**Assignment 8**

**Github:** [**https://github.com/RanjitSingh007/SWE437-Selenium-Quote-Server-Testing**](https://github.com/RanjitSingh007/SWE437-Selenium-Quote-Server-Testing)

**Contribution:**

Ranjit Singh: Designed IDM and BCC for the assignment. Helped team members to write test cases and setup selenium with Google Chrome.

Ahmad Aram: Designed the test cases and helped with the implementing BCC. Consolidated automatic test suite for quote server application.

Khang Chau Vo: Helped with the test cases and writing the test values for each test case.

Overall, everyone equally contributed to complete this assignment

**1. Input Domain Modelling**

**b3**

**b2**

**b1**

b1 = valid alphanumeric strings according to grammatical rules.

b2 = invalid alphanumeric strings or numeric or special characters etc.

b3 = null or empty string

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristic** | **Block 1 (b1)** | **Block 2 (b2)** | **Block 3 (b3)** |
| q1 = "relation of alphanumeric String for search with null" | valid string | invalid string | string is null |
| q2 = "relation of searching an alphanumeric String using search by quote with null" | valid quote string | invalid quote string (quote doesn't exist) | Nothing returned (null/empty) |
| q3 = "relation of searching an alphanumeric String using search by the author with null" | valid quote string | invalid quote string (quote doesn't exist) | Nothing returned (null/empty) |
| q4 = "relation of generating an alphanumeric String using Get Another Random Quote with null" | valid quote string | invalid quote string (the same quote is returned repeatedly) | Nothing returned (null/empty) |

Short version of above table

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristic** | **b1** | **b2** | **b3** |
| A | A1 | A2 | A3 |
| B | B1 | B2 | B3 |
| C | C1 | C2 | C3 |
| D | D1 | D2 | D3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Basic Choice Coverage** | | | | | |
| Base | A1,B1,C1,D1 | A1,B1,C1,D2 | A1,B1,C2,D1 | A1,B2,C1,D1 | A2,B1,C1,D1 |
|  | | A1,B1,C1,D3 | A1,B1,C3,D1 | A1,B3,C1,D1 | A3,B1,C1,D1 |

**2. Test values and abstract level**

|  |  |  |
| --- | --- | --- |
| **Test 1** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B1 | World | valid quote found |
| C1 | Alex | valid quote found |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 2** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B1 | World | valid quote found |
| C1 | Alex | valid quote found |
| D2 | click to create new quote | same quote is generated |
| Test 2: \*Not a valid test because same quotes are not usually generated | | |
|  |  |  |
| **Test 3** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B1 | World | valid quote found |
| C1 | Alex | valid quote found |
| D3 | click to create new quote | null/empty quote generated |
| Test 3: \*Not a valid test because null/empty quotes are never generated | | |
|  |  |  |
| **Test 4** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B1 | World | valid quote found |
| C2 | schoolcool | not search quote found |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 5** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B1 | World | valid quote found |
| C3 | " " (empty string) | " " (empty string) |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 6** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B2 | !Pigs CAn Fly | not search quote found |
| C1 | Alex | valid quote found |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 7** | **Value** | **Expected** |
| A1 | Alex | valid quote found |
| B3 | " " (empty string) | " " (empty string) |
| C1 | Alex | valid quote found |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 8** | **Value** | **Expected** |
| A2 | !This Quote doesnt exist? | not search quote found |
| B1 | World | valid quote found |
| C1 | Alex | valid quote found |
| D1 | click to create new quote | new quote will be generated |
|  |  |  |
| **Test 9** | **Value** | **Expected** |
| A3 | " " (empty string) | " " (empty string) |
| B1 | World | valid quote found |
| C1 | Alex | valid quote found |
| D1 | click to create new quote | new quote will be generated |