**ISM 4432 and 6145 – SOFTWARE TESTING**

**SPRING SEMESTER 2022**

# TESTING ASSIGNMENT 4 – Due: April 16, 2022

*Automated Software Testing*

## **1. Selenium IDE Assignment**

**Instructions**:

1. Pick some part of the <http://demo.guru99.com/test/newtours/> web site as your SUT (System under test) (e.g. Sign-on page, Register page, home page, flight booking)
2. Create at least 4 separate test-case files that comprise at least 6 commands.
3. Create a test suite which calls each of your test-case files.
4. Prepare the final set of deliverables for submission into Canvas.

**Deliverables**: Test plan, Test scripts with a brief description of what each script does. Attach Screen shots if appropriate. Also, if there are any preconditions (files created configurations etc.) please mention those.

**Note:** Your tests do not have to all pass in order for you to get the best grade possible! In fact, a test **should** fail if the SUT has a bug in the test's area.

Your tests can be "all capture" or "all hand-coded" or some mixture of the two. It is the *quality* of code that matters, not how you produced it. That said, it may prove difficult to produce a quality set of tests using "all capture."

**Grading criteria**:

* Well-documented code, i.e., **comments!** Explain both what you are testing and what the code does.
* *Robust* test cases, i.e., those that can survive minor text changes by the page's owners.
* *Completeness* of test cases, i.e., cases which cover everything that needs to be verified or asserted for a feature.

1. **Automation guidelines**

2.1 Read through the *Selenium’s Hands-on Tutorials:* available in *Canvas.*

2.2Write down the tests you would like to perform on the SUT as simple one-line sentences. You may use any functional testing paradigm to develop your test cases. Remember to be devious in your selection of test cases. (You may later use them to create your test scripts and even add more detail. It is advisable to keep your scripts well documented and maintainable.)

2.3 Use different methods to identify web elements as given in tutorial (Eg. DOM, CSS, Xpath)

1. **Deliverables**

3.1 You are expected to deliver at least 4 test cases for your SUT. Report each test case using Functional Test Case Reporting Forms attached to this assignment.

3.2 Submit test scripts for the above test cases. You can submit the HTML files. Include comments in your scripts to make it easier to understand and separate one test case from the other.

3.3 Complete Defect Reporting Forms if running a test case results in a failure. Report the defect using the report form attached.

1. **Assignment time line**

The following time line is recommended so that you may complete your assignment comfortably and efficiently.

* 1. Reading phase:

Go through the Selenium documentation; begin thinking about possible test cases for a given system.

* 1. Working phase:

Learn the basic operations of Selenium IDE, create test scripts for the selected system, and complete the assignment.

* 1. Submit the assignment end of the day on April 16, 2022. Please submit your deliverables as a single compressed folder to Canvas.

The course Teaching Assistant – Amulya Alwala ([aalwala@usf.edu](mailto:aalwala@usf.edu) ) – is available to answer your queries regarding this assignment.

Test Case Report

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 04 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 1 |
| **Test Case Description:** | Can a user login to the Demo Guru 99 website | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | User successfully or unsuccessfully login to Guru99 website | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Proceed to the website <https://demo.guru99.com/test/login.html>  Run Selenium IDE test | | |
| **Stop Procedures:** | User successfully or unsuccessfully login to Guru99 website | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connectivity | | |
| **Software:** | Operating System with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Login Page | | |
| **Input Specifications:** | Username/ email address  Password | | |
| **Procedural Steps:** | Enter Username/ email address  Enter Password  Hit Sign-In Button | | |
| **Expected Results of Case:** | Return a new page on the website | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | Returns a “Successfully Logged In” message | | |

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| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 05 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 2 |
| **Test Case Description:** | Can a user register to use the Guru 99 website | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Can a user successfully or unsuccessfully create a user account to the Guru99 website through the register page | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Proceed to the website <https://demo.guru99.com/test/newtours/register.php>  Run Selenium IDE test | | |
| **Stop Procedures:** | User successfully or unsuccessfully creates a user account to the Guru99 website | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connection | | |
| **Software:** | Operating System with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Register Page | | |
| **Input Specifications:** | First Name  Last Name  Email  Address  City  State  Postal Code  Country  Username  Password (2) | | |
| **Procedural Steps:** | Enter First Name  Enter Last Name  Enter Email  Enter Address  Enter City  Enter State  Enter Postal Code  Enter Country  Enter Username  Enter Password  Confirm Password  Hit Submit Button | | |
| **Expected Results of Case:** | Return a new user account created | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | Return message  “Dear ,  Thank you for registering. You may now sign-in using the user name and password you've just entered.  Note: Your user name is .” | | |

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| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 05 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 3 |
| **Test Case Description:** | Can a user at the Guru99 send an email submission | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Successfully or unsuccessfully send an email submission | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Proceed to the website  Run Selenium IDE test | | |
| **Stop Procedures:** | Successfully or unsuccessfully send an email submission | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connection | | |
| **Software:** | Operating System with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Guru99 Demo Page | | |
| **Input Specifications:** | Email address  Course selection | | |
| **Procedural Steps:** | Enter email address  Choose course selection  Hit submit button | | |
| **Expected Results of Case:** | Submit button return a response | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | Submit button returns pop-up message “Form submitted successfully….” | | |

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| **GENERAL INFORMATION** | | | |
| **Test Stage:** | Unit Functionality Integration System Interface  Performance Regression Acceptance Pilot  **Functionality and unit test code** | | |
| **Test Date:** | 05 April 2022 | **System Date, if applicable:** |  |
| **Tester:** | Herbert, Sean | **Test Case Number:** | 4 |
| **Test Case Description:** | Can a user successfully submit a flight request using the Guru99 website | | |
| **Results:** | Pass Fail | **Incident Number, if applicable:** |  |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Successfully or unsuccessfully submit a flight request | | |
| **Roles and Responsibilities:** |  | | |
| **Set Up Procedures:** | Proceed to the website <https://demo.guru99.com/test/newtours/index.php>  Run Selenium IDE test | | |
| **Stop Procedures:** | Successfully or unsuccessfully submit a flight request | | |
| **ENVIRONMENTAL NEEDS** | | | |
| **Hardware:** | Computer with internet connection | | |
| **Software:** | Operating System with web browser | | |
| **Procedural Requirements:** |  | | |
| **TEST** | | | |
| **Test Items and Features:** | Flight Request | | |
| **Input Specifications:** | Username  Password | | |
| **Procedural Steps:** | Enter username  Enter password  Hit submit button | | |
| **Expected Results of Case:** | Return a new webpage | | |
| **ACTUAL RESULTS** | | | |
| **Output Specifications:** | Return message “Enter your username and password are correct” | | |

DEFECT REPORTING FORM

**DEFECT ID: 1**

**TITLE: Flight request COMPONENT: Home page**

**REPORTED BY: Herbert, Sean SUBCOMPONENT: Flight request**

**REPORTED ON: 05 April 2021 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P3**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S3**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**While at the home page of Guru99 website, when submitting a flight request, instead of returning a response related to a flight request being sent, only a message of “enter your username and password correct” is returned.**

**STEPS TO REPRODUCE:**

**Using any computer with an internet connection and a web browser.**

**COMMENTS:**

**N/A**

**ATTACHMENTS:**

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DEFECT REPORTING FORM

**DEFECT ID: 2**

**TITLE: No images on icons COMPONENT: Home page**

**REPORTED BY: Herbert, Sean SUBCOMPONENT: Course listing**

**REPORTED ON: 05 April 2021 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P4**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S4**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**While at the home page of Guru99 website, there are no images for the course listing icons.**

**STEPS TO REPRODUCE:**

**Using any computer with an internet connection and a web browser.**

**COMMENTS:**

**N/A**

**ATTACHMENTS:**

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DEFECT REPORTING FORM

**DEFECT ID: 3**

**TITLE: Drop-down menu items COMPONENT: Home page**

**REPORTED BY: Herbert, Sean SUBCOMPONENT: Drop-down**

**REPORTED ON: 05 April 2021 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P4**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S4**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**While at the home page of Guru99 website, checkboxes are used for drop-down menu items.**

**STEPS TO REPRODUCE:**

**Using any computer with an internet connection and a web browser.**

**COMMENTS:**

**N/A**

**ATTACHMENTS:**

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DEFECT REPORTING FORM

**DEFECT ID: 4**

**TITLE: Max character length COMPONENT: Login page**

**REPORTED BY: Herbert, Sean SUBCOMPONENT: Username/ password**

**REPORTED ON: 05 April 2021 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P2**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S2**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**While at the login page of Guru99 website, there is no max character length used for entering username or password.**

**STEPS TO REPRODUCE:**

**Using any computer with an internet connection and a web browser.**

**COMMENTS:**

**N/A**

**ATTACHMENTS:**

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DEFECT REPORTING FORM

**DEFECT ID: 5**

**TITLE: Link issues COMPONENT: N/A**

**REPORTED BY: Herbert, Sean SUBCOMPONENT: N/A**

**REPORTED ON: 05 April 2021 VERSION: N/A**

**PLATFORM: PC RESOLUTION PRIORITY: P3**

**OPERATING SYSTEM: Windows 11 RESOLUTION SEVERITY: S3**

**RELATED TEST CASE IDS: N/A CONSISTENCY: N/A**

**DEFECT SUMMARY:**

**While at the using the Guru99 website, many of the top icons that should take you back to the home page, only takes you back to the existing page that you’re on.**

**STEPS TO REPRODUCE:**

**Using any computer with an internet connection and a web browser.**

**COMMENTS:**

**N/A**

**ATTACHMENTS:**

1.

2.

**For evaluators use only**

**DEFECT STATUS: \_\_\_\_\_\_\_\_\_APPROVED \_\_\_\_\_\_\_\_\_ REJECTED**

**REASON:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_