

Quality/Automation Test Project

CRUD OPERATION AND JS ALERT TEST
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1. CRUD Operation

1.0 Brief

The Gatling computer data base (available on [Computers database \(gatling.io\)](https://gatling.io/computers-database)) is an open-source testing framework. The program can be used as an example to cover the CRUD operations, as well as edge cases when developing an automated testing solution. The preconditions, steps and expected results for each operation will be discussed in detail below.

Note:

The program to date only allows the user to read only. Thus, it is not possible to make changes (create, update, delete) to the pre-existing data. The only way to confirm successful changes are through the built-in notifications.

1.1 Test 1 Create New Computer

A new computer will be added to the database. The required details are the name, introduction date, discontinuation date and the company name.

1.1.1 Preconditions

- Ensure that the Gatling computer database page has been fully loaded
- It is important that the “Add a new computer” is clickable before proceeding onto the steps

1.1.2 Steps

1. Click “Add a new computer” button
2. Enter “IBM 5100” in the “Computer name” text field
3. Enter “1975-09-01” in the “Introduction” text field
4. Enter “1982-03-01” in the “Discontinued” text field
5. Select “IBM” in the “Company” drop down list
6. Click “Create this computer”

1.1.3 Expected Outcome

- The user will be returned to the previous (home) page
- A notification will appear above the search filter box indicating that a new computer has been created as shown in figure 1 below



Figure 1 - Create success notification

1.2 Test 2 Read Computer Detail

Since it is not possible to actually add a new computer to the data base, we will search and read the details of an existing computer on the data base. For this test purpose, the IBM 650 will be used as an example to perform this test. The computer name, introduction date, discontinuation date and company name will be simply returned on the console.

1.2.1 Preconditions

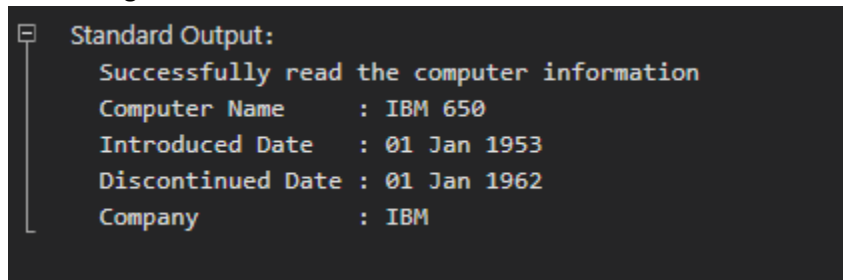
- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.2.2 Steps

1. Enter "IBM 650" in the "search box"
2. Click "Filter by name" button
3. Check if the computer name is found in the list, if found proceed
4. Read computer name
5. Read introduction date
6. Read discontinuation date
7. Read company name

1.2.3 Expected Outcome

- Return the computer name, introduction date, discontinuation date and company name on the console, as shown in figure 2 below.

A screenshot of a console output window with a dark background. The window has a title bar with a square icon and the text "Standard Output:". The output text is as follows:

```
Successfully read the computer information
Computer Name      : IBM 650
Introduced Date    : 01 Jan 1953
Discontinued Date  : 01 Jan 1962
Company           : IBM
```

Figure 2 - Console Output

1.3 Test 3 Update Computer Detail

The introduction and discontinuation dates of a computer will be updated. For this test purpose, the IBM 650 will be used again as an example to perform this test.

1.3.1 Preconditions

- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.3.2 Steps

1. Enter "IBM 650" in the "search box"
2. Click "Filter by name" button
3. Check if the computer name is found in the list, if found proceed
4. Click the "IBM 650" link

5. Replace the introduction date to “1953-06-01”
6. Replace the discontinuation date to “1969-08-18”
7. Click “Save this computer”

1.3.3 Expected Outcome

- The user will be returned to the previous (home) page
- A notification will appear above the search filter box indicating that a new computer has been created as shown in figure 3 below



Done ! Computer IBM 650 has been updated

Figure3 - Update success notification

1.4 Test 4 Update Incorrect Date Format

The introduction and discontinuation dates of a computer will be updated with the incorrect format (YYYY/MM/DD). For this test purpose, the IBM 650 will be used again as an example to perform this test.

1.4.1 Preconditions

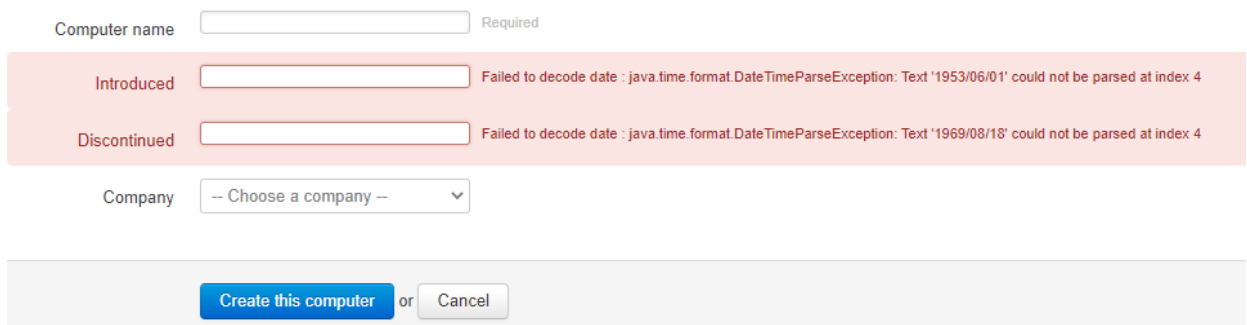
- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.4.2 Steps

8. Enter “IBM 650” in the “search box”
9. Click “Filter by name” button
10. Check if the computer name is found in the list, if found proceed
11. Click the “IBM 650” link
12. Replace the introduction date to “1953/06/01”
13. Replace the discontinuation date to “1969/08/18”
14. Click “Save this computer” -> error
15. Click “Cancel”

1.4.3 Expected Outcome

- The date text fields will indicate an error as shown in figure 4 below



The screenshot shows a web form for updating a computer. At the top, there is a text input for 'Computer name' with a 'Required' label. Below this is a red-bordered box containing two date input fields. The first is labeled 'Introduced' and the second 'Discontinued'. Both fields have red error messages: 'Failed to decode date : java.time.format.DateTimeParseException: Text '1953/06/01' could not be parsed at index 4' and 'Failed to decode date : java.time.format.DateTimeParseException: Text '1969/08/18' could not be parsed at index 4' respectively. Below the date fields is a dropdown menu for 'Company' with the text '-- Choose a company --'. At the bottom of the form, there are two buttons: 'Create this computer' (blue) and 'Cancel' (grey), separated by the word 'or'.

Figure4 - Update error notification

1.5 Test 5 Delete Computer

A computer will be deleted from the database. For this test purpose, the IBM 650 will be used again as an example to perform this test.

1.5.1 Preconditions


- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.5.2 Steps

1. Enter "IBM 650" in the "search box"
2. Click "Filter by name" button
3. Check if the computer name is found in the list, if found proceed
4. Click the "IBM 650" link
5. Click "Delete this computer"

1.5.3 Expected Outcome

- The user will be returned to the previous (home) page
- A notification will appear above the search filter box indicating that a new computer has been created as shown in figure 4 below



Done ! Computer IBM 650 has been deleted

Figure5 - Delete success notification

1.6 Test 6 Search for Non-Existent Computer

A non-existent computer will be entered in the search box.

1.6.1 Preconditions

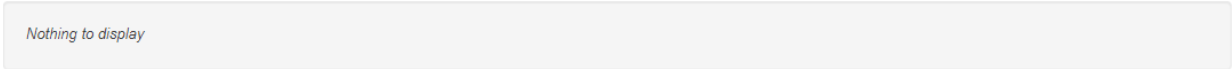
- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.6.2 Steps

1. Enter "wasd" in the "search box"
2. Click "Filter by name" button
3. Check if the computer name is found in the list

1.6.3 Expected Outcome

- A message indicating that nothing is found should appear, as shown in figure 6 below.



Nothing to display

← Previous Displaying 1 to 0 of 0 Next →

Figure6 - No entry notification

1.7 Test 7 Search for Partial Name

A partial part of a computer name will be entered in the search box. If more than one entry is found, only the first will be taken into consideration.

1.6.1 Preconditions

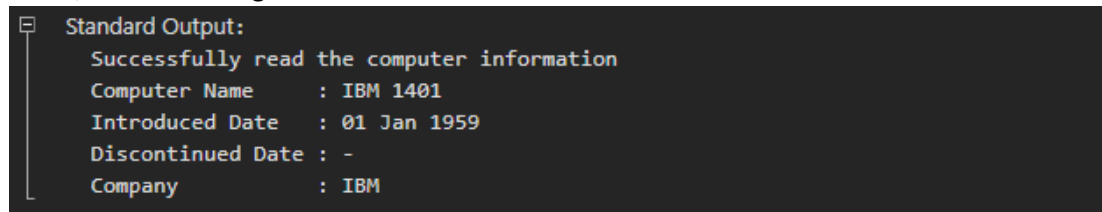
- Ensure that the Gatling computer database page has been fully loaded
- It is important that the search box is visible before proceeding onto the steps

1.6.2 Steps

4. Enter "IBM" in the "search box"
5. Click "Filter by name" button
6. Check if the computer name is found in the list

1.6.3 Expected Outcome

- All computer entries that contains "IBM" in its name will appear on the table.
- Return the computer name, introduction date, discontinuation date and company name on the console, as shown in figure 7 below.

A screenshot of a console output window with a dark background. The window has a title bar with a close button icon and the text 'Standard Output:'. The output text is as follows:

```
Successfully read the computer information
Computer Name      : IBM 1401
Introduced Date    : 01 Jan 1959
Discontinued Date  : -
Company            : IBM
```

Figure7 - Console Output

2. JavaScript Alerts

2.0 Brief

The JavaScript Alerts program ([The Internet \(the-internet.herokuapp.com\)](https://the-internet.herokuapp.com/alerts)) is another open-source testing program, designed to assist the development of handling JavaScript alert windows automatically. For this purpose, the program will handle 3 different types of alert windows.

2.1 Test 1 JS Alert

Observe the alert window and the result when clicking the “Click for JS Alert” button.

2.1.1 Preconditions

- Ensure that the JavaScript Alerts page has been fully loaded

2.1.2 Steps

1. Click the “Click for JS Alert” button
2. Click “Ok” button on the alert window

2.1.3 Expected Outcome

- Result: You successfully clicked an alert

Result:

You successfully clicked an alert

2.2 Test 2 JS Confirm Ok

Observe the alert window and the result when clicking the “Click for JS Confirm” button.

2.2.1 Preconditions

- Ensure that the JavaScript Alerts page has been fully loaded

2.2.2 Steps

1. Click the “Click for JS Confirm” button
2. Click “Ok” button on the alert window

2.2.3 Expected Outcome

- Result: You clicked Ok

Result:

You clicked: Ok

2.3 Test 3 JS Confirm Cancel

Observe the alert window and the result when cancelling the “Click for JS Confirm” button.

2.3.1 Preconditions

- Ensure that the JavaScript Alerts page has been fully loaded

2.3.2 Steps

1. Click the “Click for JS Confirm” button
2. Click “Cancel” button on the alert window

2.3.3 Expected Outcome

- Result: You clicked Cancel

Result:

You clicked: Cancel

2.4 Test 4 JS Prompt Input

Observe the alert window and the result when clicking the “Click for JS Prompt” button.

2.4.1 Preconditions

- Ensure that the JavaScript Alerts page has been fully loaded

2.4.2 Steps

1. Click the “Click for JS Prompt” button
2. Enter “Testing 1 2 3” in the alert window text field
3. Click “Ok” button on the alert window

2.4.3 Expected Outcome

- You entered: Testing 1 2 3

Result:

You entered: Testing 1 2 3

2.5 Test 5 JS Prompt Cancel

Observe the alert window and the result when cancelling the “Click for JS Prompt” button.

2.5.1 Preconditions

- Ensure that the JavaScript Alerts page has been fully loaded

2.5.2 Steps

1. Click the “Click for JS Prompt” button
2. Click “Cancel” button on the alert window

2.5.3 Expected Outcome

- You entered: null

Result:

You entered: null