Tricentis

Automation Engineer Level 1

Exercise 1b

Read and verify Excel data

Objective

By the end of this exercise, you will be able to make use of the Excel Engine 3.0 standard modules in Tosca. This will enable you to create an end-to-end Excel testcase that reads and verifies data present in an excel file.

Why is this Important?

Tricentis Tosca supports steering Excel files using Excel Engine 3.0 and Excel UI Engine 3.0 out of the box. This exercise will enable you to leverage the standard modules available for the Excel Engine 3.0

Project Perspective

Excel is used all across to store data and is integrated with many SUTs. There are applications that generate excel files as an output that contains the data that might require verification. In such cases, the Excel Engine 3.0 of Tosca comes in handy.

Instructions

1. Log in to Tosca Commander and navigate to the path **AE1 Exercises>>TestCases>>Excel Engine** and create a new **TestCase** in this folder and name it **Read and verify Excel data**

2. Within this TestCase, create three **TestStepFolders** – 'Precondition', 'Process', and 'Postcondition'

3. Add the Standard Module **TBox Open Excel Workbook** into the folder **Precondition** and rename it as **Open Excel workbook**

4. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Employee_Data_2022	Input
Path	C:\Tosca_Projects\Employee_Data_2022.xlsx	Input

5. Add the Standard Module **TBox Define Excel Range** into the folder **Precondition** and rename it as **Define Excel range**

6. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Employee_Data_2022	Input
Worksheet Name	Employee_Personal_Records	Input
Range Name	EmployeeDataRange	Input
Start Cell	A1	Input
End Cell	F7	Input

7. Add the Standard Module **TBox Excel Range Manipulation** into the folder **Process** and rename it as **Read and verify data in Excel**

8. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Range Name	EmployeeDataRange	Input
Data Table		Select
Enter values in $1 row to buffer data		
$1		Select
FirstName	Employee_FirstName	Buffer
LastName	Employee_LastName	Buffer
EmailId	Employee_EmailId	Buffer
EmployeeId	Employee_Id	Buffer
Enter values in $2 row to verify data		
$2		Select
FirstName	Jane	Verify
LastName	Doe	Verify
EmailId	Jane.Doe@test.com	Verify
EmployeeId	1012	Verify

9. Add the Standard Module **TBox Close Excel Workbook** into the folder **Postcondition** and rename it as **Close Excel workbook**

10. Input **Values** as shared in the table below:

TestStep Value	Value	ActionMode
Workbook Name	Employee_Data_2022	Input
Path	C:\Tosca_Projects	Input
Save	True	Input

11. Mark the TestCase **Completed** and run it in ScratchBook.

Expected outcome

The TestCase should be executed successfully, and the data in Excel file would be buffered and verified.

Hints

1. You can use ResultCount, and RowCount properties to buffer the number of rows and iterate dynamically
2. You can use Loops and Repetitions with Excel test cases to buffer or verify multiple rows in a single test step