout()
        {
                ~~selenium~~.setSpeed("1000");
                ~~selenium~~.open("file:///C:/combo.html");
                ~~selenium~~.waitForPageToLoad("30000");
                ~~selenium~~.windowMaximize();
                String[] selectelements = new String[1000];
                selectelements= ~~selenium~~.getSelectOptions("//select");
                System.out.println("The number of options present in the given select box is "
+selectelements.length); }
}
```

OUTPUT:


file:///C:/Users/vm.../Desktop/count.html
file:///C:/Users/vmvin/Desktop/count.html
Volvo
Type here to search



```
import com.thoughtworks.selenium.*;
public class Comboitemcount1 extends SeleneseTestCase
{ public void setUp() throws Exception
{ selenium = new DefaultSelenium("localhost", 4444, "*chrome", "file:///C:Users/vmvin/Desktop/count.html");
selenium.start();
}
public void testloginlogout()
{
selenium.setSpeed("1000");
selenium.open("file:///C:/Users/vmvin/Desktop/count.html");
selenium.waitForPageToLoad("30000");
selenium.windowMaximize();
String[] selectelements = new String[1000];
selectelements= selenium.getSelectOptions("//select");
System.out.println("The number of options present in the given select box is " +selectelements.length); }
}
```

```
<terminated> Comboitemcount1 [JUnit] C:\Program Files (x86)\Java\jre1.6.0_04\bin\javaw.exe (5 Apr 2018 22:11:38)
The number of options present in the given select box is 4
```

13. Write and test a program to count number of items present on a desktop.

Requirements:

- Write this java test code in eclipse. Since we are not using any Selenium object here no need of selenium RC Server to run at the command prompt for this program.
- Write a visual basic script with the following code and save as count.vbs under the desktop.

Procedure:-

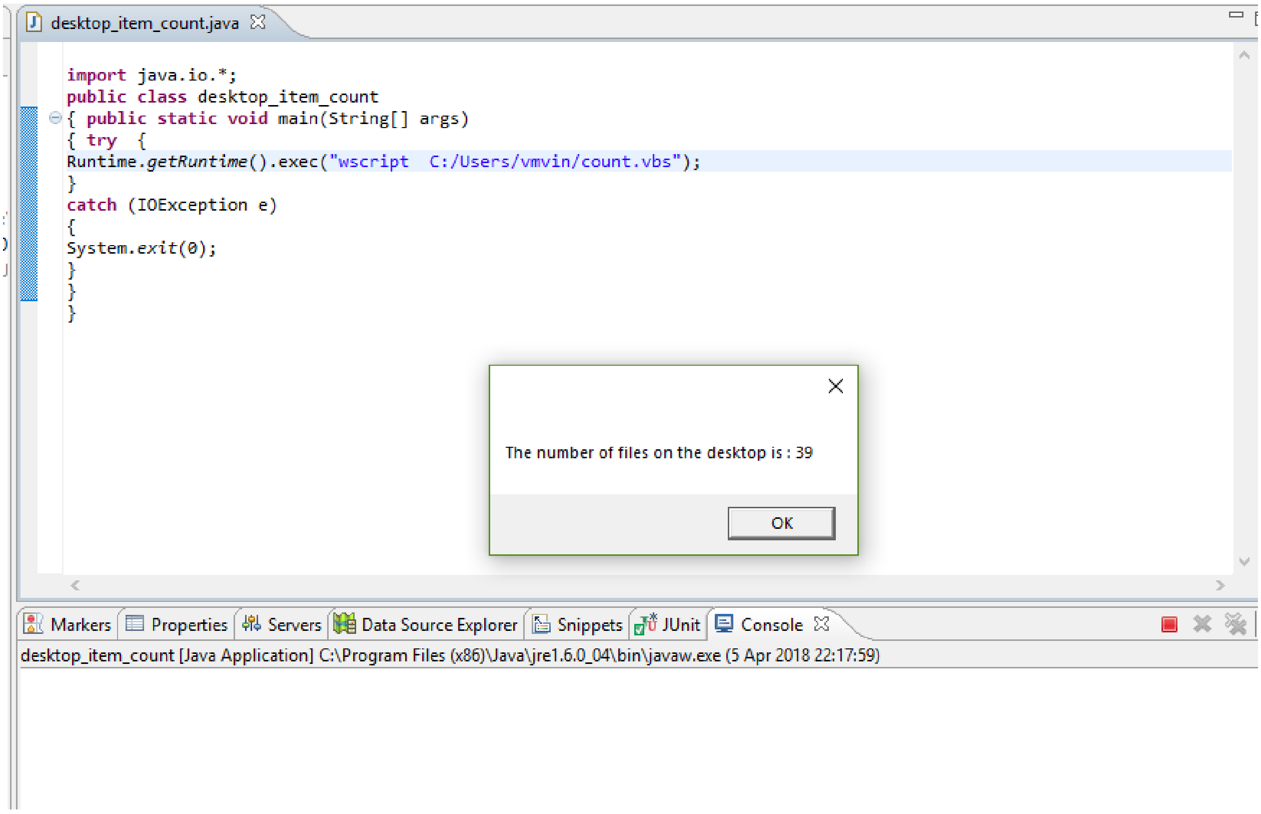
- Type the visual basics code in the notepad and save that as count.vbs
- Write the Above code in eclipse by following the below steps
- Open eclipse application →give the folder name where you want to store your files-→the default will be ‘workspace ‘Then go to file→new→java project.
- You will get Create java project window →Name the project to st→ click finish.
- Double click on the new project st on the package explorer you will get src folder and JRE System Library
- Right click on the src folder→go to new→click on the class → you will get new java class window →name the class as desktop_item_count →click finish.
- Click on run button in eclipse, the output will be displayed in an alert box.

- Type the below code in notepad and save as count.vbs

```
Set fso = createobject("Scripting.FileSystemObject")
DesktopPath = CreateObject("WScript.Shell").SpecialFolders("Desktop")
'Files count
msgbox "The number of files on the desktop is : "&fso.GetFolder(DesktopPath).Files.Count
'Folders count msgbox "The number of folders on the desktop is : "&fso.GetFolder(DesktopPath)
.SubFolders.Count
```

- Type the below code in eclipse

```
import java.io.*;
public class desktop_item_count
{
public static void main(String[ ] args)
        {
        try
         {
                Runtime.getRuntime().exec("wscript  C:/Users/vmvin/count.vbs");
                }
                catch (IOException e)
                {
                        System.exit(0);
                }
        }
}
```



```
import java.io.*;
public class desktop_item_count
{ public static void main(String[] args)
{ try  {
Runtime.getRuntime().exec("wscript  C:/Users/vmvin/count.vbs");
}
catch (IOException e)
{
System.exit(0);
}
}
}
```

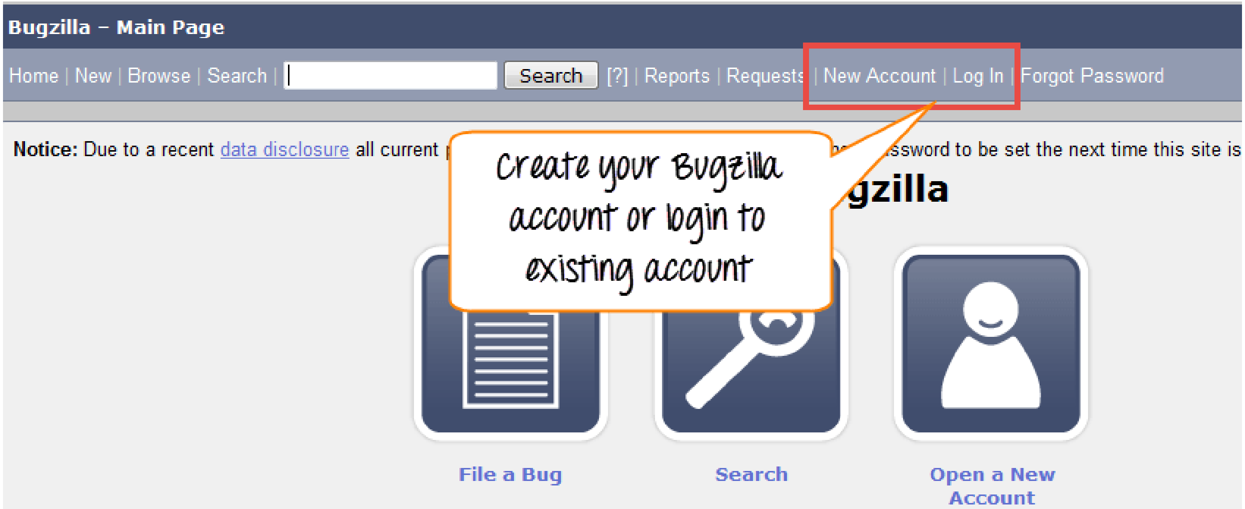
The number of files on the desktop is : 39

desktop_item_count [Java Application] C:\Program Files (x86)\Java\jre1.6.0_04\bin\javaw.exe (5 Apr 2018 22:17:59)

14 Understanding the use of bug tracking and testing tool Bugzilla and Jira

How to log-in to Bugzilla

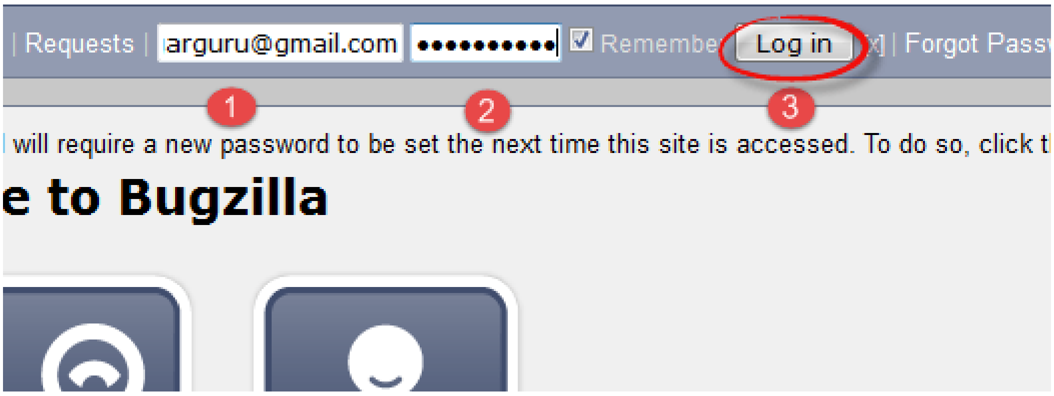
Step 1) Use the following link https://landfill.bugzilla.org/bugzilla-5.0-branch/ for your handons. To create an account in Bugzilla or to login into the existing account go to **New Account or Log in** option in the main menu.


Bugzilla – Main Page
Home | New | Browse | Search | Search [?] | Reports | Requests | New Account | Log In | Forgot Password
Create your Bugzilla account or login to existing account
gzilla
File a Bug
Search
Open a New Account

Notice: Due to a recent data disclosure all current ... ssword to be set the next time this site is

Step 2) Now, enter your personal details to log into Bugzilla

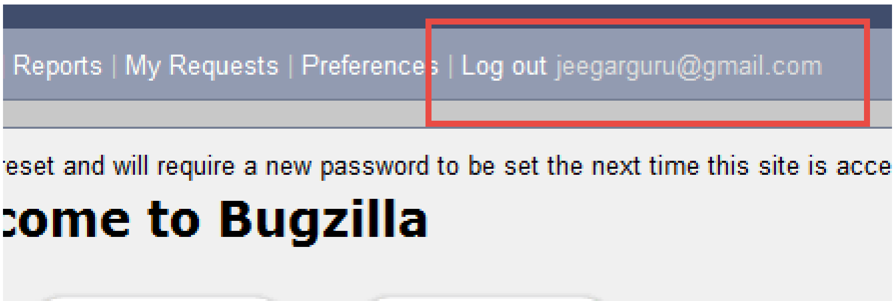
1. User ID
2. Password
3. And then click on **"Log in"**



arguru@gmail.com ••••••••••• ☑

will require a new password to be set the next time this site is accessed. To do so, click t

Step 3) You are successfully logged into Bugzilla system

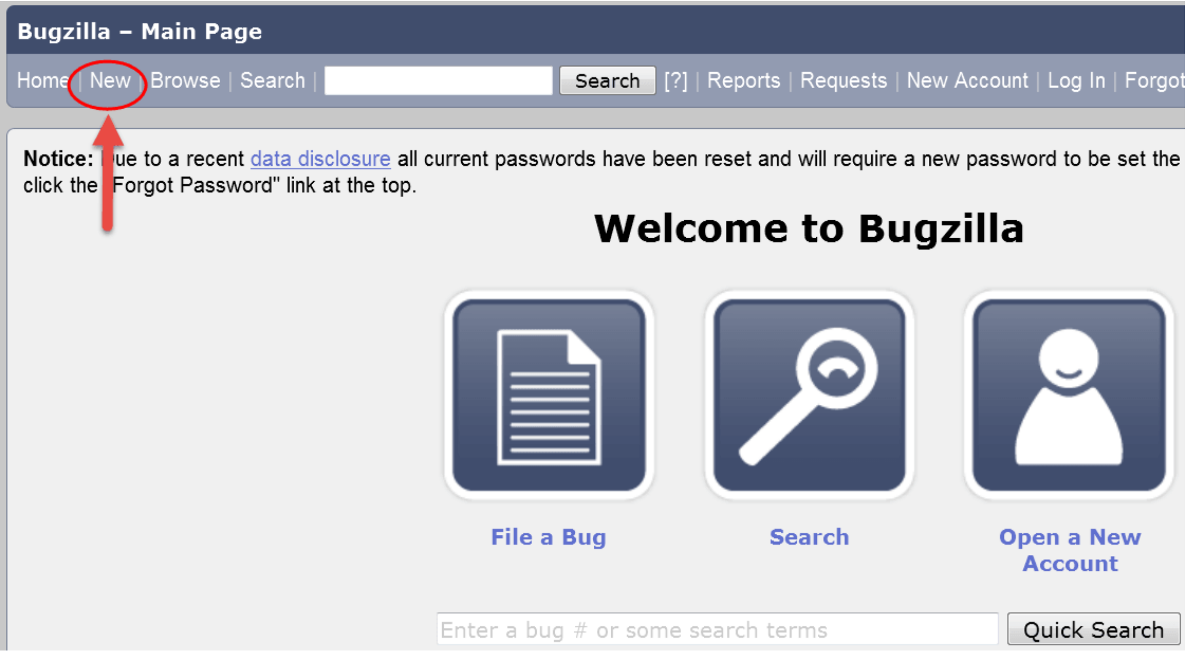

Reports | My Requests | Preferences | Log out jeegarguru@gmail.com

eset and will require a new password to be set the next time this site is acce

come to Bugzilla

Creating a Bug-report in Bugzilla

Step 1) To create a new bug in Bugzilla, visit the home-page of Bugzilla and click on **NEW** tab from the main menu

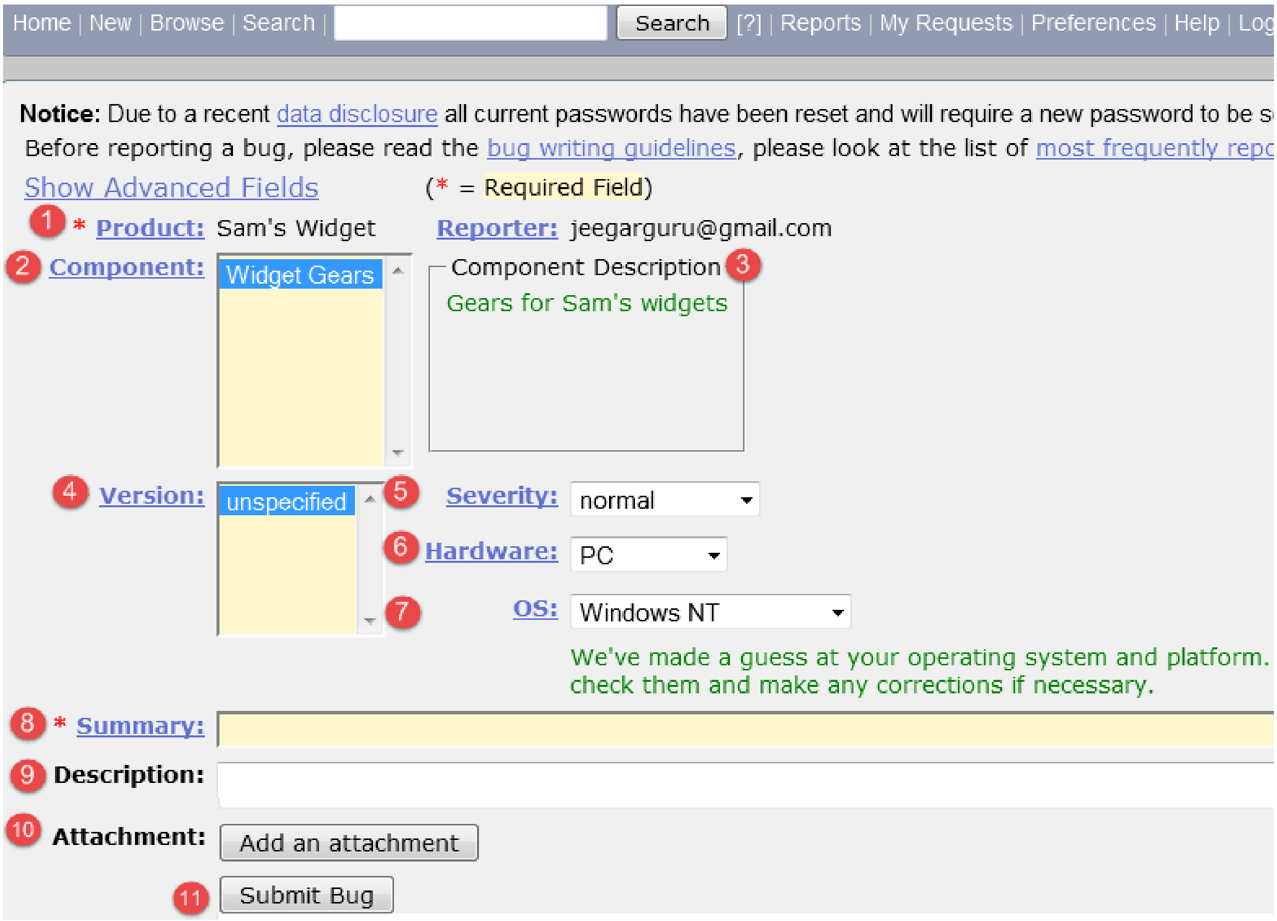

Bugzilla – Main Page
Home | New | Browse | Search | Search [?] | Reports | Requests | New Account | Log In | Forgot
Welcome to Bugzilla
File a Bug
Search
Open a New Account
Enter a bug # or some search terms
Quick Search

Notice: ue to a recent data disclosure all current passwords have been reset and will require a new password to be set the click the Forgot Password" link at the top.

Step 2) In the next window

1. Enter Product
2. Enter Component
3. Give Component description
4. Select version,
5. Select severity
6. Select Hardware
7. Select OS
8. Enter Summary
9. Enter Description
10. Attach Attachment
11. Submit

NOTE: The above fields will vary as per your customization of Bugzilla


Home | New | Browse | Search | Search [?] | Reports | My Requests | Preferences | Help | Log

Notice: Due to a recent data disclosure all current passwords have been reset and will require a new password to be s
Before reporting a bug, please read the bug writing guidelines, please look at the list of most frequently repo

Show Advanced Fields (* = Required Field)

1 * **Product:** Sam's Widget **Reporter:** jeegarguru@gmail.com

2 **Component:** Widget Gears

Component Description 3
Gears for Sam's widgets

4 **Version:** unspecified

5 **Severity:** normal

6 **Hardware:** PC

7 **OS:** Windows NT

We've made a guess at your operating system and platform.
check them and make any corrections if necessary.

8 * **Summary:**

9 **Description:**

10 **Attachment:** Add an attachment

11 Submit Bug

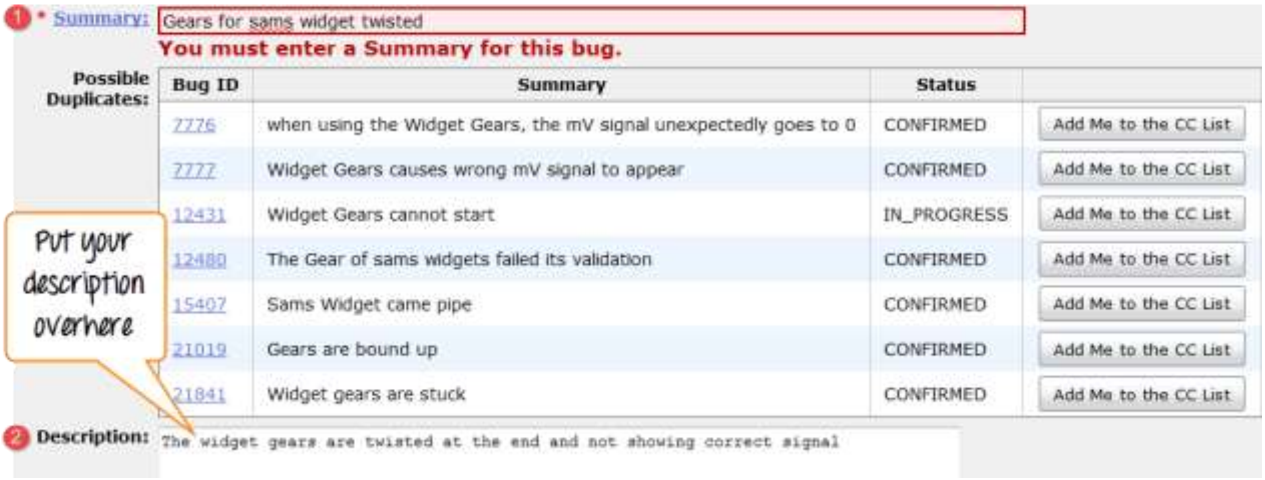
NOTE: The mandatory fields are marked with *.

In our case field's

- Summary
- Description

Are mandatory

If you do not fill them you will get a screen like below



1 * Summary: Gears for sams widget twisted

You must enter a Summary for this bug.

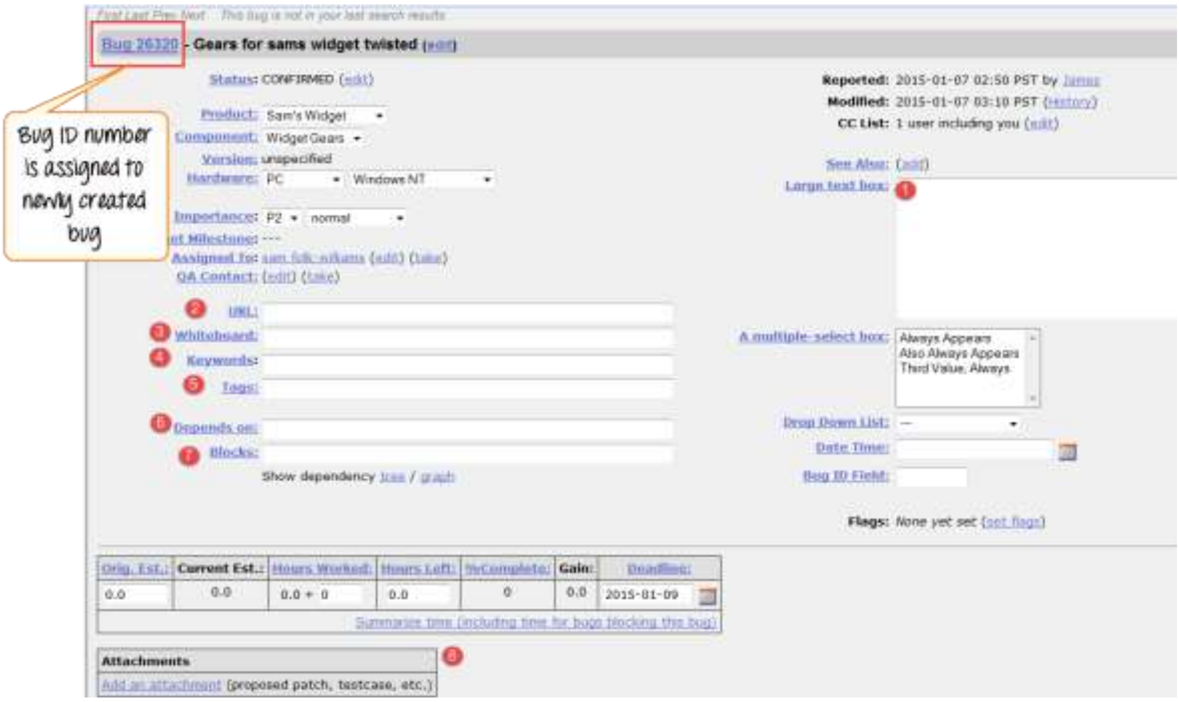
Possible Duplicates:

Bug ID	Summary	Status	
7776	when using the Widget Gears, the mV signal unexpectedly goes to 0	CONFIRMED	Add Me to the CC List
7777	Widget Gears causes wrong mV signal to appear	CONFIRMED	Add Me to the CC List
12431	Widget Gears cannot start	IN_PROGRESS	Add Me to the CC List
12480	The Gear of sams widgets failed its validation	CONFIRMED	Add Me to the CC List
15407	Sams Widget came pipe	CONFIRMED	Add Me to the CC List
21019	Gears are bound up	CONFIRMED	Add Me to the CC List
21841	Widget gears are stuck	CONFIRMED	Add Me to the CC List

2 Description: The widget gears are twisted at the end and not showing correct signal

Step 4) Bug is created ID# 26320 is assigned to our Bug. You can also add additional information to the assigned bug like URL, keywords, whiteboard, tags, etc. This extra-information is helpful to give more detail about the Bug you have created.

1. Large text box
2. URL
3. Whiteboard
4. Keywords
5. Tags
6. Depends on
7. Blocks
8. Attachments



Bug ID number is assigned to newly created bug

First Last Prev Next   This bug is not in your last search results

Bug 26320 - Gears for sams widget twisted (edit)

Status: CONFIRMED (edit)

Product: Sam's Widget

Component: Widget Gears

Version: unspecified

Hardware: PC   Windows NT

Importance: P2   normal

Target Milestone: ---

Assigned To: sam folk-wilkams (edit) (take)

QA Contact: (edit) (take)

URL:

Whiteboard:

Keywords:

Tags:

Depends on:

Blocks:

Show dependency tree / graph

Reported: 2015-01-07 02:50 PST by James

Modified: 2015-01-07 03:10 PST (History)

CC List: 1 user including you (edit)

See Also: (edit)

Large text box:

A multiple-select box: Always Appears
Also Always Appears
Third Value, Always

Drop Down List: ---

Date Time:

Bug ID Field:

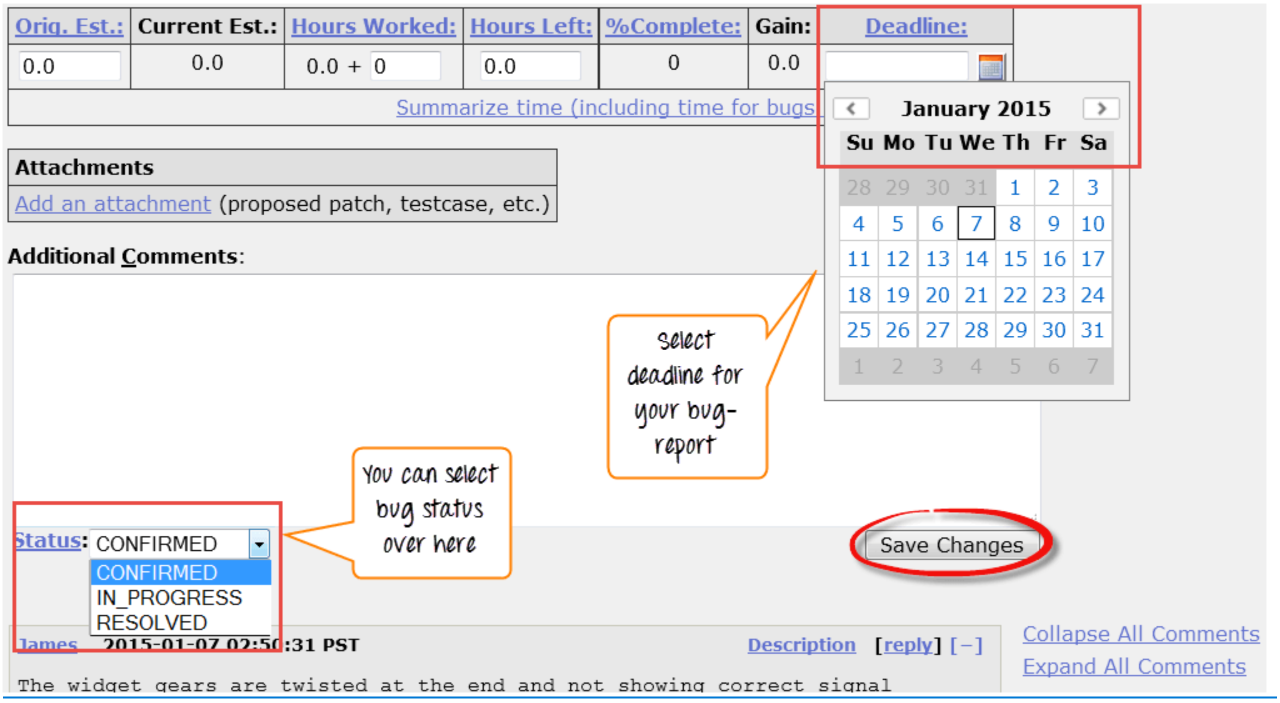
Flags: None yet set (set flags)

Orig. Est.:	Current Est.:	Hours Worked:	Hours Left:	%Complete:	Gain:	Deadline:
0.0	0.0	0.0 + 0	0.0	0	0.0	2015-01-09

Summarize time (including time for bugs blocking this bug)

Attachments
Add an attachment (proposed patch, testcase, etc.)

Step 5) In the same window if you scroll down further. You can select deadline date and also status of the bug. **Deadline in Bugzilla usually gives the time-limit to resolve the bug in given time frame.**



Orig. Est.:	Current Est.:	Hours Worked:	Hours Left:	%Complete:	Gain:	Deadline:
0.0	0.0	0.0 + 0	0.0	0	0.0	

Summarize time (including time for bugs

January 2015

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

Attachments

Add an attachment (proposed patch, testcase, etc.)

Additional Comments:

Status: CONFIRMED

- CONFIRMED
- IN_PROGRESS
- RESOLVED

James 2015-01-07 02:50:31 PST

The widget gears are twisted at the end and not showing correct signal

Select deadline for your bug-report

You can select bug status over here

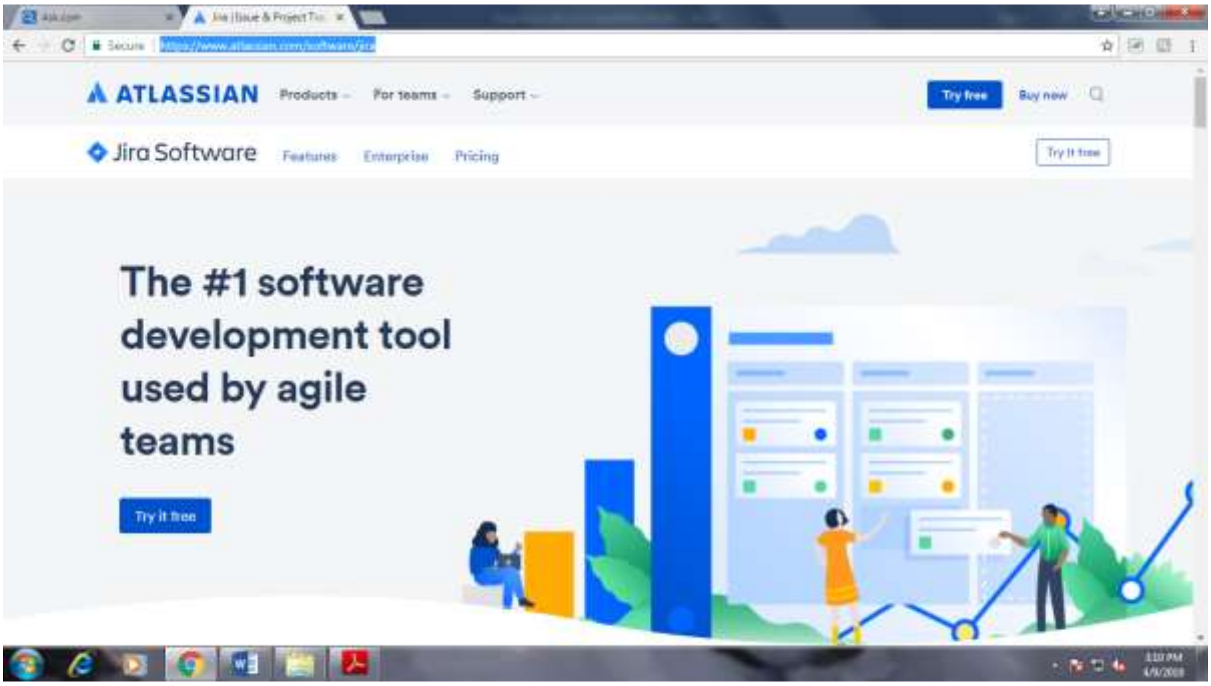
What is JIRA Issue?

JIRA issue would track bug or issue that underlies the project. Once you have imported project then you can create issues.

Under Issues, you will find other useful features like

- Issue Types
- Workflow's
- Screens
- Fields
- Issue Attributes

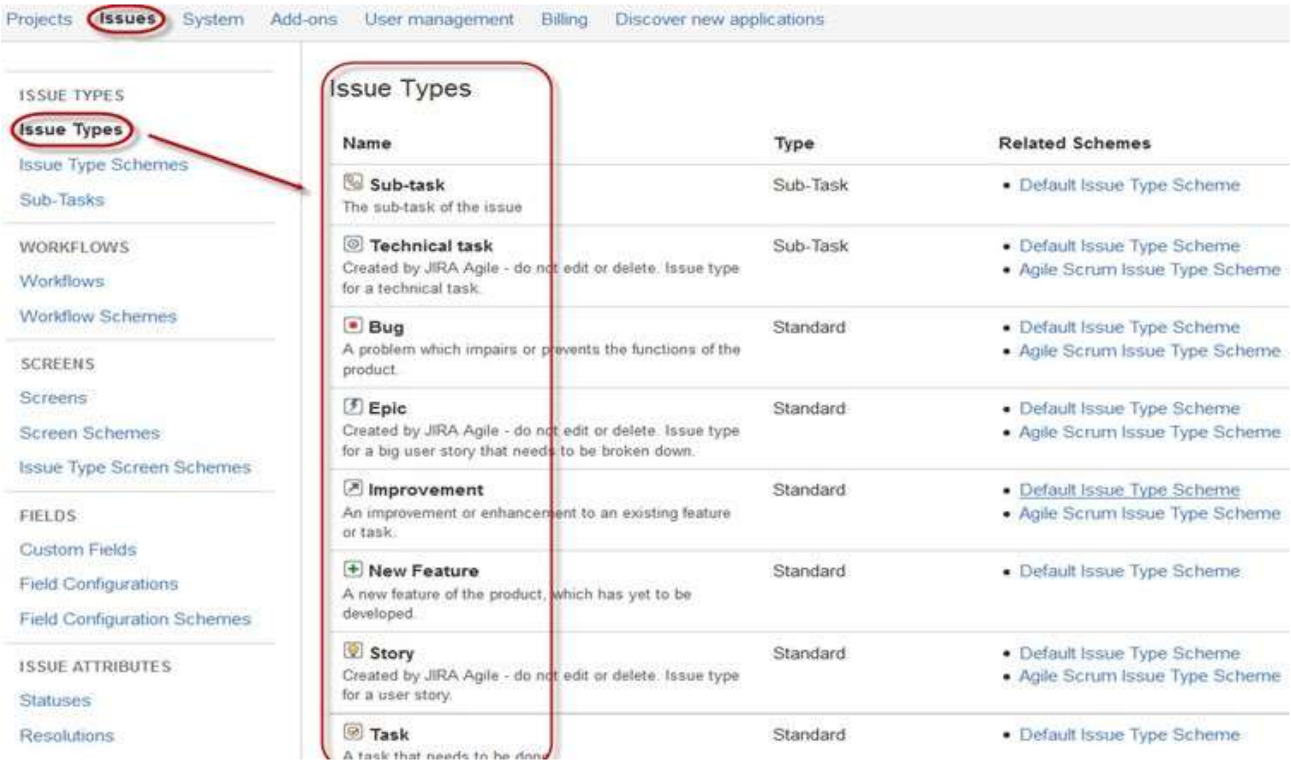
VISIT THE LINK https://www.atlassian.com/software/jira AND CLICK ON FREE TRIAL



The #1 software development tool used by agile teams

Issue Types

Issue Type displays all types of items that can be created and tracked via JIRA. JIRA Issues are classified under various forms like new feature, sub-task, bug, etc. as shown in the screen shot.

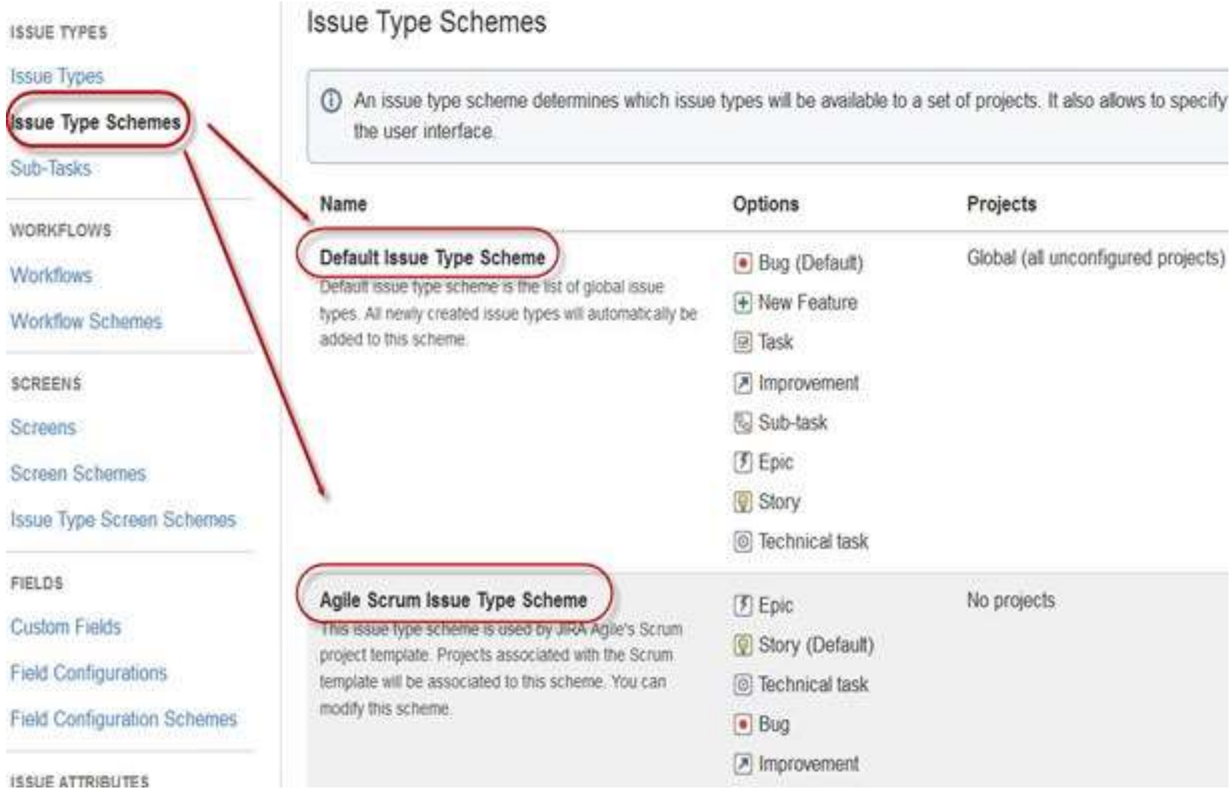


Issue Types

Name	Type	Related Schemes
Sub-task The sub-task of the issue	Sub-Task	• Default Issue Type Scheme
Technical task Created by JIRA Agile - do not edit or delete. Issue type for a technical task.	Sub-Task	• Default Issue Type Scheme • Agile Scrum Issue Type Scheme
Bug A problem which impairs or prevents the functions of the product.	Standard	• Default Issue Type Scheme • Agile Scrum Issue Type Scheme
Epic Created by JIRA Agile - do not edit or delete. Issue type for a big user story that needs to be broken down.	Standard	• Default Issue Type Scheme • Agile Scrum Issue Type Scheme
Improvement An improvement or enhancement to an existing feature or task.	Standard	• Default Issue Type Scheme • Agile Scrum Issue Type Scheme
New Feature A new feature of the product, which has yet to be developed.	Standard	• Default Issue Type Scheme
Story Created by JIRA Agile - do not edit or delete. Issue type for a user story.	Standard	• Default Issue Type Scheme • Agile Scrum Issue Type Scheme
Task A task that needs to be done	Standard	• Default Issue Type Scheme

There are two types of Issue types schemes in JIRA, one is

- **Default Issue Type Scheme:** In default issue type scheme all newly created issues will be added automatically to this scheme
- **Agile Scrum Issue Type Scheme:** Issues and project associated with Agile Scrum will use this scheme

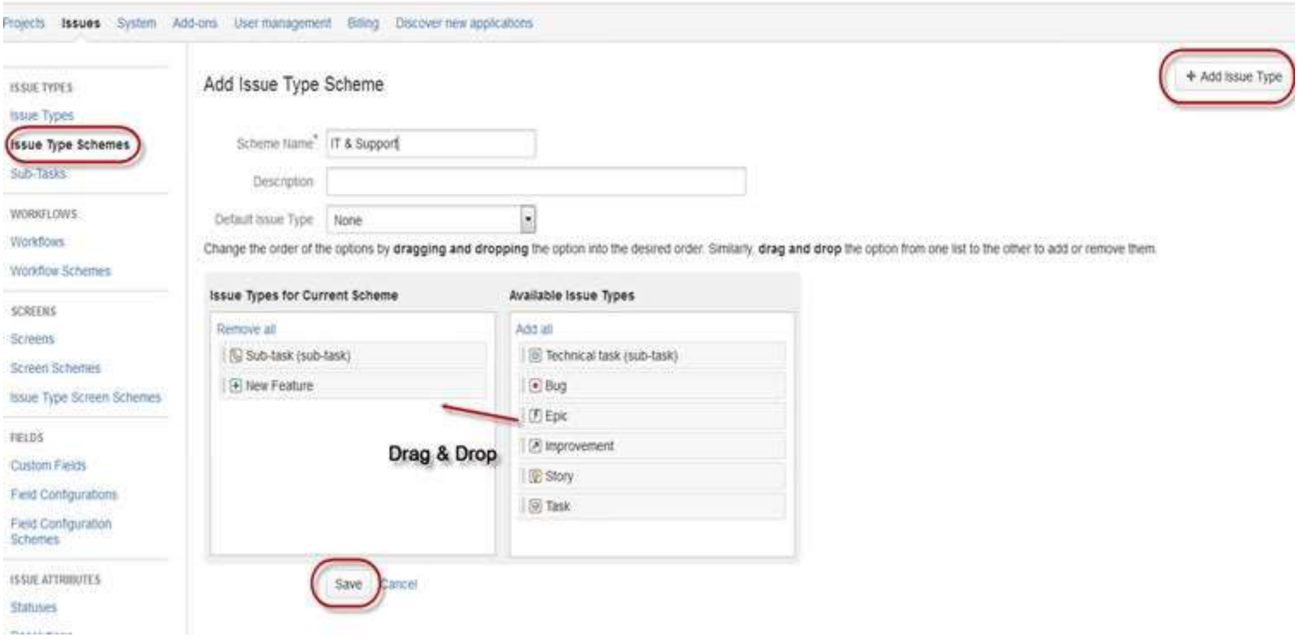


Issue Type Schemes

ⓘ An issue type scheme determines which issue types will be available to a set of projects. It also allows to specify the user interface.

Name	Options	Projects
Default Issue Type Scheme Default issue type scheme is the list of global issue types. All newly created issue types will automatically be added to this scheme.	Bug (Default) New Feature Task Improvement Sub-task Epic Story Technical task	Global (all unconfigured projects)
Agile Scrum Issue Type Scheme This issue type scheme is used by JIRA Agile's Scrum project template. Projects associated with the Scrum template will be associated to this scheme. You can modify this scheme.	Epic Story (Default) Technical task Bug Improvement	No projects

Apart from these two issue type schemes, you can also add schemes manually as per requirement, for example we have created **IT & Support** scheme, for these we will **drag and drop** the issue types from the **Available Issue type** to **Issue type for current scheme** as shown in the screen shot below



Add Issue Type Scheme

Scheme Name* IT & Support

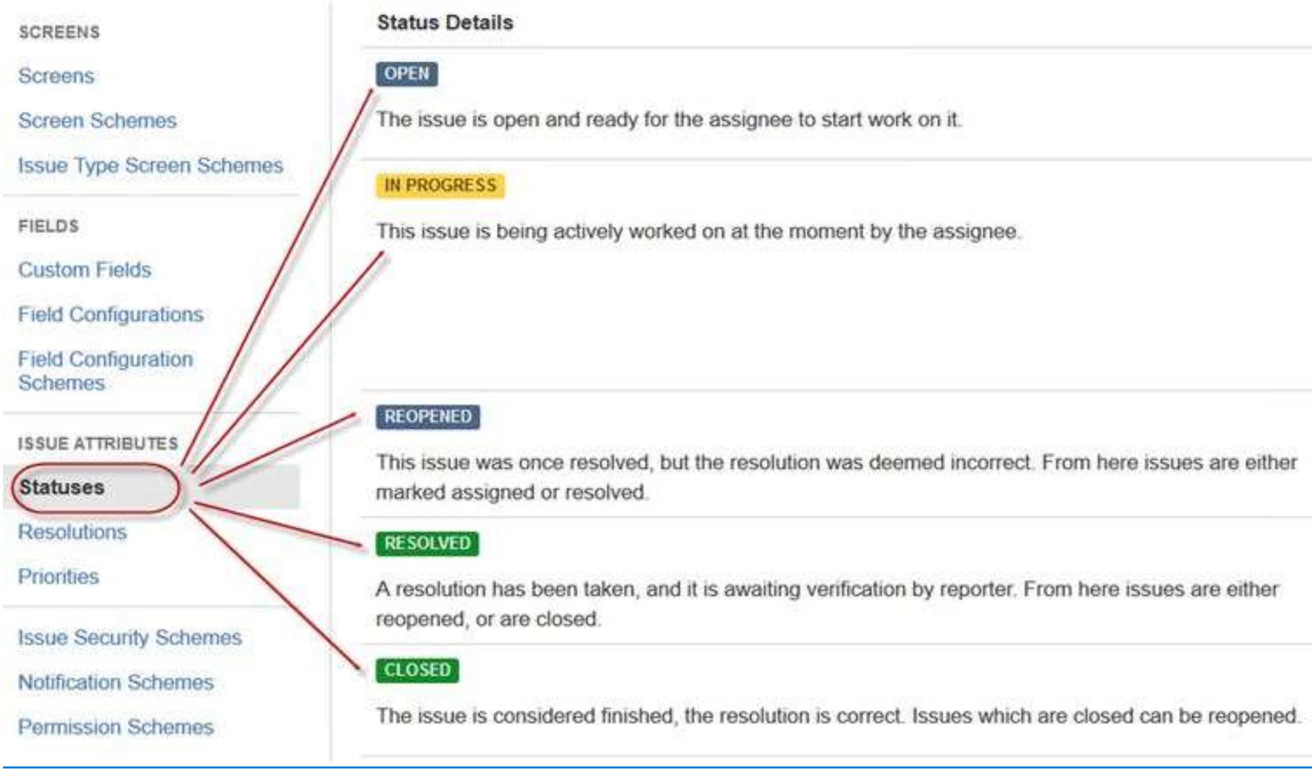
Description

Default Issue Type None

Change the order of the options by **dragging and dropping** the option into the desired order. Similarly, **drag and drop** the option from one list to the other to add or remove them.

Issue Types for Current Scheme	Available Issue Types
Remove all	Add all
Sub-task (sub-task)	Technical task (sub-task)
New Feature	Bug
	Epic
	Improvement
	Story
	Task

Statuses: Different statuses are used to indicate the progress of a project like **To do, InProgress, Open, Closed, ReOpened, and Resolved.** Likewise, you have resolutions and priorities, in resolution it again tells about the progress of issue like **Fixed, Won't fix, Duplicate, Incomplete, Cannot reproduce, Done** also you can set the priorities of the issue whether an issue is **critical, major, minor, blocker and Trivial.**



Status Details

OPEN

The issue is open and ready for the assignee to start work on it.

IN PROGRESS

This issue is being actively worked on at the moment by the assignee.

REOPENED

This issue was once resolved, but the resolution was deemed incorrect. From here issues are either marked assigned or resolved.

RESOLVED

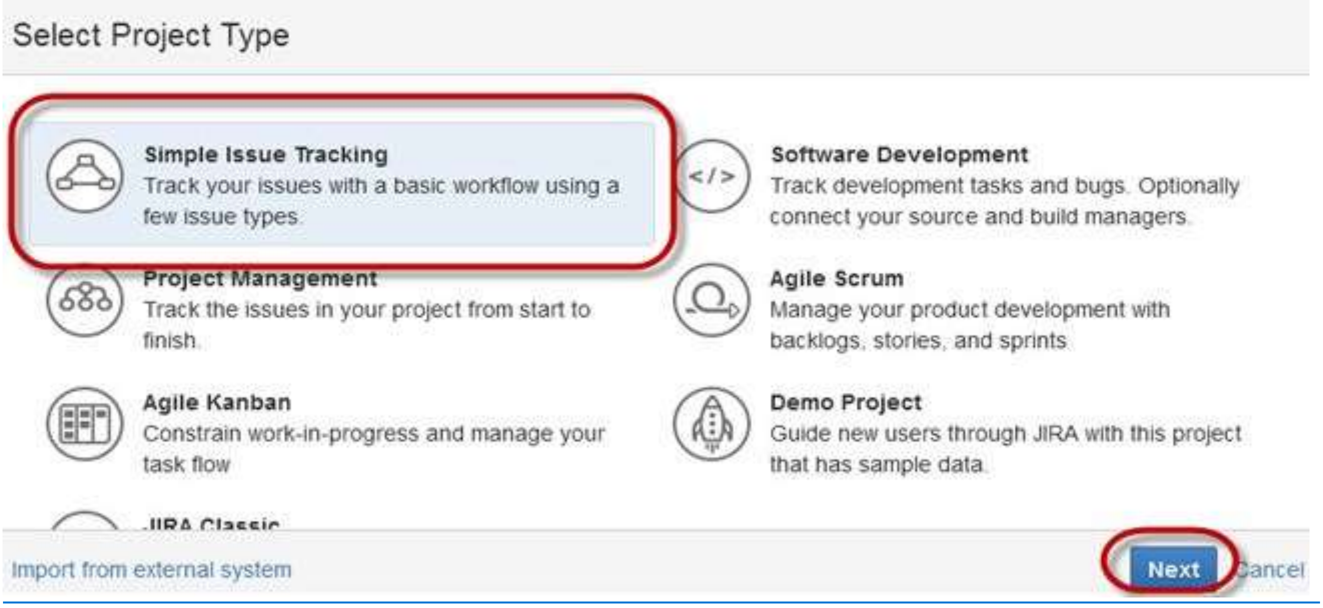
A resolution has been taken, and it is awaiting verification by reporter. From here issues are either reopened, or are closed.

CLOSED

The issue is considered finished, the resolution is correct. Issues which are closed can be reopened.

How to create an issue in JIRA

JIRA Dashboard will open when you enter your user ID and password. Under JIRA dashboard you will find option **Project,** when you click on it, it will open a window that list out options like **Simple Issue Tracking, Project Management, Agile Kanban, Jira Classic** and so on as shown in screen shot below.



Select Project Type

Simple Issue Tracking Track your issues with a basic workflow using a few issue types.

Software Development Track development tasks and bugs. Optionally connect your source and build managers.

Project Management Track the issues in your project from start to finish.

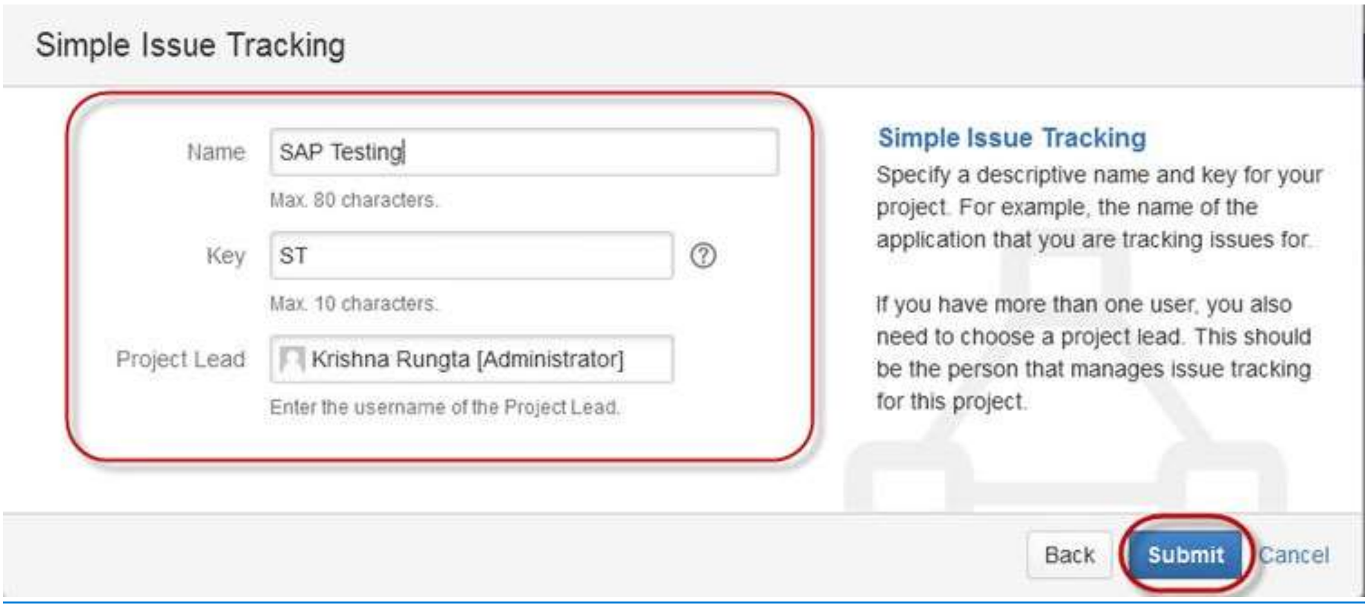
Agile Scrum Manage your product development with backlogs, stories, and sprints.

Agile Kanban Constrain work-in-progress and manage your task flow.

Demo Project Guide new users through JIRA with this project that has sample data.

JIRA Classic

When you click on option **Simple Issue Tracking,** another window will open, where you can mention all the details about the issue and also assign the issue to the responsible person.



Simple Issue Tracking

Name: SAP Testing
Max. 80 characters.

Key: ST
Max. 10 characters.

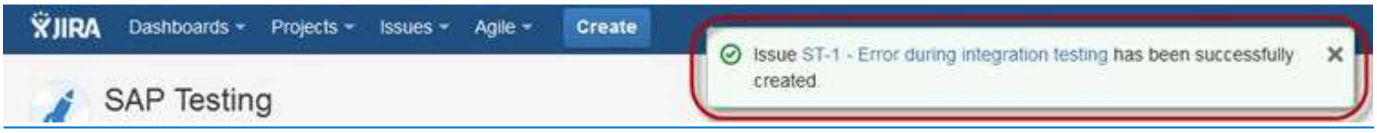
Project Lead: Krishna Rungta [Administrator]
Enter the username of the Project Lead.

Simple Issue Tracking

Specify a descriptive name and key for your project. For example, the name of the application that you are tracking issues for.

If you have more than one user, you also need to choose a project lead. This should be the person that manages issue tracking for this project.

When you click on "Submit" button, a window will open where you can perform a list of work like creating issues, assigning issues, check the status of issues like- resolved, In-Progress or closed and so on.



SAP Testing

Issue ST-1 - Error during integration testing has been successfully created.

15 Open ended Experiment: Mini Project – Not for exam but to compulsory to be included in Record. (Test cases for Hotel Booking)

The User Interface Screens are described in table 1.

Table 1: Hotel Management User Interface Screens

Screen Name	Description
Login	Log into the system as a CSR or Manager
Reservation	Retrieve button, update/save reservation, cancel reservation, modify reservation, change reservation, adjust room rate, accept payment type/credit card
Check-in	Modify room stay (e.g., new credit card), check-in customer (with or without a reservation), adjust room rate, special requests, accept payment type/credit card
Checkout	Checkout customer, generate bill
Hotel Payment	Accept payment for room and food
Room Service/Restaurant	Create order, modify order, view order, cancel order, generate meal bill
Customer Record	Add or update customer records
Administer Rooms	Availability and rates
Administer User	Create, modify, and delete users; change password
Administer Meals	Create, modify, and delete meal items and prices
Reports	Select, view, save, and delete reports

Functional Requirements

Functional requirements define the fundamental actions that system must perform.

The functional requirements for the system are divided into three main categories, Reservation/Booking, Food, and Management.

1. Reservation/Booking
   1.1. The system shall record reservations.
   1.2. The system shall record the customer’s first name.
   1.3. The system shall record the customer’s last name.
   1.4. The system shall record the number of occupants.
   1.5. The system shall record the room number.
   1.6. The system shall display the default room rate.
      1.6.1. The system shall allow the default room rate to be changed.
      1.6.2. The system shall require a comment to be entered, describing the reason for changing the default room rate.

1.7. The system shall record the customer’s phone number.
1.8. The system shall display whether or not the room is guaranteed.
1.9. The system shall generate a unique confirmation number for each reservation.
1.10. The system shall automatically cancel non-guaranteed reservations if the customer has not provided their credit card number by 6:00 pm on the check-in date.
1.11. The system shall record the expected check-in date and time.
1.12. The system shall record the expected checkout date and time.
1.13. The system shall check-in customers.
1.14. The system shall allow reservations to be modified without having to reenter all the customer inforamtion.
1.15. The system shall checkout customers.
1.15.1. The system shall display the amount owed by the customer.
1.15.2. To retrieve customer information the last name or room number shall be used
1.15.3. The system shall record that the room is empty.
1.15.4. The system shall record the payment.
1.15.5. The system shall record the payment type.
1.16. The system shall charge the customer for an extra night if they checkout after 11:00 a.m.
1.17. The system shall mark guaranteed rooms as “must pay” after 6:00 pm on the check-in date.
1.18. The system shall record customer feedback.

2. Food
2.1. The system shall track all meals purchased in the hotel (restaurant and room service).
2.2. The system shall record payment and payment type for meals.
2.3. The system shall bill the current room if payment is not made at time of service.
2.4. The system shall accept reservations for the restaurant and room service.

3. Management
3.1. The system shall display the hotel occupancy for a specified period of time (days; including past, present, and future dates).
3.2. The system shall display projected occupancy for a period of time (days).
3.3. The system shall display room revenue for a specified period of time (days).
3.4. The system shall display food revenue for a specified period of time (days).
3.5. The system shall display an exception report, showing where default room and food prices have been overridden.
3.6. The system shall allow for the addition of information, regarding rooms, rates, menu items, prices, and user profiles.
3.7. The system shall allow for the deletion of information, regarding rooms, rates, menu items, prices, and user profiles.

Nonfunctional Requirements

Functional requirements define the needs in terms of performance, logical database requirements, design constraints, standards compliance, reliability, availability, security, maintainability, and portability.

Performance Requirements

Performance requirements define acceptable response times for system functionality.

- The load time for user interface screens shall take no longer than two seconds.
- The log in information shall be verified within five seconds.
- Queries shall return results within five seconds.

Booking/Reservation System	**Testcase1(valid input)**	**Testcase2(invalid input)**
• Customer first name	Abcd	1234
• Customer last name	Xyz	$&*^
• Customer address	7th cross, Kormangla	-----bbjdsay--;
• Customer phone number	9191919090	asdf, 123654
• Number of occupants	2 , two	safdsa
• Assigned room	501	***
• Default room rate	500 rupees	-45 rupees
• Rate description	luxury room price	[blank]
• Guaranteed room (yes/no)	yes , no	[blank]
• Credit card number	4545435235254325	fdsjafsa
• Confirmation number	51515	afsda
• Automatic cancellation date	3-4-2018	1-1-1947
• Expected check-in date	2-4-2018	32-2-2018
• Expected check-in time	1:30 PM	25:30 AM
• Actual check-in date	2-4-2018	0-0-2010
• Actual check-in time	1:30 PM	0:75 AM
• Expected check-out date	5-4-2018	33-4-2011
• Expected check-out time	3:00PM	4:89PM
• Actual check-out date	5-4-2018	33-4-2018
• Actual check-out time	2:00PM	4:99AM
• Payment received (yes/no)	yes , no	[blank]
• Payment type	credit card , cash	[blank]
• Total Bill	5600 rupees	-566 rupees