TESTING OF E-Tuitions Website USING SELENIUM TOOL

A PROJECT REPORT FOR SOFTWARE TESTING

(ITE2004)

Submitted in partial fulfillment for the award of the degree of

B. Tech

in

Information Technology

By

Dilip Agarwal 15BIT0309

S. Hariprasanth 15BIT0006

Under the guidance of **Prof. Iyapparaja M.**

School of Information Technology and Engineering

Winter Semester 2017-18

ACKNOWLEDGEMENT

We sincerely thank **Dr. G. Viswanathan** - Chancellor, VIT University, for creating us an opportunity to use the facilities available at VIT. We also thank **Prof. IYAPPARAJA M**- Department of Information Technology, VIT university, for giving us the opportunity to do this project. We also thank the Dean and entire department of Information Technology, School of Information Technology and Engineering, for giving us this opportunity.

DECLARATION

We hereby declare that the project report entitled "**TESTING OF E-Tuitions WEBSITE USING SELENIUM TOOL**" submitted by us to VIT University, Vellore in partial fulfillment of the requirement for the award of the degree of B.Tech. (Information Technology) is a record of J component of project work carried out by us under the guidance of Prof. IYAPPARAJA M. We further declare that the work reported in this project has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Place: Vellore   Dilip Agarwal

Date: 6 April,2018   S. Hariprasanth

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PROJECT ABSTRACT

If you want to learn anything new, the easiest way is certainly to search and study it online! But is it the most effective method? Has online education made every other traditional teaching method obsolete? Can we really do it without the teachers?

The truth is that even after advent of various online learning platform which try very hard to match a real-life classroom experience, nothing can replace the one-to-one interaction, discussion and doubt clearing that happens in a traditional classroom environment. E-tuitions help students with personalized one-to-one attention and customized study plan that particularly address their weaker subject areas. The home tutor helps students in clearing doubts they have in any subject or topic. The aim of this project is to provide a platform where those who have an expertise over a subject and want to share their knowledge and those who seek that knowledge can find each other and interact. Our goal is to make the subject experts easily accessible to student who are struggling in a subject and want to learn the subject at their own pace with the help of a private tutor.

INTRODUCTION

E-tuitions provide a platform that fills the gap between those who want to teach and those who wish to study. Our project is aimed at helping students, tutors as well as institutions who seek teaching talent to add to their workforce.

e-tuitions help the students to find the best suitable teacher in their own area. They can search the teacher as per their own requirements and contact to him/her and clear his/her doubt with perfect method. They can ask the teacher for home tuitions as well.

It helps the teachers to find out the students who want to learn something new from the teachers at their own area. e-tuitions provide a platform to teachers who wants to help students who cannot afford so much fee. It also helps people to earn some money by teaching.

Students will respond better to a teacher that is suited to them, in terms of both temperament and learning style. As there is such a wide range of tutors available, each with their own strengths, specialities and learning styles, there is bound to be a tutor that is well suited to every student. Finding the right tutor, that can engage and inspire, can really make a big difference for the learner.

It helps the institutions to find out the best teachers available at their location. Institutions can hire them, and it will help the students to build their career. It can really make a big difference for the learner.

For Full Preview of Our Website Click: https://e-tuitions.com

Sample Code:

```php
<?php
include("connection.php"); //Connection file
include("usefulfunctions.php");
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <title>E-Tuitions</title>
<meta name="google-site-verification" content="1tCJf0aY5KHJ2LV145Usgl2EvB2giVBvqeBkFzLOiK0" />
<link rel="icon" href="favicon.ico" type="image/x-icon" />
<link rel="manifest" href="/manifest.json">
<link rel="mask-icon" href="/safari-pinned-tab.svg" color="#5bbad5">

    <meta charset="utf-8"/>
    <meta name="google-site-verification" content="ZdjA-vIk-VCboFoNvuSn3IHqu-RRFyhr-sYKi4o9W_Y" />
    <meta name="keywords" content="Home tuition, Home Tution, My private tutor, my private teacher, Teacher Requirement, E-tutors, e-tuitions,
    <meta name="description" content="Find the best teacher without going anywhere at your own location. We are providing best teacher of your
    <meta name="keyphrase" content="e-tuitions - Get The Home Teacher Now- Anywhere any time at your location teacher | Best teacher in my loca
    <meta name="Title" content="Home tuitions - My Private Tutor | Best Home Tution Site Best Possible Teacher For me | Affordable Teacher" />
    <meta name="distribution" content="Global" />
    <meta name="robots" content="index, follow" />
    <meta name="revisit-after" content="1 days"/>
    <meta name="copyright" content="e-tuitions.com"/>
    <meta itemprop="name" content="e-tuitions Home Page"/>
    <meta itemprop="image" content=""/>
    <meta itemprop="keywords" content="Home tuition, Home Tution, My private tutor, my private teacher, Teacher Requirement, E-tutors, e-tuiti

    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css"/>
    <link rel="stylesheet" type="text/css" href="css/externalstyle.min.css"/>
    <script src="js/externaljavascript.min.js"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/bootstrap-select/1.12.4/js/bootstrap-select.min.js"></script>
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/bootstrap-select/1.12.4/css/bootstrap-select.min.css"/>

<style>
    .pageheader#web-design{background:url(mainpage1.jpg) center 200% fixed #333}
</style>

</head>
<?php
    include("navbar.php");
?>
<body>
<div class="container-fluid">
    <section class="row pageheader" id="web-design">
        <div class="container">

            <h1 class="mainheadingonindex">Welcome To E-tuitions</h1>
        </div>
    </section>
    <section class="row content">
        <h2 class="whyitmatters">Why It Matters</h2>
        <p class="text-muted text-center" style="color:grey">If you want to learn anything new, the
        easiest way is certainly to search and study it online! But is it
        the most effective method? Has online education made every other traditional
        teaching method obsolete? Can we really do it without the teachers? Private
        home tuition help students with
        personalized one-to-one attention and customized study plan that
        particularly address their weaker subject areas.The home tutor helps students
        in clearing doubts they have in any subject or topic.
        Subject experts are right away, Find your teacher in your own location and clear your doubts.
        </p>
    </section>
    <?php
    include('recentlyadded.php');
    ?>
    <section class="row service-points web-development">
        <h2 class="text-center whatwedo">What We Do?</h2>
        <div class="container" style="color:grey">
            <div class="row">
```

```
70          <div class="col-sm-6">
71              <h3><b>Help To Students</b></h3>
72              <hr style="border: 0.6px solid lightgrey"/>
73              <p>
74              e-tuitions help the students to find the best suitable teacher in there own area. They
75              can search the teacher as per there own
76              requirements and contact to him/her and clear his/her doubt with perfect method.
77              They can ask the teacher for home tuitions as well.
78              </p>
79          </div>
80          <div class="col-sm-6">
81              <h3><b>Help To Teachers</b></h3>
82              <hr style="border: 0.6px solid lightgrey"/>
83              <p>
84              e-tuitions help the teachers to find out the students who want to learn something new from the teachers at there own
85              e-tuitions provide a platform to teachers who wants to help students who can not afford so much fee.
86              It also help people to earn some money by teaching.
87
88              </p>
89          </div>
90      </div>
91      <div class="row">
92          <div class="col-sm-6">
93              <h3><b>Student Teacher Relationship</b></h3>
94              <hr style="border: 0.6px solid lightgrey"/>
95              <p>
96              Students will respond better to a teacher that is suited to them, in terms of both temperament and learning style.
97              As there is such a wide
98              range of tutors available, each with their own strengths, specialities and learning styles, there
99              is bound to be a tutor that is well suited to each and every student.
100             Finding the right tutor, that can engage and inspire, can really make a big difference for the learner.
101
102             </p>
103             </p>
104         </div>
105         <div class="col-sm-6">
106             <h3><b>Help To Instituitions</b></h3>
107             <hr style="border: 0.6px solid lightgrey" />
108             <p>
109             e-tuitions help the instituitions to find out the best teachers available at there location.
110             instituions can hire them and it will help the students to build there career.
111             It can really make a big difference for the learner.
112
113             </p>
114         </div>
115         </div>
116     </div>
117 </section>
118 </div>
119 </body>
120 </html>
121 <?php
122     include("footer.php");
123 ?>
124 <?php
125     include("signup/teachersignup.php");
126     include("signup/studentsignup.php");
127 ?>
128
```
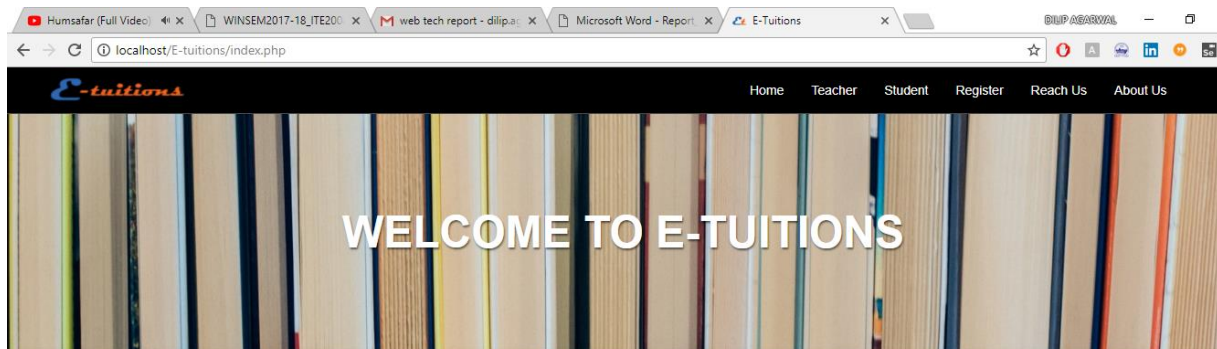
Screenshots of Website:

What We Do?

Help To Students

e-tuitions help the students to find the best suitable teacher in there own area. They can search the teacher as per there own requirements and contact to him/her and clear his/her doubt with perfect method. They can ask the teacher for home tuitions as well.
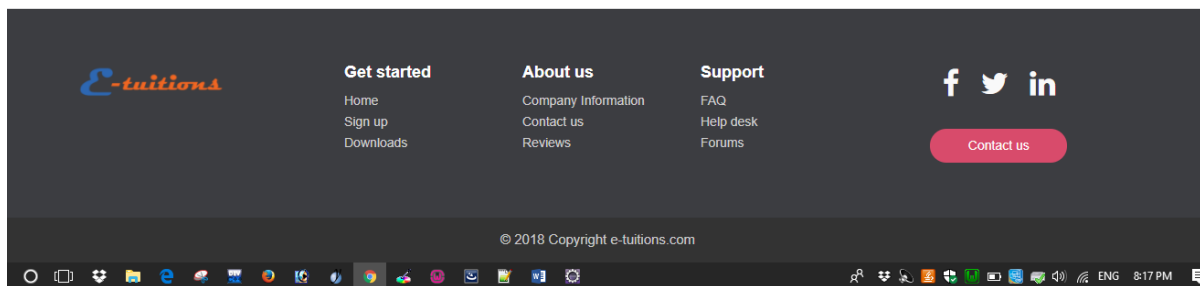
Help To Teachers

e-tuitions help the teachers to find out the students who want to learn something new from the teachers at there own area. e-tuitions provide a platform to teachers who wants to help students who can not afford so much fee. It also help people to earn some money by teaching.

Student Teacher Relationship

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Help To Instituitions

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E-tuitions

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e-tuitions Students

Filter Students

Search by First Name

Search by Gender ▼

Search By Class ▼

Select By Subject ▼

Search By Board ▼

Search By Medium ▼

Search By State ▼

Search By City ▼

Search By Area ▼

Apply

Dilip Agarwal (Male 20)
State : Rajasthan
City : Jaipur
Contact : 8619113671
Board : CBSE
Medium : English
Class Learn : B.TECH
View Profile

Reetika Gupta (Female 22)
State : Rajasthan
City : Jaipur
Contact : 8056723654
Board : CBSE
Medium : English
Class Learn : B.TECH
View Profile

Ajay Choudhary (Male 24)
State : Haryana
City : Bhiwani
Contact : 9782367896
Board : KVS
Medium : English
Class Learn : B.TECH
View Profile

Anant Gupta (Male 14)
State : Rajasthan
City : Jaipur
Contact : 8056756257
Board : CBSE
Medium : English
Class Learn : Class X
View Profile

Hina Khan (Female 21)
State : Haryana
City : Bhiwani
Contact : 7745896253
Board : CBSE
Medium : English
Class Learn : Class XI
View Profile

Vibas Goel (Male 21)
State : Gujarat
City : Surat
Contact : 8096321450
Board : CBSE
Medium : English
Class Learn : Class XII
View Profile

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11
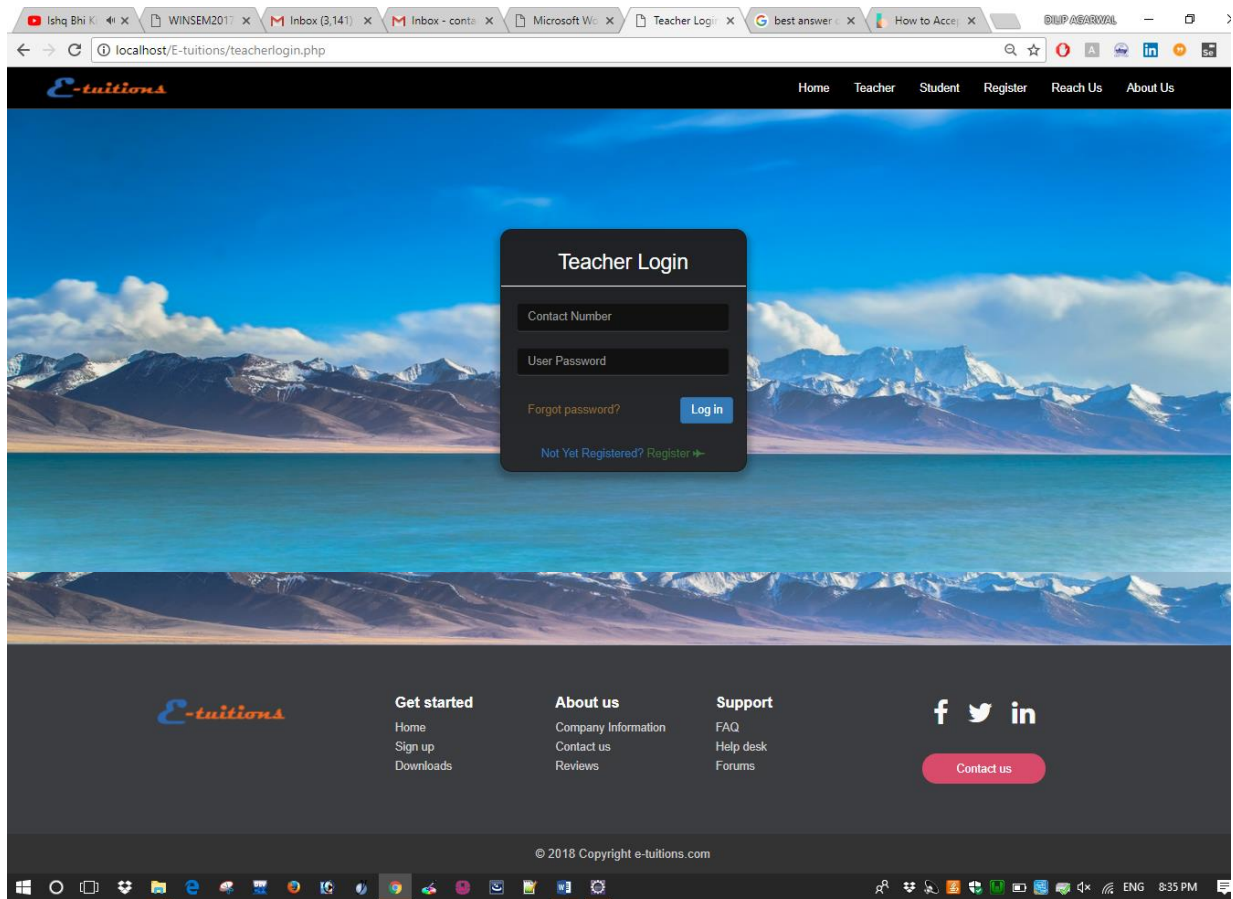
14
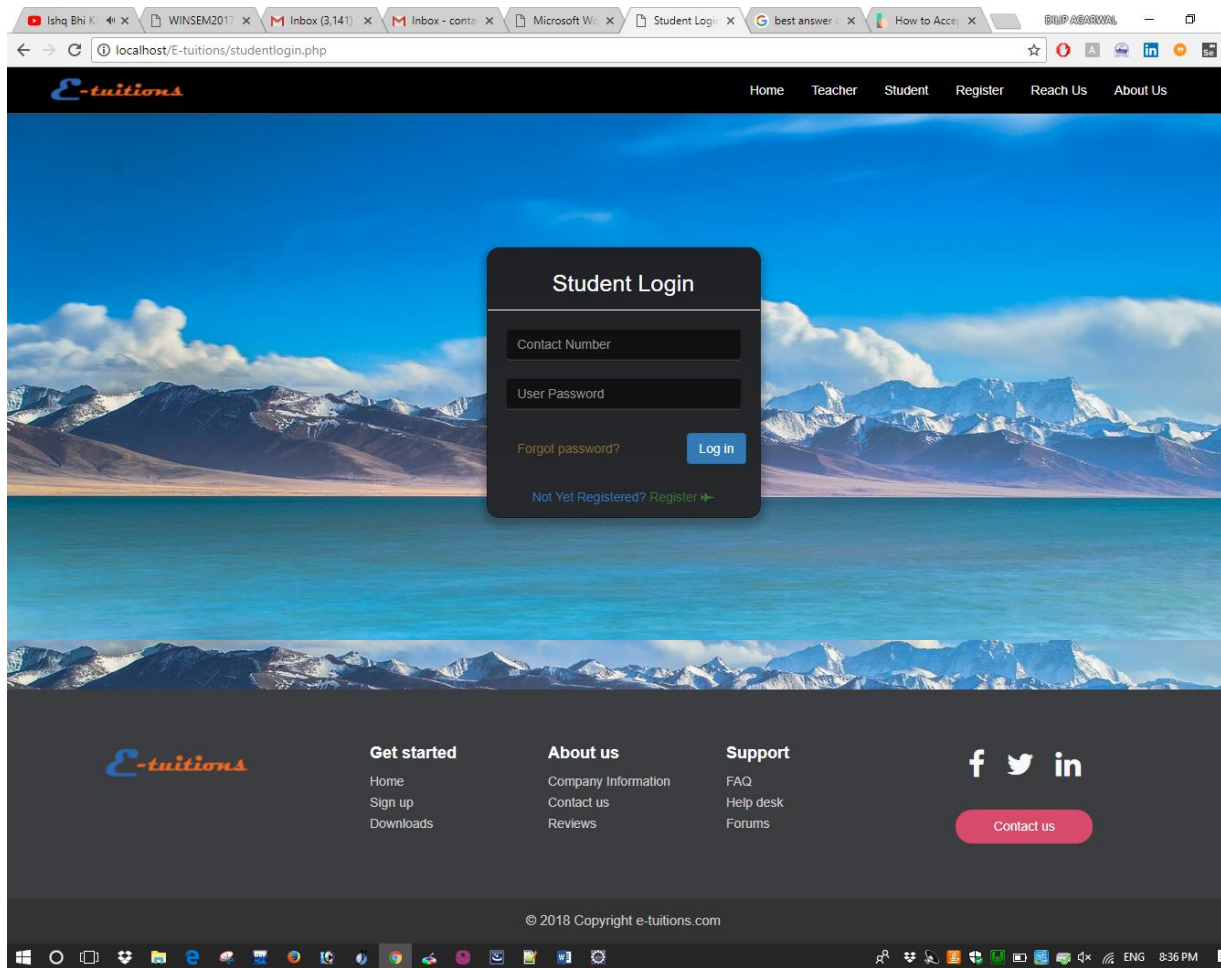
TESTING TOOL

Selenium: -

- Selenium is a free (open source) automated testing suite for web applications across different browsers and platforms.
- Selenium provides a playback (formerly also recording) tool for authoring tests without the need to learn a test scripting language (Selenium IDE).
- It also provides a test domain-specific language (Sienese) to write tests in a number of popular programming languages, including C#, Groovy, Java, Perl, PHP, Python, Ruby and Scala. The tests can then run against most modern web browsers. Selenium deploys on Windows, Linux, and macOS platforms.
- It is quite similar to HP Quick Test Pro (QTP now UFT) only that Selenium focuses on automating web-based applications.
- Testing done using Selenium tool is usually referred as Selenium Testing.
- Selenium is not just a single tool but a suite of software's, each catering to different testing needs of an organization.
- It is open-source software, released under the Apache 2.0 license: web developers can download and use it without any charge.

Components: -

1. Selenium Integrated Development Environment (IDE)

2. Selenium Remote Control (RC)

3. Web Driver

4. Selenium Grid
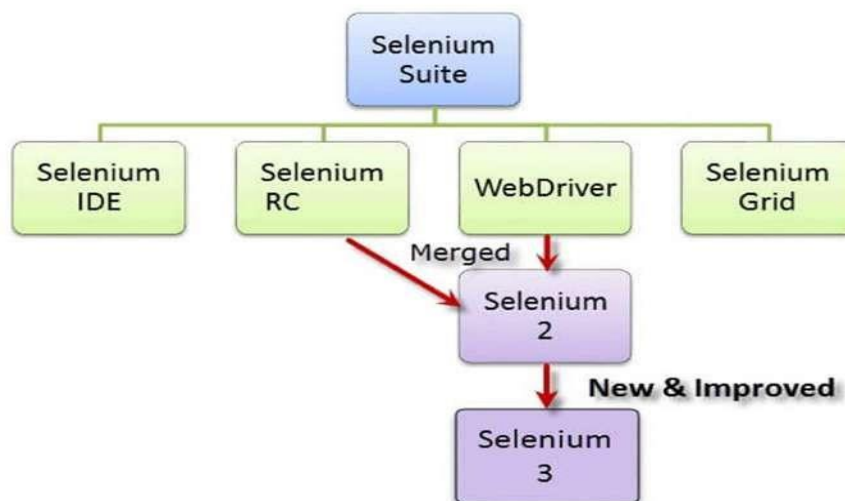
At the moment, Selenium RC and WebDriver are merged into a **single framework** to form Selenium 2. Selenium 1, by the way, refers to **Selenium RC**.

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SELENIUM IDE: -

Selenium Integrated Development Environment (IDE) is the simplest framework in the Selenium suite and is the easiest one to learn.

It is a Firefox plugin that you can install as easily as you can with other plugins.

However, because of its simplicity, Selenium IDE should only be used as a prototyping tool.

If you want to create more advanced test cases, you will need to use either Selenium RC or WebDriver

PROS	CONS
Very easy to use and install.	Available only in Firefox.
No programming experience is required, though knowledge of HTML and DOM are needed.	Designed only to create prototypes of tests.
Can export tests to formats usable in Selenium RC and WebDriver.	No support for iteration and conditional operations.
Has built-in help and test results reporting module.	Test execution is slow compared to that of Selenium RC and WebDriver.
Provides support for extensions.	

SELENIUM REMOTE CONTROL: -

Selenium RC was the flagship testing framework of the whole Selenium project for a long time.

This is the first automated web testing tool that allowed users to use a programming language they prefer.

As of version 2.25.0, RC can support the following programming languages:

- • Java
- • C#
- • PHP
- • Python
- • Perl
- • Ruby

Selenium RC comes in two parts.

1. A server which automatically launches and kills browsers, and acts as a HTTP proxy for web requests from them.

2. Client libraries for your favorite computer language.

Pros	Cons
Cross-browser and cross-platform	Installation is more complicated than IDE
Can perform looping and conditional operations	Must have programming knowledge
Can support data-driven testing	Needs Selenium RC Server to be running
Has matured and complete API	API contains redundant and confusing commands
Can readily support new browsers	Browser interaction is less realistic
Faster execution than IDE	Inconsistent results & Uses Javascript
	Slower execution time than WebDriver

SELENIUM WEBDRIVER: -

The WebDriver proves itself to be better than both Selenium IDE and Selenium RC in many aspects.

It implements a more modern and stable approach in automating the browser's actions. WebDriver, unlike Selenium RC, does not rely on JavaScript for Automation.

It controls the browser by directly communicating with it.

The supported languages are the same as those in Selenium RC.

- Java
- C#
- PHP
- Python
- Perl
- Ruby

Pros	Cons
Simpler installation than Selenium RC	Installation is more complicated than Selenium IDE
Communicates directly to the browser	Requires programming knowledge
Browser interaction is more realistic	Cannot readily support new browsers
No need for a separate component such as the RC Server	Has no built-in mechanism for logging runtime messages and generating test results
Faster execution time than IDE and RC	

SELENIUM GRID: -

Selenium Grid is a tool used together with Selenium RC to run parallel tests across different machines and different browsers all at the same time. Parallel execution means running multiple tests at once.

FEATURES: -

Enables simultaneous running of tests in multiple browsers and environments.

Saves time enormously.

Utilizes the hub-and-nodes concept. The hub acts as a central source of Selenium commands to each node connected to it.

Advantages of Selenium: -

1. Selenium is pure open source, freeware and portable tool.

2. Selenium supports variety of languages that include Java, Perl, Python, C#, Ruby, Groovy, Java Script, and VB Script. etc.

3. Selenium supports many operating systems like Windows, Macintosh, Linux, Unix etc.

4. Selenium supports many browsers like Internet explorer, Chrome, Firefox, Opera, Safari etc.

5. Selenium can be integrated with ANT or Maven kind of framework for source code compilation.

6. Selenium can be integrated with other open source tools for supporting other features.

7. Selenium can be used for Android, iPhone, Blackberry etc. based application testing.

8. Selenium supports very less CPU and RAM consumption for script execution.

9. Selenium supports Parallel Test Execution.

Disadvantages of Selenium: -

1. No reliable Technical Support from anybody.

2. Selenium only supports web-based application and does not support windows-based application.

3. Difficult to use, takes more time to create Test cases.

4. Sometimes it is difficult to Setup Test Environment when it compares to Vendor Tools like UFT, RFT, Silk Test etc...

5. Limited support for Image Testing.

6. No Test Tool integration for Test Management.

7. Selenium does not support file upload facility.

8. Selenium need outside support for report generation activity like dependence on Test NG or Jenkins. we need to take help from either JUnit of TestNG Testing Framework to generate Test Reports.

We are using Selenium IDE and Selenium Web Driver for Testing:

Java language we are using for Selenium Web Driver.

Code for Selenium Web Driver:

```
1   package Testing;
2
3⊕  import java.util.NoSuchElementException;
9
10  public class Code
11  {
12⊖    public static void main(String[] args) {
13        WebDriver driver = new FirefoxDriver();
14        driver.get("http://localhost/E-tuitions/index.php");
15
16        |
17        // Checking for logo link is working or not  in navbar
18
19        System.out.println("\n  Test Case:"+ 1 + "\n  Checking that 'Logo' is working or not\n");
20        driver.findElement(By.className("navbar-brand")).click();
21        String URL1 = driver.getCurrentUrl();
22        if(URL1.equals("http://localhost/E-tuitions/"))
23           System.out.println("  The Logo is working. It successfully navigates To Home page");
24        else
25           System.out.println("  The logo is not working. Some Error was occurred");
26        System.out.println("--------------------------------------------------------------------------------------------------------------------\n");
27
28
29        // Checking for Internal links for More Teachers is working or not  on homepage
30
31        System.out.println("  Test Case 2: \n  Checking For 'More Teachers' is internal link Or external link");
32        try
33        {
34           driver.findElement(By.linkText("More Teachers")).click();
35           String URL3 = driver.getCurrentUrl();
36           if (URL3.contains("E-tuitions"))
```

```
37        System.out.println(" It is an Internal Link - Redirecting to another page in the Same Application - Passed");
38    }
39    catch (NoSuchElementException e) {
40        System.out.println(" It is an External Link - Redirecting to another page in different Application - Failed");}
41    System.out.println("-------------------------------------------------------------------------------------\n");
42
43
44    // Checking for View Profile Link is working or not in search students page
45
46    System.out.println(" Test Case:"+ 3 + "\n Checking that 'view profile link' is working or not in search Teacher page \n");
47    driver.findElement(By.linkText("View Profile")).click();
48    String URL7 = driver.getCurrentUrl();
49    if(URL7.equals("http://localhost/E-tuitions/studentlogin.php"))
50        System.out.println(" The link is working. It successfully navigates To student login page");
51    else
52        System.out.println("The link is not working. Some Error was occurred");
53    System.out.println("-------------------------------------------------------------------------------------\n");
54
55
56    driver.get("http://localhost/E-tuitions/");
57
58    // Checking for Internal link of More Students is working or not  on homepage
59
60    System.out.println(" Test Case 4: \n Checking For 'More Students' is internal link or external link");
61    try
62    {
63        driver.findElement(By.linkText("More Students")).click();
64        String URL2 = driver.getCurrentUrl();
65        if (URL2.contains("E-tuitions"))
66            System.out.println(" It is an Internal Link - Redirecting to another page in the Same Application - Passed");
67    }
68    catch (NoSuchElementException e) {
69        System.out.println(" It is an External Link - Redirecting to another page in different Application - Failed");}
70    System.out.println("-------------------------------------------------------------------------------");
71
72    // Checking for View Profile Link is working or not in search students page
73    System.out.println("\n Test Case:"+ 5 + "\n Checking that 'view profile link' is working or not in search students page \n");
74    driver.get("http://localhost/E-tuitions/students.php");
75    driver.findElement(By.linkText("View Profile")).click();
76    String URL6 = driver.getCurrentUrl();
77    if(URL6.equals("http://localhost/E-tuitions/teacherlogin.php"))
78        System.out.println(" The link is working. It successfully navigates To teacher login page");
79    else
80        System.out.println("The link is not working. Some Error was occurred");
81    System.out.println("-------------------------------------------------------------------------------");
82
83
84    // Checking for About Us Link is working or not  in navbar
85
86    System.out.println("\n Test Case:"+ 6 + "\n Checking that 'About Us link' is working or not\n");
87    driver.findElement(By.linkText("About Us")).click();
88    URL1 = driver.getCurrentUrl();
89    if(URL1.equals("http://localhost/E-tuitions/aboutus.php"))
90        System.out.println(" The About Us Page is working. It successfully navigates To About Us page");
91    else
92        System.out.println(" The About Us link is not working. Some Error was occurred");
93    System.out.println("-------------------------------------------------------------------------------\n");
94
95
96    // Checking for Reach Us Link is working or not  in navbar
97    System.out.println(" Test Case:"+ 7 + "\n Checking that 'Reach Us link' is working or not\n");
98    driver.findElement(By.linkText("Reach Us")).click();
```

```
99      URL1 = driver.getCurrentUrl();
100     if(URL1.equals("http://localhost/E-tuitions/contactus.php"))
101         System.out.println(" The Reach Us Page is working. It successfully navigates To Contact Us page");
102     else
103         System.out.println(" The Reach Us link is not working. Some Error was occurred");
104
105     // Now Test will start for teacher login Input Section
106
107     int i=8;
108     System.out.println("\n\n========================= Now The Test will start for Teacher Login Input Section  =========================");
109     teacherLoginLoop: while(true)
110     {
111         Scanner obj = new Scanner(System.in);
112         System.out.println("\nPress 1: For Test Teacher Login");
113         System.out.println("Press 2: For Exit From Teacher Login Section");
114         System.out.print("\nPut Your Choice Here: ");
115         int choice=obj.nextInt();
116         switch(choice)
117         {
118             case 1:
119                 System.out.println("\n--------------------------------------------------------------------------------\n");
120                 System.out.println(" Test Case:"+ i + "\n Checking For 'Teacher Login' is valid or not\n");
121                 driver.get("http://localhost/E-tuitions/teacherlogin.php");
122                 Scanner sc = new Scanner(System.in);
123
124                 System.out.print(" Enter UserId: ");
125                 String userid = sc.nextLine();
126
127                 System.out.print(" Enter Password: ");
128                 String password = sc.nextLine();
129
130                 driver.findElement(By.className("teacherid")).sendKeys(userid);
131                 driver.findElement(By.className("teacherpassword")).sendKeys(password);
132                 driver.findElement(By.id("go")).click();
133                 String URL4 = driver.getCurrentUrl();
134                 if (URL4.contains("afterteacherlogin.php"))
135                 {
136                     System.out.println("\n Login Successful!!");
137                     System.out.println("\n--------------------------------------------------------------------------------");
138                 }
139                 else
140                 {
141                     System.out.println("\n Login Unsuccessful!!");
142                     System.out.println("\n--------------------------------------------------------------------------------");
143                 }
144                 i++;
145                 break;
146             case 2:
147                 break teacherLoginLoop;
148             default:
149                 System.out.print("\nPlease Choose From Given Choice Only");
150         }
151     }
152
153
154     // Test will start for Student login Input Section
155
156     System.out.println("\n========================= Now the test will start for Student Login Input Section =========================\n");
157     studentLoginLoop: while(true)
158     {
159         Scanner obi = new Scanner(System.in);
```

```java
160        System.out.println("\nPress 1: For Test Student Login");
161        System.out.println("Press 2: For Exit From Student Login Section");
162        System.out.print("\nPut Your Choice Here: ");
163        int choice=obj.nextInt();
164        switch(choice)
165        {
166          case 1:
167            System.out.println("\n-------------------------------------------------------------------------------------------\n");
168            System.out.println("  Test Case:"+ i + "\n  Checking For 'Teacher Login' is valid or not\n");
169            driver.get("http://localhost/E-tuitions/studentlogin.php");
170            System.out.print("  Enter UserId: ");
171            Scanner sc = new Scanner(System.in);
172            String userid = sc.nextLine();
173            System.out.print("  Enter Password: ");
174            String password = sc.nextLine();
175
176            driver.findElement(By.className("teacherid")).sendKeys(userid);
177            driver.findElement(By.className("teacherpassword")).sendKeys(password);
178            driver.findElement(By.id("go")).click();
179            String URL5 = driver.getCurrentUrl();
180            if (URL5.contains("afterstudentlogin.php"))
181            {
182                System.out.println("\n  Login Successful!!");
183                System.out.println("\n-------------------------------------------------------------------------------------");
184            }
185            else
186            {
187              System.out.println("\n  Login Unsuccessful!!");
188                System.out.println("\n-------------------------------------------------------------------------------------");
189            }
190            i++;
191                break;
192            case 2:
193                break studentLoginLoop;
194            default:
195                System.out.print("\nPlease Choose From Given Choice Only");
196          }
197        }
198
199
200      driver.close();
201      }
202 }
```

Test Cases by Selenium Web driver:

Test Case Description: -

This test case checks that after click on logo button of "e-tuitions". Is It redirects the webpage to home page or not.

```
Test Case:1
Checking that 'Logo' is working or not

The Logo is working. It successfully navigates To Home page
-------------------------------------------------------------
```

Test Case Description: -

This test case checks that after click on "More Teachers" link available on homepage. Is It redirects the webpage to more teacher's page or not.

```
Test Case 2:
Checking For 'More Teachers' is internal link Or external link
It is an Internal Link - Redirecting to another page in the Same Application - Passed
-------------------------------------------------------------
```

Test Case Description: -

Checking that **"view profile"** link is working or not in Search Teacher Page

```
Test Case:3
Checking that 'view profile link' is working or not in search Teacher page

The link is working. It successfully navigates To student login page
-------------------------------------------------------------
```

Test Case Description: -

This test case checks that after click on "More Students" link available on homepage. Is It redirects the webpage to more student's page or not.

Test Case 4:
Checking For 'More Students' is internal link or external link
It is an Internal Link - Redirecting to another page in the Same Application - Passed

Test Case Description: -

Checking that **"view profile"** link is working or not in Search Student Page

Test Case:5
Checking that 'view profile link' is working or not in search students page

The link is working. It successfully navigates To teacher login page

Test Case Description: -

This test case checks that after click on "About Us" link in navbar. Is It redirects the webpage to About Us page or not.

Test Case:6
Checking that 'About Us link' is working or not

The About Us Page is working. It successfully navigates To About Us page

Test Case Description: -

This test case checks that after click on "ReachUs" link in navbar. Is It redirects the webpage to Contact Us page or not.

Test Case:7
Checking that 'Reach Us link' is working or not

The Reach Us Page is working. It successfully navigates To Contact Us page

After Checking of Link available on homepage it redirects to Teacher Login page. And then it will ask you that do you want to test Teacher Login page or not. If you press 1 means yes and if you press 2 then it will consider it as no.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id but wrong password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put wrong User Id but right password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put wrong User Id and wrong password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id and right password and as expected it is redirects to login.

After testing the Teacher Login page, it redirects to Seacher Login page. And then it will ask you that do you want to test Student Login page or not. If you press 1 means yes and if you press 2 then it will consider it as no.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id but wrong password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put wrong User Id but right password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put wrong User Id and wrong password and as expected it is not redirects to login.

Test Case Description: -

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id and right password and as expected it is redirects to login.

```
Test Case:15
Checking For 'Teacher Login' is valid or not

Enter UserId: 8056756257
Enter Password: o1nG6wJ^

Login Successful!!
----------------------------------------
```

Test Cases by Selenium IDE:

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put wrong User Id and wrong password and as expected it does not redirects to login.

First Test Case		
open	/E-tuitions/studentlogin.php	
type	id=teacherid	Dilip Agarwal
type	id=teacherpassword	123456
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id but wrong password and as expected it is not redirects to login.

Second Test Case		
open	/E-tuitions/studentlogin.php	
type	id=teacherid	
type	id=teacherpassword	
type	id=teacherid	8056756257
type	id=teacherpassword	abcd
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id and right password and as expected it is redirects to login.

Third Test Case		
open	/E-tuitions/studentlogin.php	
type	id=teacherid	8056756257
type	id=teacherpassword	o1nG6wJ^
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id and right password and as expected it is redirects to login.

Fourth Test Case		
open	/E-tuitions/studentlogin.php	
type	id=teacherid	123456789
type	id=teacherpassword	o1nG6wJ^
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here we put right User Id but wrong password and as expected it is not redirects to login.

Fifth Test Case		
open	/E-tuitions/teacherlogin.php	
type	id=teacherid	8056756257
type	id=teacherpassword	jhhvdjhvdj
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here no input is given and as expected it does not redirects to login.

Six		
open	/E-tuitions/teacherlogin.php	
type	id=teacherid	
type	id=teacherpassword	
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here only teacherid is given and as expected it does not redirects to login.

Seven		
open	/E-tuitions/teacherlogin.php	
type	id=teacherid	2131231
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Here only password is given and as expected it does not redirects to login.

Eight		
open	/E-tuitions/teacherlogin.php	
clickAndWait	id=go	
type	id=teacherpassword	ekebckc k
clickAndWait	id=go	

Test Case Description:

After taking input from tester it is checking that, are you doing unauthorized login?

Nine		
open	/E-tuitions/teacherlogin.php	
type	id=teacherid	9785214523
type	id=teacherpassword	H&Uw93Nv
clickAndWait	id=go	

Test Suite Generated by Selenium IDE:

Test Suite
First
Second
Third
Fourth
Fifth
Sixth
Seven
Eight
Nine
Ten(Teacher Register)
Eleven (Student Register)

Report Generated of Our website by Online Testing websites:

Web Page Speed Report

URL:	https://e-tuitions.com
Title:	Access denied | e-tuitions.com used Cloudflare to restrict access
Date:	Report run on Wed Apr 4 20:33:21EDT2018

Diagnosis

Global Statistics

Total HTTP Requests:	36
Total Size:	664278 bytes

Object Size Totals

Object type	Size (bytes)	Download @ 56K (seconds)	Download @ T1 (seconds)
HTML:	1179	0.43	0.21
HTML Images:	0	0.00	0.00
CSS Images:	651768	136.50	10.05
Total Images:	651768	136.5	10.05
Javascript:	11331	2.66	0.46
CSS:	0	0.00	0.00
Multimedia:	0	0.00	0.00
Other:	0	0.00	0.00

External Objects

External Object	QTY
Total HTML:	1
Total HTML Images:	0
Total CSS Images:	33
Total Images:	33
Total Scripts:	2
Total CSS imports:	0
Total Frames:	0
Total Iframes:	0

Download Times*

Connection Rate	Download Time
14.4K	522.05 seconds
28.8K	264.62 seconds
33.6K	227.85 seconds
56K	139.59 seconds
ISDN 128K	47.74 seconds
T1 1.44Mbps	10.72 seconds

Overall Report After Testing:

Testing Module-1 (Teacher Register)

TEST CASE ID: Teacher Register Details	**ASSIGN DATE:** 25th Jan 2018
PROJECT/MODULE: Teacher Register	**SUBMISSION DATE:** 7th Feb 2018
OBJECTIVE: To check whether Teacher Register page working properly or not	**TESTER/VERIFIER:** S.Hariprasanth
NUMBER OF TEST CASES: 30	**APPROVER/VALIDATOR:** Prof. IYAPPARAJA M

PRECONDITIONS:

1. NAME field should be 3-20 alphabets.

2. It should take only valid e-mail.

3. Phone number field should be 10 numbers starting with 6, 7 or 8 or 9.

4. Picture upload should allow only file type with extension gif, jpg, png or jpeg.

TEST CASE ID	TEST INPUT	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)	REMARK	BUG STATE
1	Hari	Valid	Valid	Pass	-	-
2	Hari15	Invalid	Valid	Fail	Major	New
3	An	Invalid	Valid	Fail	Minor	New
4	A@_ui	Invalid	Invalid	Pass	-	-
5	1234	Invalid	Invalid	Pass	-	-
6	abcdefghijklmnopqrstui	Invalid	Valid	Fail	Medium	New
7	email@domain.com	Valid	Valid	Pass	-	-
8	firstnalastname@domain.com	Valid	Valid	Pass	-	
9	_____@domain.com	Invalid	Valid	Fail	Major	New
10	"email"@domain.com	Invalid	Invalid	Pass	-	-
11	#@%^%#$@#$@#.com	Invalid	Valid	Fail	Medium	New
12	@domain.com	Invalid	Invalid	Pass	-	-

13	email@domain	Invalid	Valid	Fail	Major	New
14	email@domain.web	Valid	Valid	Pass	-	-
15	email@domain..com	Invalid	Valid	Fail	Minor	New
16	9952475894	Valid	Valid	Pass	-	-
17	965236	Invalid	Invalid	Pass	-	-
18	1234567890	Invalid	Valid	Fail	Major	New
19	Asd1323546	Invalid	Invalid	Pass	-	-
20	9956845632156	Invalid	Valid	Fail	Major	New
21	@#32421432	Invalid	Invalid	Pass	-	-
22	qwsderf@34	Invalid	Valid	Fail	Major	New
23	8056756257	Valid	Valid	Pass	-	-
24	dilipagarwal.jpg	Valid	Valid	Pass	-	-
25	Software.pdf	Invalid	Valid	Fail	Major	New
26	hari.exe	Invalid	Invalid	Pass	-	-
27	cplusplus.txt	Invalid	Valid	Fail	Major	New
28	Dilip.png	Valid	Valid	Pass	-	-
29	Hari.kio	Invalid	Valid	Fail	Critical	New
30	Image.jpg	Valid	Valid	Pass	-	-

Number of test cases planned, executed and passed/failed:

Test cases Planned	Test cases Executed	TCs Pass	TCs Failed
30	30	17	13

No of defects identified & their Severity:

(i)   Number of critical bugs: 1

(ii)   Number of major bugs: 8

(iii) Number of medium bugs: 2

(iv)   Number of minor bugs: 2

Testing Module-2 (Student Registration)

TEST CASE ID: Student Register details	ASSIGN DATE: 25th Jan 2018
PROJECT/MODULE: Student Register	SUBMISSION DATE: 7th Feb 2018
OBJECTIVE: To check whether Student Register page working properly or not	TESTER/VERIFIER: Dilip Agarwal
NUMBER OF TEST CASES: 30	APPROVER/VALIDATOR: Prof. IYAPPARAJA M

PRECONDITIONS:
1. Name field should be 3-20 alphabets.
2. It should take only valid e-mail.
3. Phone number field should be 10 numbers starting with 6, 7 or 8 or 9.
4. Picture upload should allow only file type with extension gif, jpg, png or jpeg.

TEST CASE ID	TEST INPUT	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)	REMARK	BUG STATE
1	Dilip	Valid	Valid	Pass	-	-
2	Dilip11	Invalid	Valid	Fail	Major	New
3	Di	Invalid	Valid	Fail	Minor	New
4	A#-ji	Invalid	Invalid	Pass	-	-
5	54321	Invalid	Invalid	Pass	-	-
6	haramiboidbdkjjhvjhv	Invalid	Valid	Fail	Medium	New

7	myemail@domain.com	Valid	Valid	Pass	-	-
8	myname@vit.ac.in	Valid	Valid	Pass	-	-
9	_____@domain.com	Invalid	Inalid	Pass	-	-
10	"email"@domain.com	Invalid	Invalid	Pass	-	-
11	#@%^%#$@#$@#.com	Invalid	Valid	Fail	Medium	New
12	@domain.com	Invalid	Invalid	Pass	-	-
13	email@domain	Invalid	Valid	Fail	Major	New
14	email@domain.web	Valid	Valid	Pass	-	-
15	email@domain..com	Invalid	Valid	Fail	Major	New
16	8619113671	Valid	Valid	Pass	-	-
17	896523	Invalid	Invalid	Pass	-	-
18	0987654123	Invalid	Valid	Fail	Major	New
19	Hyu1356895	Invalid	Invalid	Pass	-	-
20	9956845632156	Invalid	Invalid	Pass	-	-
21	432@#32421	Invalid	Invalid	Pass	-	-
22	qwsderf@34	Invalid	Valid	Fail	Critical	New
23	8619113625	Valid	Valid	Pass	-	-
24	dilip.jpg	Valid	Valid	Pass	-	-
25	testing.pdf	Invalid	Valid	Fail	Major	New
26	hari.txt	Invalid	Invalid	Pass	-	-
27	cplusplus.exe	Invalid	Valid	Fail	Major	New
28	Dilip.png	Valid	Valid	Pass	-	-
29	Hari.poi	Invalid	Valid	Fail	Critical	New
30	Image.png	Valid	Valid	Pass	-	-

Steps to execute test case:

1. Click on Teacher Register
2. Put All your Required Information

No. of test cases planned, executed and passed/failed:

Test cases Planned	Test cases Executed	Test cases Pass	Test cases Failed
30	30	19	11

No of defects identified & their Severity:

(i)   Number of critical bugs: 2

(ii)   Number of major bugs: 6

(iii)   Number of medium bugs: 2

(iv)   Number of minor bugs: 1

Testing Module-3 (Student/Teacher Login):

TEST CASE ID: Student/Teacher Login details	**ASSIGN DATE:** 25th Jan 2018
PROJECT/MODULE: Student Register	**SUBMISSION DATE:** 7th Feb 2018
OBJECTIVE: To check whether Student Register page working properly or not	**TESTER/VERIFIER:** Dilip Agarwal and S.Hariprasanth
NUMBER OF TEST CASES: 15	**APPROVER/VALIDATOR:** Prof. IYAPPARAJA M

PRECONDITIONS:
1. **User ID should contain only digits.**
2. **Password field should have at least 8 characters and it is alphanumeric and should contain at least one special character.**

TEST CASE ID	TEST INPUT (user id)	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)	REMARK	BUG STATE
1	8619113671	Valid	Valid	Pass	-	-
2	896523	Invalid	Invalid	Pass	-	-
3	0987654123	Invalid	Valid	Fail	Major	New
4	Hyu1356895	Invalid	Invalid	Pass	-	-
5	9956845632156	Invalid	Invalid	Pass	-	-
6	432@#32421	Invalid	Invalid	Pass	-	-

7	qwsderf@34	Invalid	Valid	Fail	Critical	New
8	8056756257	Valid	Valid	Pass	-	-
9	Dilip@_908	Valid	Valid	Pass	-	-
10	Dilip11	Invalid	Valid	Fail	Major	New
11	Di11@	Invalid	Invalid	Fail	Major	New
12	A#-ji	Invalid	Invalid	Pass	-	-
13	54321	Invalid	Invalid	Pass	-	-
14	Haripri589	Invalid	Invalid	Pass	-	-
15	Dilip@%^&	Invalid	Valid	Fail	Major	New
16	abcd	Invalid	Invalid	Pass	-	-
17	abcdefghijk	Invalid	Invalid	Pass	-	-
18	hariprasanth@	Invalid	Valid	Fail	Major	New
19	Hari4567@	Valid	Valid	Pass	-	-
20	Hari12@	Invalid	Invalid	Pass	-	-
21	Dilip1234	Invalid	Invalid	Pass	-	-
22	12345678@#	Invalid	Valid	Fail	Major	New
23	!@#$%^&*	Invalid	Invalid	Pass	-	-

Steps to execute test case:

1. Click on login
2. Put All your Required Information

No. of test cases passed/failed:

Test cases Planned	Test cases Executed	Test cases Pass	Test cases Failed
15	15	10	5

No of defects identified & their Severity:

(i)   Number of critical bugs: 1

(ii)   Number of major bugs: 6

(iii)   Number of medium bugs: 0

(iv)   Number of minor bugs: 0

Defects distribution – module wise

	Registration	Login	Total
Critical	3	1	4
Major	14	4	18
Medium	4	0	4
Minor	4	0	4
Total	25	5	30

CONCLUSION

It has been a matter of immense pleasure, honor and challenge to have this opportunity to take up this project and complete it successfully. While working on this project we have learnt a lot about software testing. We have learn how to test a web application using selenium tool . It is highly creative job to create test cases. During the course of the project we also learnt how difficult is the work of a software tester who is assigned this job. After learning all the process and facing the challenges we were finally able to complete the project.

FUTURE WORK

The project can be extended by making more test cases over the different components of selenium test suite in order to test the application in a better manner. This will decrease the probability of errors and lead to better coverage of the entire project.