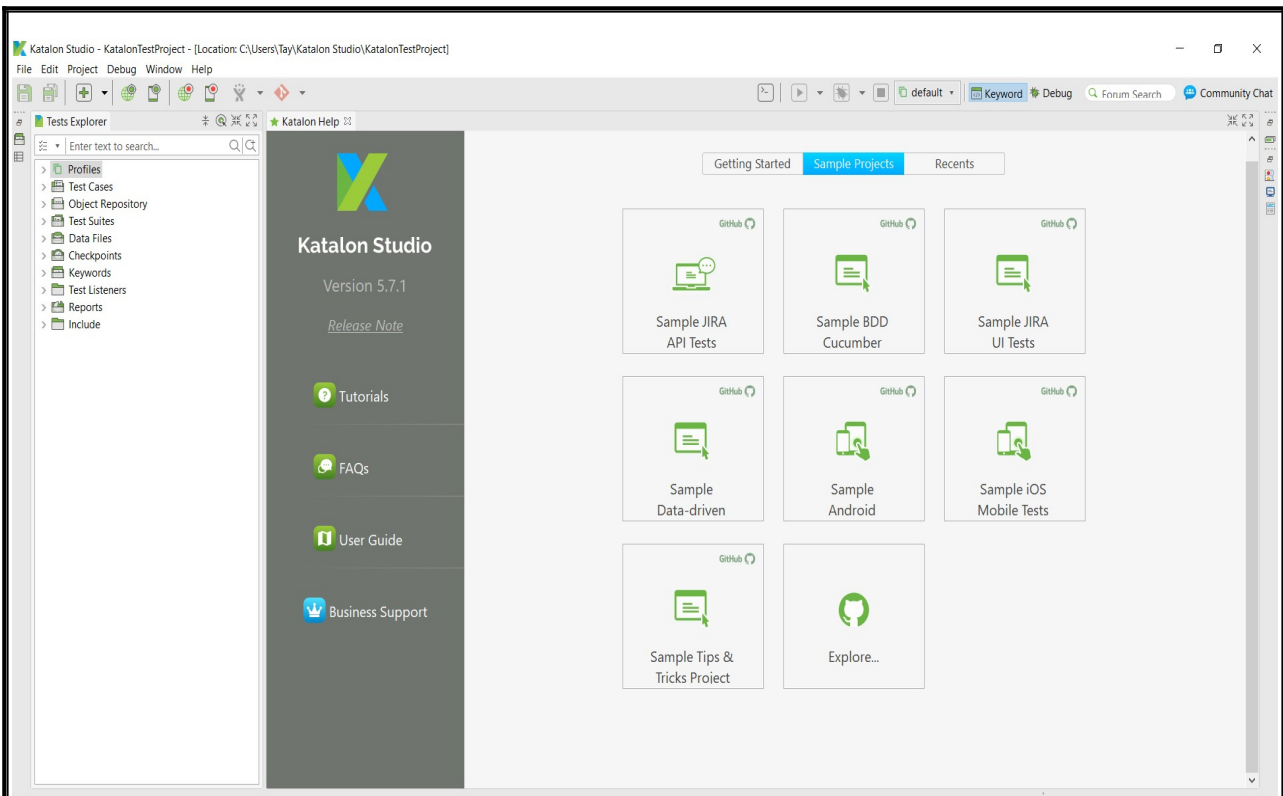


## **Introduction of the tool :**

Katalon Studios which is a comprehensive tool set for web and mobile app automation testing. This tool also have a full package that contain the powerful features which help the tester to overcome common challenges in web UI application test automation, for a particular instance of time, pop-up, IFrame, and wait-time. This software or the tool is a user-friendly and versatile which presents the creative solution help testers to work better, work faster to compile, and launch the high quality software which regards to the intelligence that provides to the full test automation process in this software. The Katalon Studio supports the robust alternative to open source Automation Frameworks.

Katalon Studio which gives insightful, with user-friendly automation solution that's characterized by the simplicity and speed. It is helpful to the users for automation tester teams and individuals to spend an quantity amount of efforts from a replacement project to executing tests then monitoring execution results. It's provided superb GUI where you'll start creating and managing your test cases. This user-friendly solution helps testers test better, work faster and launch the high quality software in the society, due to the intelligence it adds to the whole test automation process. Each part of the workflow provides as many as capabilities with the customizations for effortless maintenance and the project which scale up the following :

- The Custom keywords provides the flexibleness in adding additional keywords to check the AUT efficiently for the precise and difficult testing purposes.
- This tool Support major testing needs like Web testing, Mobile application testing and API type testing .
- Execute multiple test suites directly with test suite collection.
- The system execution results easily with neither Table view or Tree view during or after execution of the testing.
- The complete Test Suite report will reduces the time in compiling the results.



## History :

The software is built on top of the open source automation frameworks with a specialized compiler(IDE) interface for web application, mobile application and desktop application testing.

- Developed by : Katalon Inc.
- Its initial release : January 2015.
- Its first public release : September 2016.
- In 2018, the software acquired 9% of market penetration for UI test automation
- State of Testing : 2018 Report by the “Smartbear” company
- Stable release : 7.8 (Beta) / 14 October 2020.

## Uses :

- Katalon Studio supports the built-in with the Continuous Delivery or the Continuous Integration of the system and DevOps integrations of a applications
- Katalon Studio support top-to-bottom solution for application automation, which allows the optimization for the type scripting, debugging, and maintaining tests of a system.

- Katalon Studio will supports the productive IDE compiler with centralized application testing capabilities, and the data-driven testing while requiring with a quantity of maintenance for application testing projects.
- Katalon Studio offers mobile application testing capabilities with the mobile web, windows iOS and Android application apps.
- It supports powerful object spying utility and prebuilt keywords for a straight forward setup. Cross-functional (cross-environment) with the excellent feature of cloud platform support are available in Katalon for mobile application test cases.
- The latest feature addition to Katalon Studio testing capabilities — desktop app testing covers all testing needs from the user ends.
- Katalon Studio allows the tester to spy objects, record actions and locate windows elements effectively for your testing needs. With these fashionable set idea of windows built-in and custom keywords, the testers can simplify their own test steps significantly.

## **Version available in katalon studios:**

### Version History – 7.x

#### 1. Version 7.9.1

Improvements :

- Support Chrome 88.
- Support Microsoft Edge of Chromium 88.

#### 2. Version 7.9.0

New features :

Support screenshot In taking the keywords for the Mobile application and Web testing

#### 3. Version 7.8.2

Improvements :

Katalon TestOps Beta version Integration which Support detecting Assertions in the execution log.

#### 4. Version 7.8.0 - 7.8.1

New features :

Support container optimizing fixing broken Web Test Objects.

#### 5. Version 7.7.0 - 7.7.1 – 7.7.2

New features :

Katalon software Record the Utility Support by adding the verification test steps during the recording with Chrome, Bing and Firefox.

#### 6. Version 7.6.6 :

Improvements : Katalon TestOps Beta version Integration the Display feature of the TestOps Plans in Tests Explorer.

#### 7. Version 7.6.5

Improvements :

qTest Integration Include qTest Test Suite ID within the name of Katalon Test Cases downloaded from qTest

#### 8. Version 7.6.2

New Features :

Katalon TestOps Beta version Integration: Display the Executions table in Tests Explorer.

#### 9. Version 7.6.0 – 7.6.1

New features :

Katalon Studio Enterprise the Support setting of timeout and maximum response to reach the size for API requests and desktop.

#### 10. Version 7.5.10

New feature :

Support importing test scripts of Katalon IDE version 3.x.

#### 11. Version 7.5.5

New features :

Web Service Testing Support the features of a SOAP request's service endpoint.

12. Version 7.5.0 – 7.5.2

New features :

Katalon Studio Enterprise to send a copy of Test Suite Collection's report through the emails.

13. Version 7.4.0

New features :

Support migrating Selenium/TestNG/JUnit test scripts to Katalon Studio.

14. Version 7.3.2 - 7.3.3

Fix :

Bug: this software is Unable to present the activate Katalon Runtime Engine on Oracle Linux Server 7.6 and etc.

15. Version 7.3.1

Improvement :

Katalon Runtime Engine Improve the proper execution log time in the CLI mode features

16. Version 7.3.0

New Features :

Support Microsoft Edge (Chromium) on both Windows and macOS

17. Version 7.2.7

Fixes :

Bug: A problem of Smart Wait preventing request state in XMLHttpRequest from being read

18. Version 7.2.6

Fixes :

Bug: Desktop Apps Testing is a difficulty of losing Windows test objects when users drag and drop their folders.

#### 19. Version 7.2.5

New Features :

Web Service activities Supports the configuring Content Type to the tester in HTTP Header separately from HTTP Body.

#### 20. Version 7.2.4

New Features :

Support editing JVM parameters in Execution Settings.

#### 21. Version 7.2.3

Fixes :

Bug: Cannot send SOAP in parsing WSDL definition

#### 22. Version 7.2.2

New Features :

[Web Testing] Support image-based features.

#### 23. Version 7.2.0 – 7.2.1

New Features :

New Windows keywords:

- getElementPosition
- getElementRect

#### 24. Version 7.1.0-7.1.1

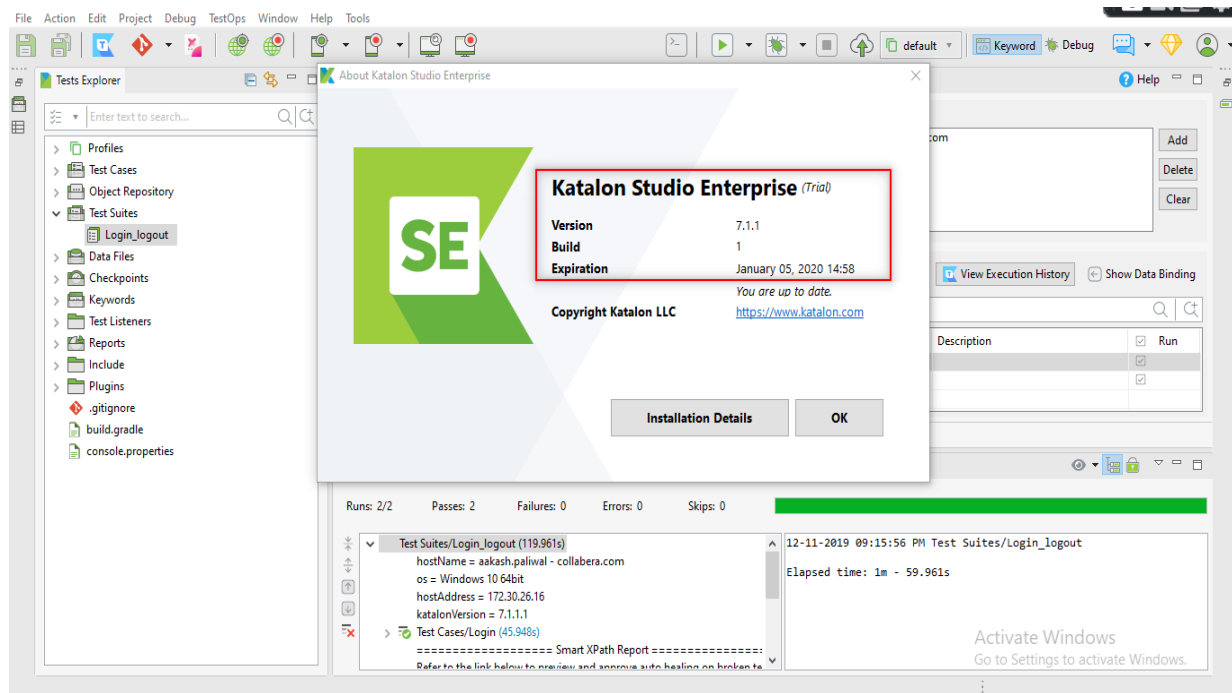
New Features :

Support naming test artificial facts, including the action of Test Case and Test suite, Test Object, Test record, Test Suite Collection, and Checkpoint with UTF - 8 characters.

#### 25. Version 7.0.0- 7.0.10

## New Features :

This software has a software that Support manually uploading the Test Suite Collections' which results the Katalon TestOps (Beta)



## Version History – 6.x

### 1. Version 6.3.3

#### Improvements :

Remove the SLF4J warning message within the execution log when running in Console mode

### 2. Version 6.3.0 – 6.3.2

#### New Features :

Support Dark theme additionally to the default Light theme. See Using Katalon Studio in Dark theme.

### 3. Version 6.2.2

#### Improvements :

Support sending emails from another email address additionally to the default username.

### 4. Version 6.2.0 - 6.2.1

Improvements :

Show plugins which didn't to reload

#### 5. Version 6.1.3 – 6.1.5

Plug-ins :

software plugin that lets Katalon Studio run a test suite collection at a selected period of time within the future.

#### 6. Version 6.1.2

Fixes and enhancements :

It allowed the tester to disable auto-redirection for the API test objects.

#### 7. Version 6.1.1

Fixes and enhancements :

Fixed a issue which is in the Katalon Studio cannot reload plugins.

#### 8. Version 6.1.0

Custom Keywords now could be shared among the project team or to the world via Katalon Store. Simply Create. Upload.

#### 9. Version 6.0.6

Fixes and enhancements :

Fixed a issue in where recorder function isn't working with Internet Explorer in Katalon Studio version 5.10.1

#### 10. Version 6.0.5

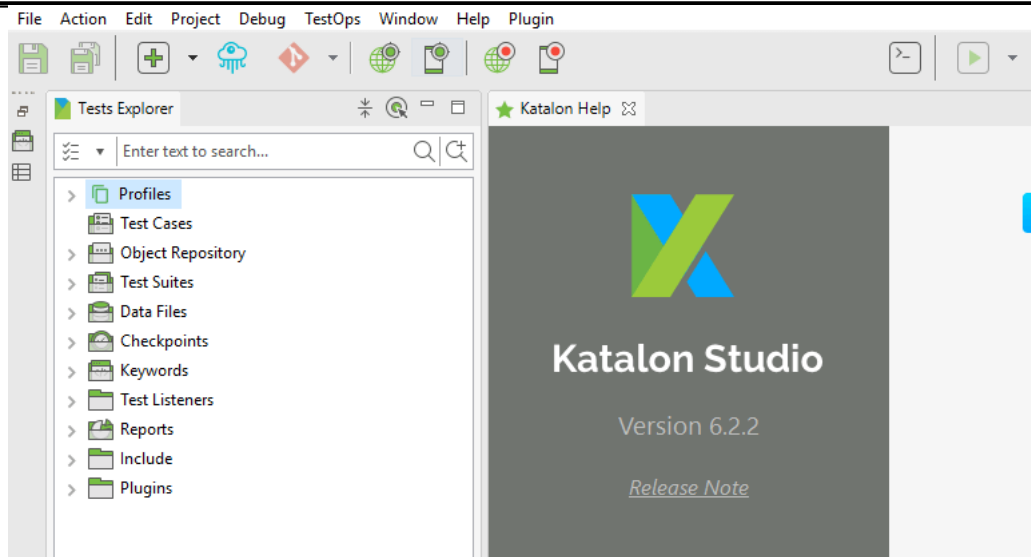
OAuth 2.0 Support :

Most of the common grant types are supported including "Authorization code,"

#### 11. Version 6.0

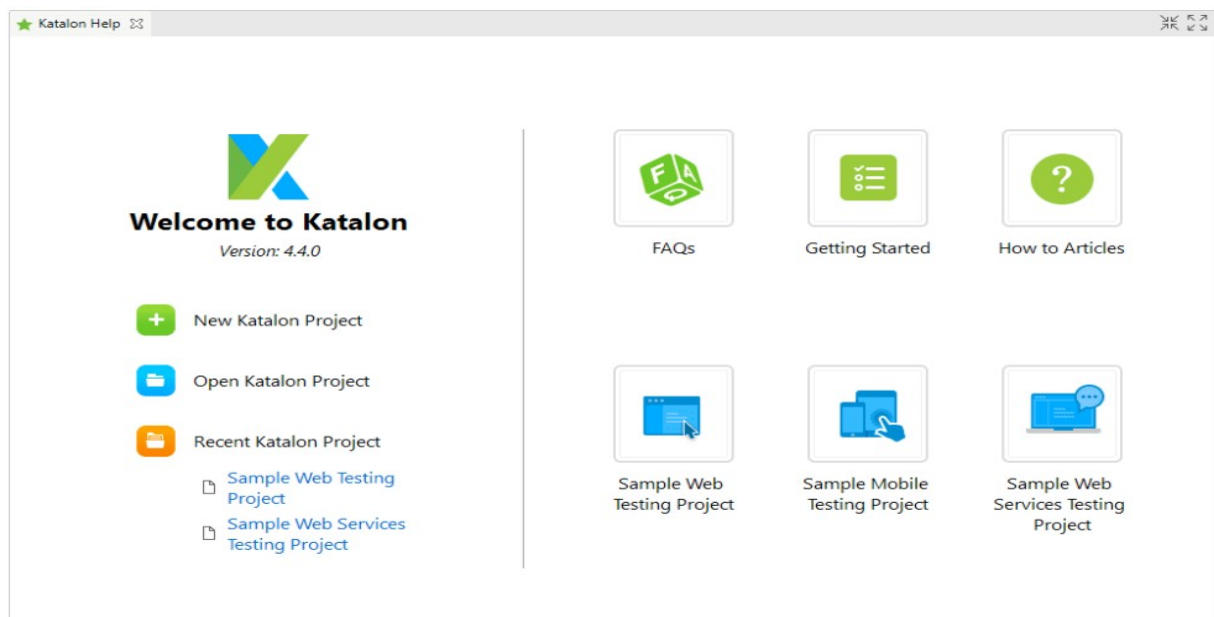
Introduce Katalon Store Integration Katalon Store of platform that leads users to the planet of wonderful plugins for Katalon studio.





### Katalon Studio 4.4 :

- New Chrome extension
- Powerful web service testing
- Mobile engine: is updated to Appium 1.6



### Katalon studio v5.0 :

- Record Web, Spy Web.
- Auto-saved last execution environment.

### **Platform :**

### 1. Windows :

Katalon Studio that fully supports automation test for desktop apps written within the following platforms: Universal Windows Platform (UWP), Windows Forms (WinForms), Windows Presentation Foundation (WPF), and Classic Windows (Win32).

### 2. Mac OS :

- OS: 9.x onwards
- Xcode :9.4.1 - latest

### 3. Linux :

## **Software requirements :**

Operating System (OS) : Windows 7, Windows 8, Windows 10, macOS 10.11+, Linux (Ubuntu based)

## **Hardware requirements :**

CPU capacity : Minimum: 2 GHz or faster 32-bit (x86) or 64-bit (x64) processor

Memory capacity : Minimum : 2 GB RAM (32-bit) or 4 GB RAM (64-bit)

Recommended : 4 GB RAM (32-bit) or 8 GB RAM (64-bit).

Hard Drive capacity : At least 1 GB available hard disk space.

## **Features :**

### 1. Simple Deployment :

A single, well-organized deployment package that contains everything a tester needs for deploying a strong test automation tool.

### 2. Quick & Easy Set-up :

Beyond the installation, Katalon Studio makes it easy to line up the environment. Using Katalon's pre-built templates which is useful to the tester with the test scripts, it's very easy for testers to run their first test script with this tool.

### 3. Faster & Weightier Outcomes :

With the clear steps on field-specific tester training, help testers to create their own test cases and run the automation test rough writings expeditiously. Every step starting from the undertaking organization, test engendering, execution, report generation and support, are often executed using Katalon.

#### 4. Flexible Modes :

New testers can use recordings and keywords to make or create automation tests, while expert testers can employ a full IDE to make or create increased rough writings.

#### 5. Easy Usage :

Manual testers with the some quantity programming skills that helps the tester with full benefits with very easy steps.

#### 6. Cross-Browser Application :

Katalon supports the fsunsequent platforms – Windows 32 and 64 (7, 8, and 10) and OS 4 X 10.5+.

### **Drawbacks :**

- There don't seem to be many guides for help just in case you get an mistakes or error or issues using the tool.
- There are many of functions that required some more info the way to use e.g. loading pictures from PC in a test case.
- User dislike the speed during which front-end UI tests run.
- It doesn't support AWS device farm so we we'll not run automation
- The new edition that was released comes with bugs that we'll report.
- Capturing XPATH may well be better for dynamic objects.
- User never understand the parallel testing to function.
- Verifying text and objects within Iframes will be a challenge.
- API (application) testing is below average.
- Only good for starter quality assurance engineers or testers.
- Controls - UI components should be more user friendly
- It doesn't support documentation type and take time to read with the explore.
- Mobile API testing to take time to capture and write code for the testing purpose.

### **Advantages :**

- Katalon studios caters to the necessity of non-programmers by providing record & playback feature and scripting in manual mode for test case and test suite creation. Together with that it's a comparatively simpler learning curve which helps manual tester to simply create automation tests.
- For tester who have good programming expertise, Katalon provides tester case creation in scripting mode also.
- The script recorded in one browser is made to run in any of the supported browsers, making cross browser testing fast and compactable.
- Its test result reports are graphically intative and might be exported to pdf and CSV formats.
- It software provides a creative inherent logging mechanism and screenshot on failure of feature.

### **Disadvantages :**

- As of now there's no support for distributed testing.
- Also if a script fails due to waiting on the application it causes a lot of problems
- This tool Verify text and objects within Iframes can be a challenge to the tester
- This software does not capture objects sometimes while recording.
- As of now there is no support for the distributed testing.
- This software cannot automate desktop applications unlike some licensed tools like UFT and TestComplete.

### **References :**

1. ["How to Integrate Katalon Studio With Kobiton"](#).
2. ["Katalon and Sauce Labs Collaborate to Deliver Better Automation and Continuous Testing Experience"](#).
3. ["Katalon Releases Selenium Migration Feature and Demonstrates Maturity With Codeless Testing"](#).

## Introduction:

Katalon software is a basically simple to use tool from the test suite and should even be used by someone new developing automated test cases for his or her own web applications, desktop application and android application etc. It synchronizes both requirements specification and test specification together and automated testing execution of Test cases is possible in these software. And also the software supports to multiple projects, User can create test project and document test cases using this particular tool.

This platform offers support for test cases, test suites, test plans, test projects and user management, also various reports and statistics of the project. So Test Plans are the essential report unit for executing a group of tests on an application like Summary/Scope. The tester can manage your test cases using GUI only. One doesn't required any special setup to urge started with Katalon Studio. Katalon provides you with a GUI (Graphical User Interface) for easily recording your interactions with the online site.

Katalon studio software allows a user or the test suite developer to create the test cases and test suites and edit it later as per their requirements specification. The development environment also provides the potential of converting test cases to different programming languages, which makes it easier for the user and doesn't mandate the needs of knowing a selected programming language by the user.



## **Why I am choosing Katalon studio over other open source frameworks ?**

- Because the Katalon Studio hides all technical complex details behind the screen and provides user friendly with the manual/script mode (user can drag and drop, select the keywords and test the objects to form test steps), but the software still keeps the necessary items for more technically tester or users who are able to score into coding with the scripting mode that all supports the main development faces like syntax highlighting, code debugging and supports java language.
- With the software Selenium, the testers can have to go through given guidelines for their Desktop, API and integrate them into with an environment and a preferred coding language. By Katalon Studio is built as a particular bundle which includes and excludes almost all necessary things like Java, groovy, Android SDK, Web drivers to drive all the browsers, and required dependencies. The users have to do is to download and install it on the desktop.
- While Selenium (or) Appium requires the tester or users to build the common and reusable actions on their own desktop, katalon Studio contains the pre-defined functions of the used keywords or actions, the tester or users will find the creation to start implementing all the test cases, if testers have more knowledge they still have a way to create there own custom keywords for their new or existing projects. Custom keywords are an extension of built-in keywords in this particular .

### **List of some Companies using katalon studios :**

- Medline Industries Inc.
- Byte Systems
- Meredith Corporation

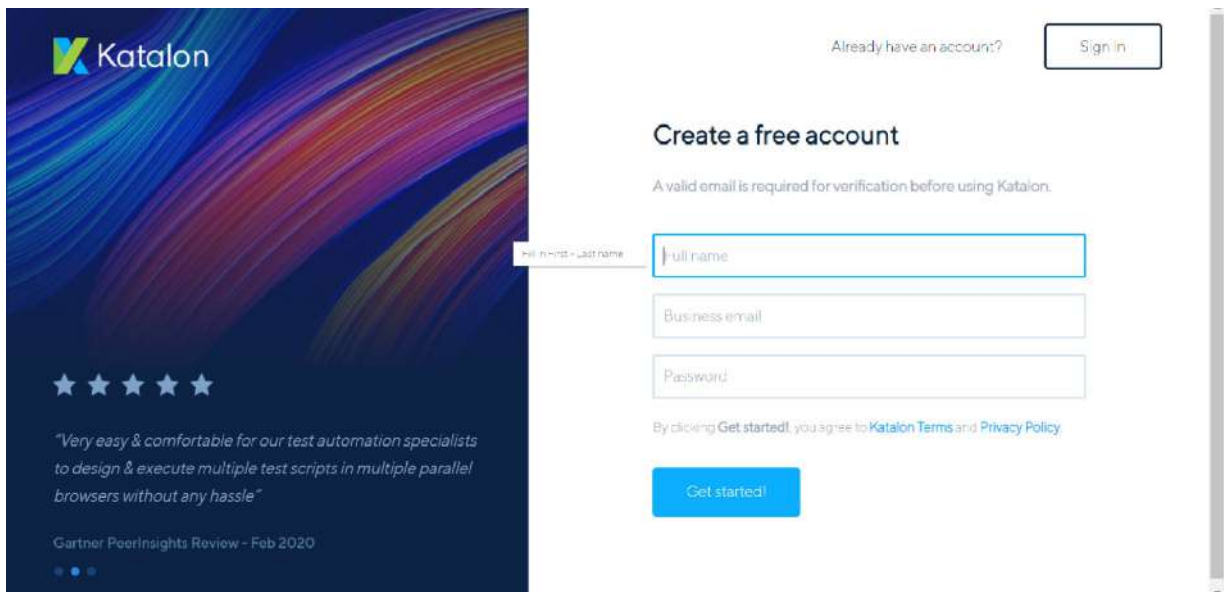
### **Environment Setup:**

*Environment Requirements :*

Verify whether your computer meets the System requirements to work with Katalon Studio.

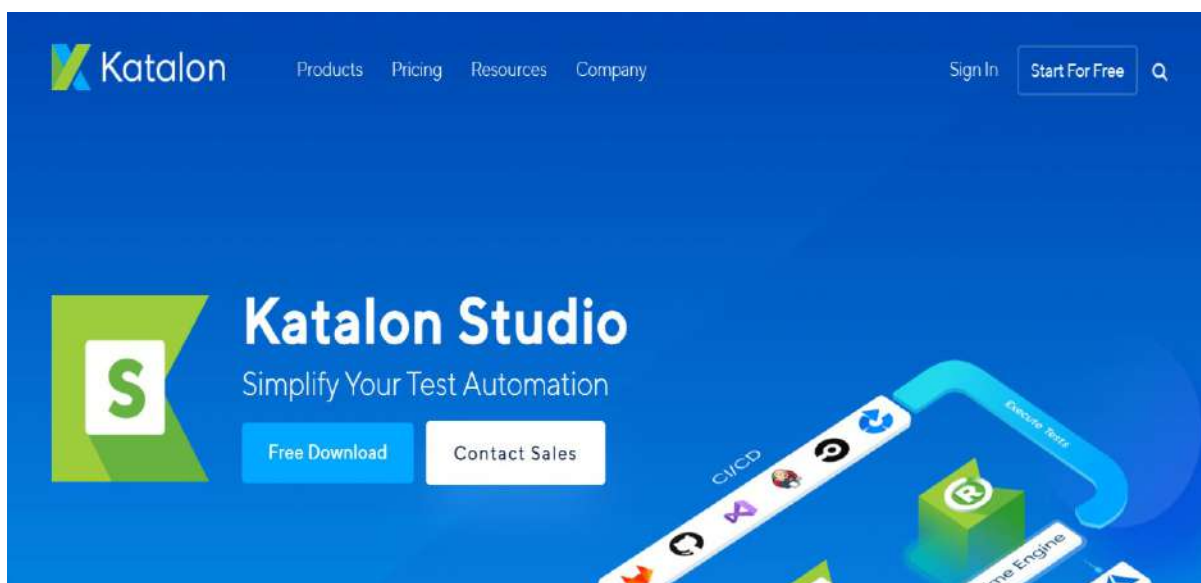
## Download Katalon Studio :

- New users will be asked to SignUp.
- Enter the required fields and click on 'Download' button (save the login information as the same to be used in activate the tool on start of the software).



The screenshot shows the Katalon Studio registration page. On the left, there is a dark blue banner with the Katalon logo, five stars, and a quote: "Very easy & comfortable for our test automation specialists to design & execute multiple test scripts in multiple parallel browsers without any hassle". Below the quote, it says "Gartner PeerInsights Review - Feb 2020". On the right, the "Create a free account" section is visible. It includes a link for "Already have an account? Sign in", a note that "A valid email is required for verification before using Katalon", and three input fields: "Full name" (with a hint "First, middle, last name"), "Business email", and "Password". Below these fields is a link for "Katalon Terms and Privacy Policy" and a blue "Get started!" button.

- Download the latest version of the katalon studio which will be a bug free and new features when compared to the older version. But Katalon Studio automatically detects a suitable version for your system, but you can also select a preferred one on the page.



## Start Katalon Studio :

### Windows :

- Double-click on the **katalon.exe** file.
- Now you just need to extract the package and clicking on Katalon.exe(in case of windows) will launch the tool.
- In order to activate the tool, it will ask for the email Id and password. Enter the information which is used in creating the account on Katalon studio.

### macOS

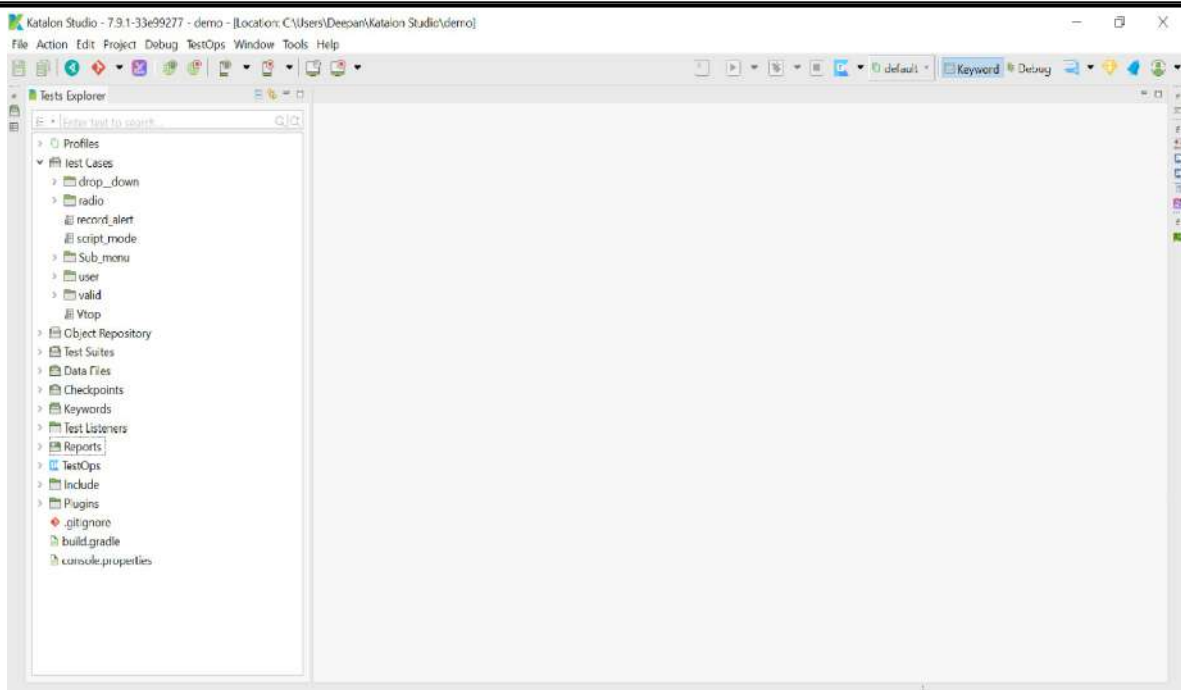
- Double-click on the **Katalon Studio** (macOS) file in the directory where it is unpacked.
  - Users can start the applications directly like in macOS.
- Once started, the application should display the splash screen similar to the following screenshot:



### Pre-requisites:

1. Valid Email to active Katalon Account
2. Active Internet Connection to download Katalon Studio.





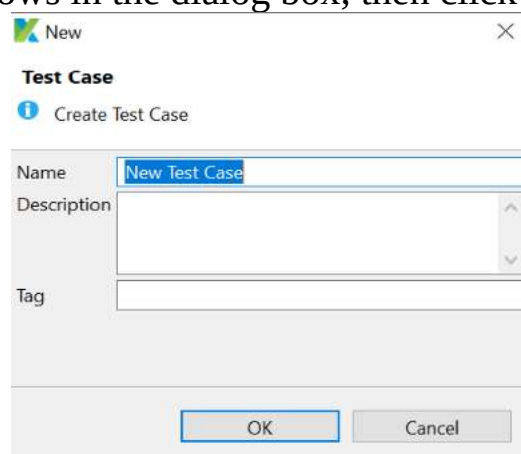
This information concludes the installation and setup of the Katalon studio, the next is how to create the test scripts for the web / desktop applications using record and playback features or spy web features.

1. Create a new project under file section on the top left corner icon
2. Start the testing of the project with the software requirement.

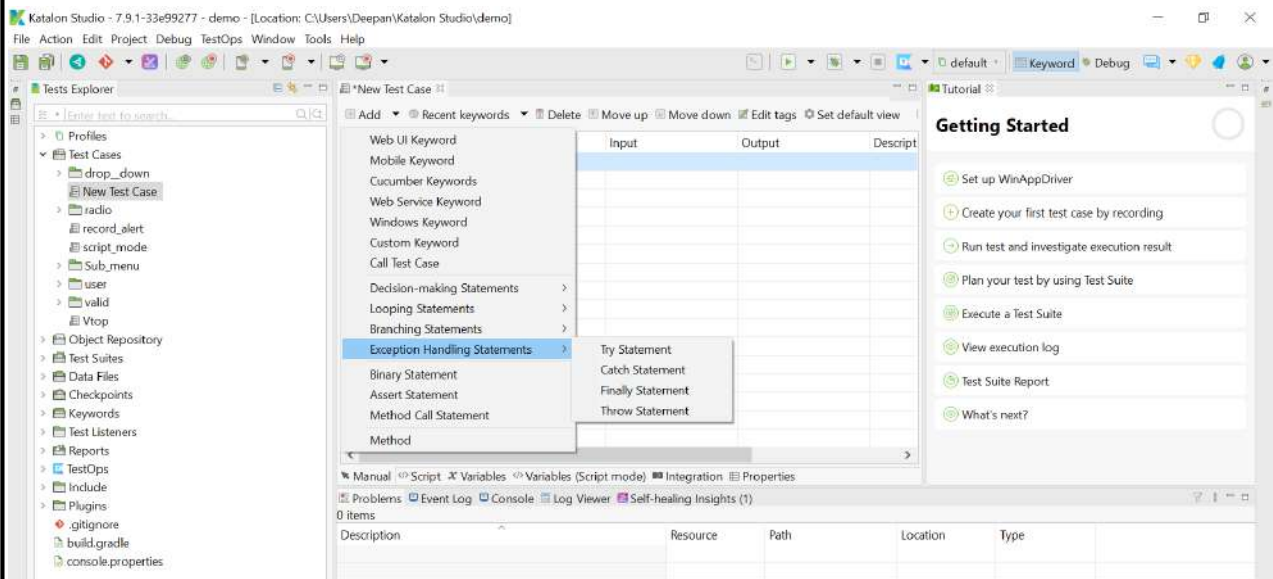
## Creating the Test Cases / Test Suite / Test Reports in katalon:

*Create Test Case : In Manual View :*

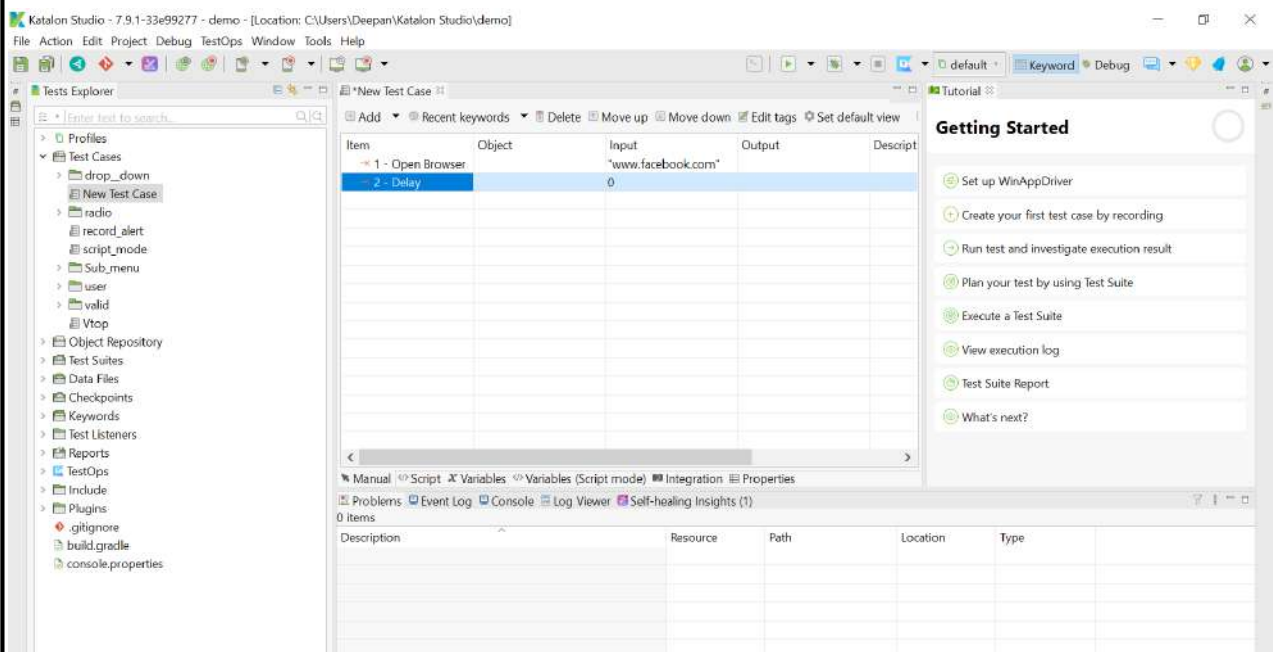
Step 1 : Select File > New > Test Case from the main menu. The New Test Case dialog will be displayed. Provide the new name for the new test case which shows in the dialog box, then click OK button.



**Step 2 :** Once a new test case is created, it is opened in Manual view. This manual view allows the tester or users to create a automation tests easily with a bit of programming skills required.



**Step 3 :** Add the Navigate To URL keyword. This keyword will navigate to a specified URL. Just do double click on the Input cell that they provide an additional data (parameters) for the built-in-keyword.



**Step 4 :** The Input dialog is displayed. And you can your specifications like url, click option and delay option etc.

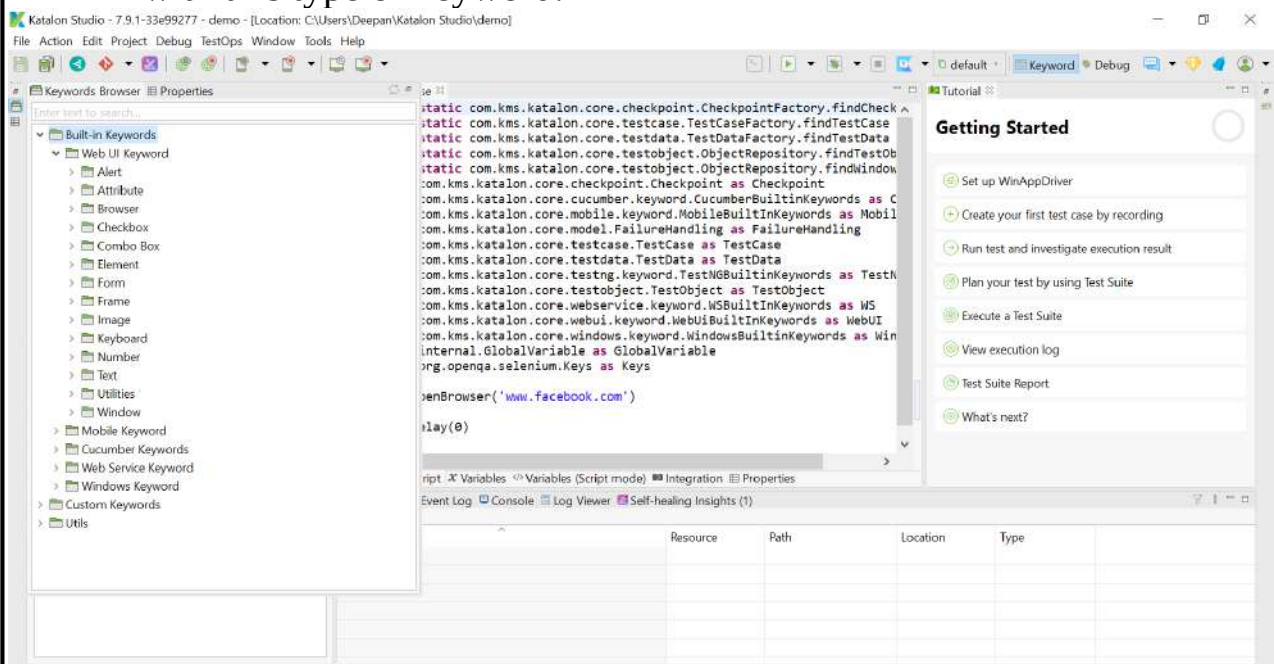
**In Script View :**

Do step 1 and 2 same as above.

Step 3 : You will create a Web application test script to make use of the web built keyword To use a built-in WebUI

```
1 import static com.kms.katalon.core.checkpoint.CheckpointFactory.findCheckpoint
2 import static com.kms.katalon.core.testcase.TestCaseFactory.findTestCase
3 import static com.kms.katalon.core.testdata.TestDataFactory.findTestData
4 import static com.kms.katalon.core.testobject.ObjectRepository.findTestObject
5 import static com.kms.katalon.core.testobject.ObjectRepository.findWindow
6 import com.kms.katalon.core.checkpoint.Checkpoint as Checkpoint
7 import com.kms.katalon.core.cucumber.keyword.CucumberBuiltinKeywords as C
8 import com.kms.katalon.core.mobile.keyword.MobileBuiltinKeywords as Mobil
9 import com.kms.katalon.core.model.FailureHandling as FailureHandling
10 import com.kms.katalon.core.testcase.TestCase as TestCase
11 import com.kms.katalon.core.testdata.TestData as TestData
12 import com.kms.katalon.core.testng.keyword.TestNGBuiltinKeywords as TestN
13 import com.kms.katalon.core.testobject.TestObject as TestObject
14 import com.kms.katalon.core.webservice.keyword.WSBuiltInKeywords as WS
15 import com.kms.katalon.core.webui.keyword.WebUiBuiltInKeywords as WebUI
16 import com.kms.katalon.core.windows.keyword.WindowsBuiltinKeywords as Win
17 import internal.GlobalVariable as GlobalVariable
18 import org.openqa.selenium.Keys as Keys
19
20 WebUI.openBrowser('www.facebook.com')
21
22 WebUI.delay(0)
23
```

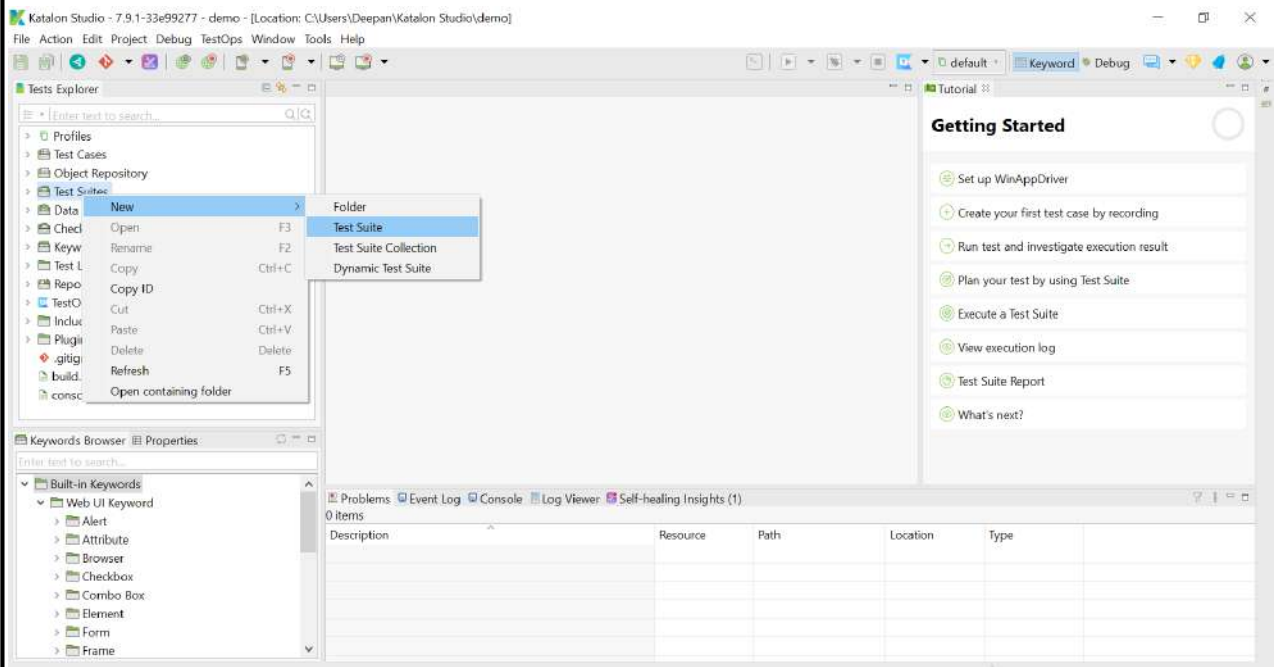
Step 4 : Enter the Verify element present keyword. This type of keyword is to validates if a certain object is displayed on the executing browser. Similarly in the previous step, we need to specify the object to be used with this type of keyword.



Step 5 : Finally execute the run button.

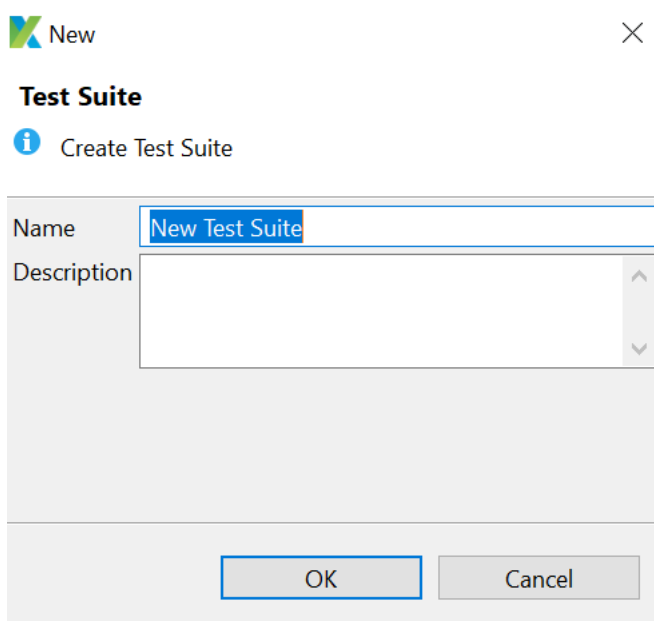
## Create a new Test Suite :

Step 1 : From the menu bar, select File -> New -> Test Suite



Step 2 : Fill in the name of the test suite and the description is a optional one.

Click OK when you are done.



**Step 3 :** Here is the another way to create the new Test Suite. In the table of the Test Case, click Add to test suite option after you have finished creating a test case.

[illegible]

## Report History :

Step 1 : Once a test suite/test suite collection finishes its execution, a historical report will be automatically generated and stored in Reports.

Katalon Studio - 7.9.1-33e99277 - demo - [Location: C:\Users\Deepan\Katalon Studio\demo]

File Action Edit Project Debug TestOps Window Tools Help

Tests Explorer

- Data Files
- Checkpoints
- Keywords
- Test Listeners
- Reports
  - 20210415\_201952
    - user\_testsuite
  - 20210415\_212927
    - Vtop
  - 20210415\_223603
    - drop\_down
  - 20210415\_230142
    - drop\_down
  - 20210415\_230619
    - user\_testsuite
  - 20210415\_232746
    - Sub\_menu
    - menu
  - 20210415\_232746
    - 20210415\_232746
  - 20210416\_000017
    - validate
  - 20210416\_000017
    - 20210416\_000017
  - 20210416\_070855
    - script
      - script\_mode
  - 20210416\_070856
- TestOps
- Include
- Outline

sub menu script\_mode script\_mode 20210416\_070856

Test Cases Table

☒ Passed ☒ Failed ☒ Error ☒ Incomplete ☒ Skipped

Export report Katalon TestOps Show Test Case Details

Search here

No.	Name	Resolution	Video
1	script_mode (7.192s)		

Summary Execution Settings Execution Environment

<b>Test Suite ID</b>	Test Suites/script/script_mode	<b>OS</b>	Windows 10 64bit
<b>Host name</b>	Deepan - Deepan	<b>Platform</b>	Chrome 89.0.4389.128
<b>Katalon version</b>	7.9.1.208	<b>End</b>	2021-04-16 07:09:12
<b>Start</b>	2021-04-16 07:09:04		
<b>Elapsed</b>	8.823s		
<b>Total TC</b>	1		
<b>Passed</b>	1	<b>Failed</b>	0
<b>Error</b>	0	<b>Skip</b>	0
<b>Incomplete</b>	0		

Problems Event Log Console Log Viewer Self-healing Insights

Runs: 1/1 Passes: 1 Failures: 0 Errors: 0 Skips: 0

Test Suites/script/script\_mode (8.823s)

```

hostName = Deepan - Deepan
os = Windows 10 64bit
hostAddress = 192.168.43.154
katalonVersion = 7.9.1.208
  
```

04-16-2021 07:09:04 AM Test Suites/script/script\_mode

Elapsed time: 8.823s



Step 2 : For the purpose of sharing, users can export reports of test suites into other formats such as HTML, CSV, PDF and JUnit.

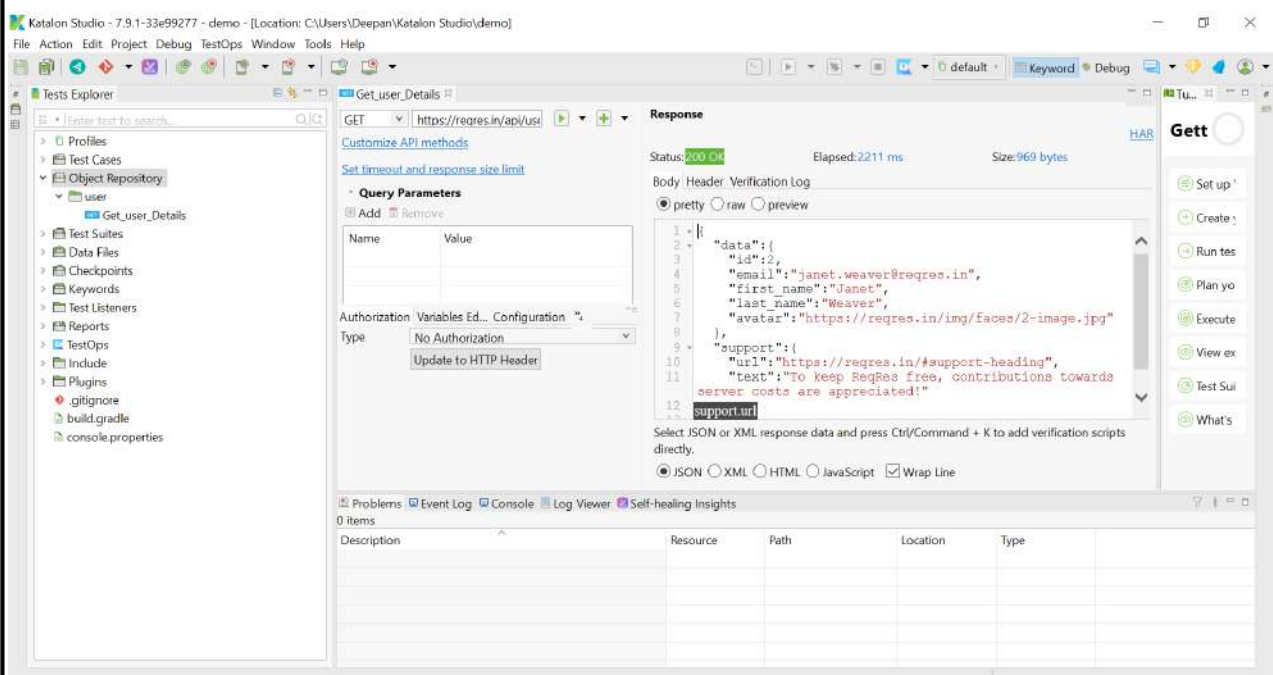
Step 3 : In Project > Settings > Plugins > Report, select the formats of reports that will be automatically generated after each Test Suite execution.

## Sample testing using katalon studios :

### 1. API Testing:

Step 1 : Before creating our first API test, let's have a look at the format we use to set up a testing project.

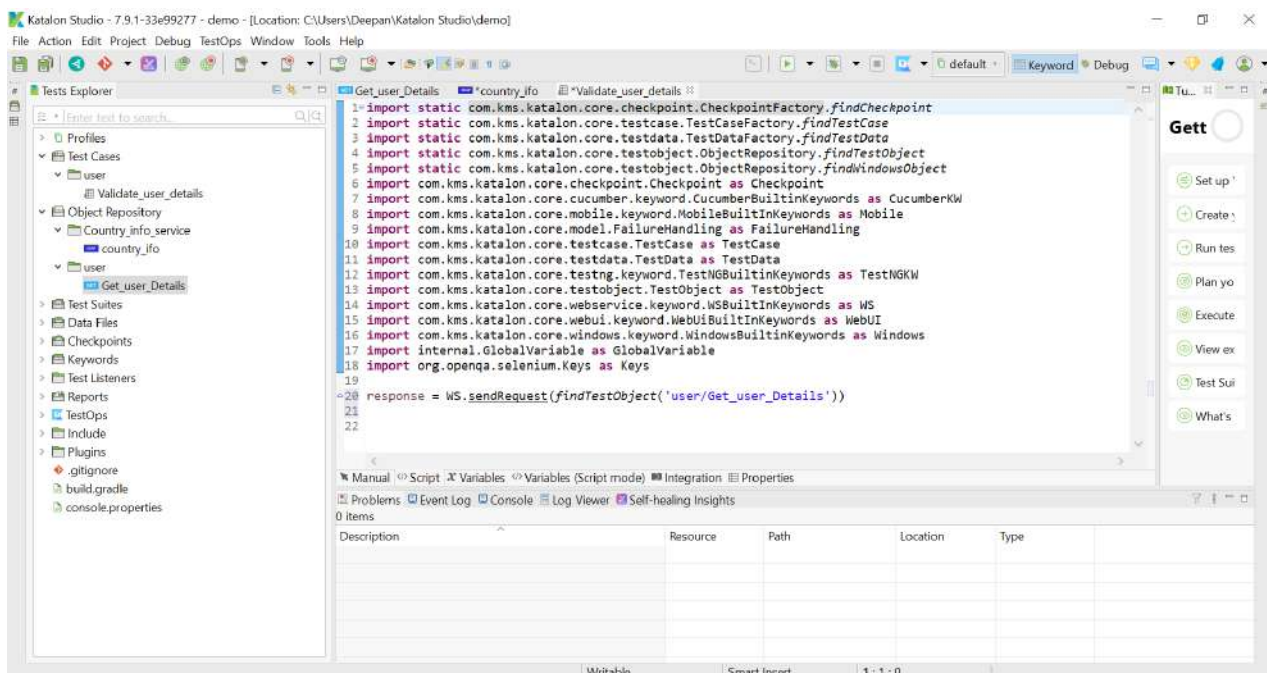
Step 2 : We can choose one of these following methods for your first request test : GET, POST, PUT, DELETE. So These methods needs to match with the given URL to have a valid request. The first test is a public API from Jira Cloud version. So the users use the GET method to retrieve or to receive the information on an existing ticket using its ID.



### Object Repository :

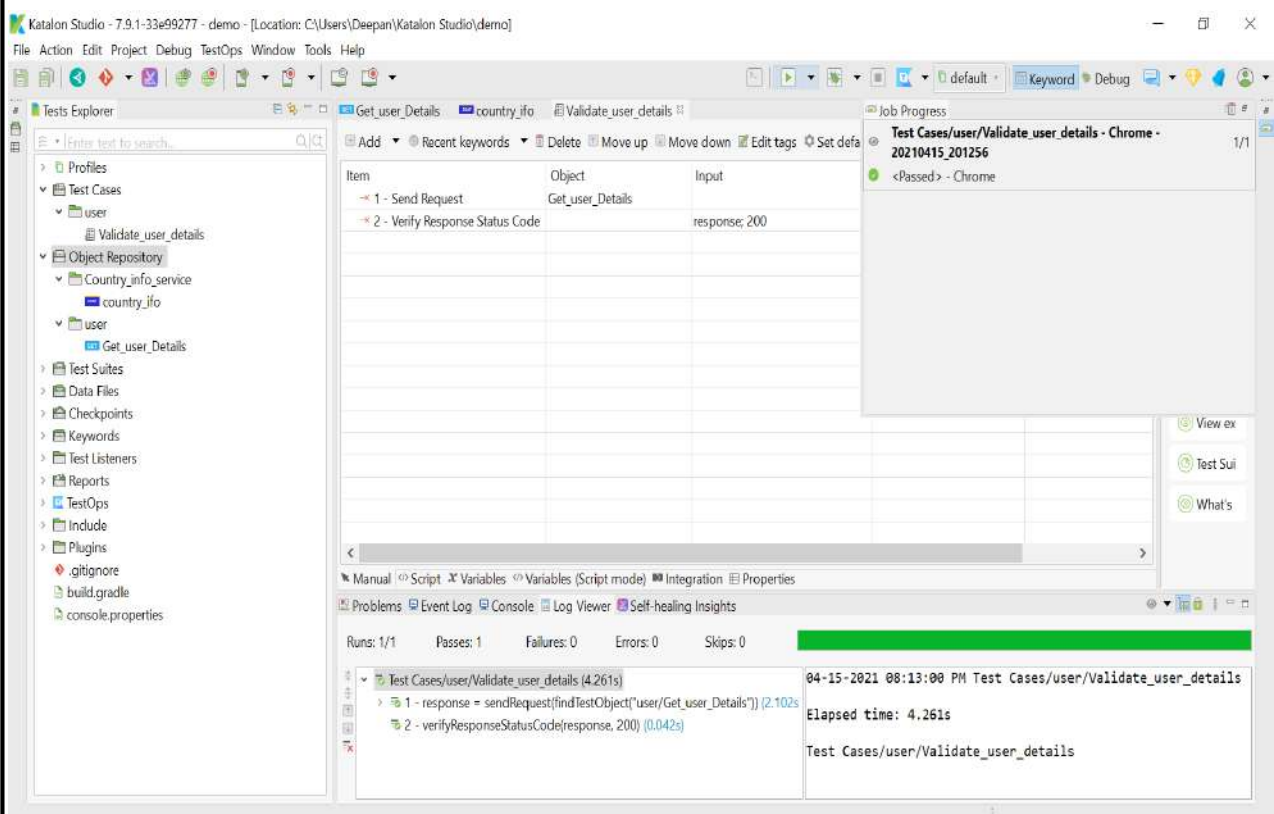
- Object repository is the place that stores the data of all the Web service endpoints and desktop applications along with all information of the request method, URL, Header, Content, and Authentication.

- Web service test objects in Object Repository are integrated by a folder system for better management.



## Test Cases :

- Test cases stores the data of all the test case scenarios and it is grouped by the folder. Each test case includes a few steps illustrating a test process.
- We can execute a test case individually with a specified execution profile.

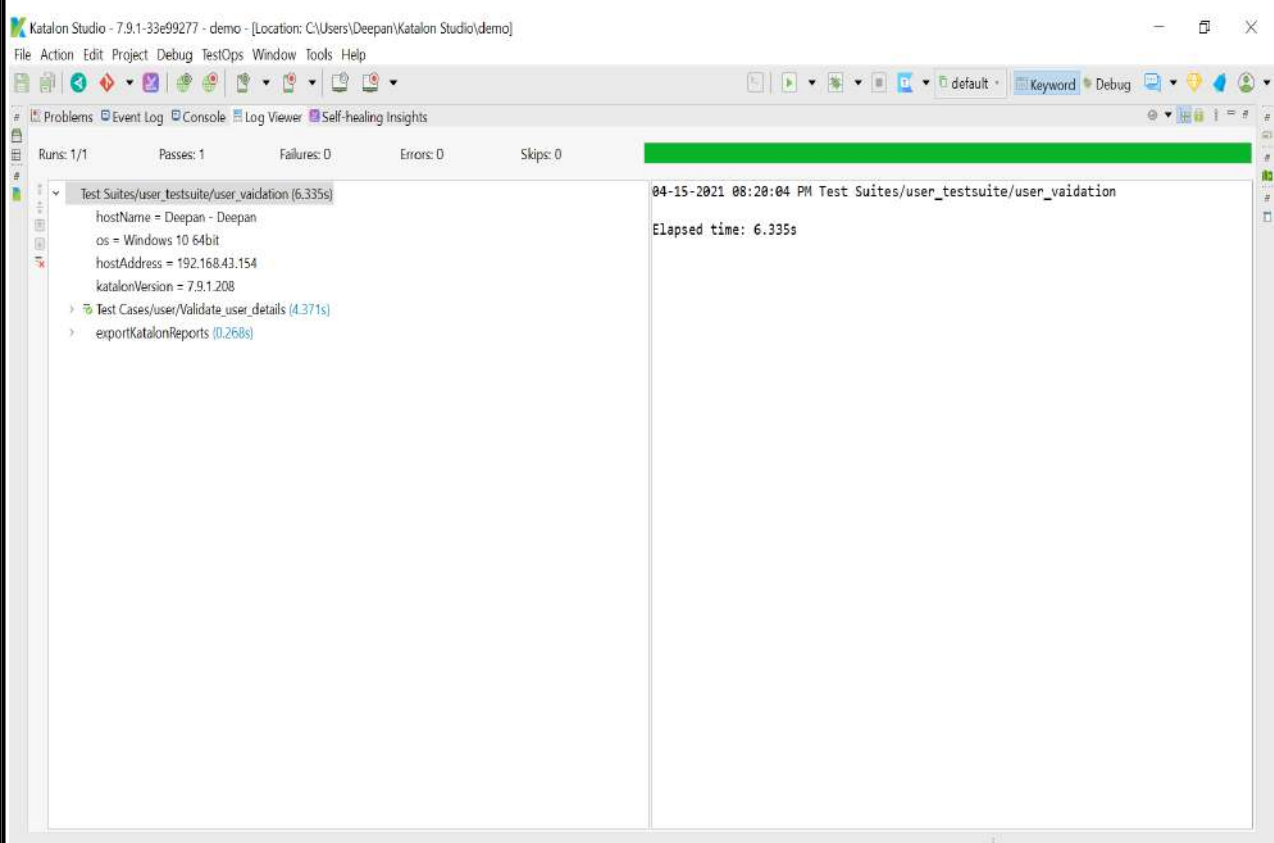


### *Test Suites :*

- Test Suites is the place where all test suites are stored. The test suite is the collection of the test cases to verify the particular target.
- Test cases at the test suite level can be executed with a data-driven approach.
- Test reports are also generated at the test suite level

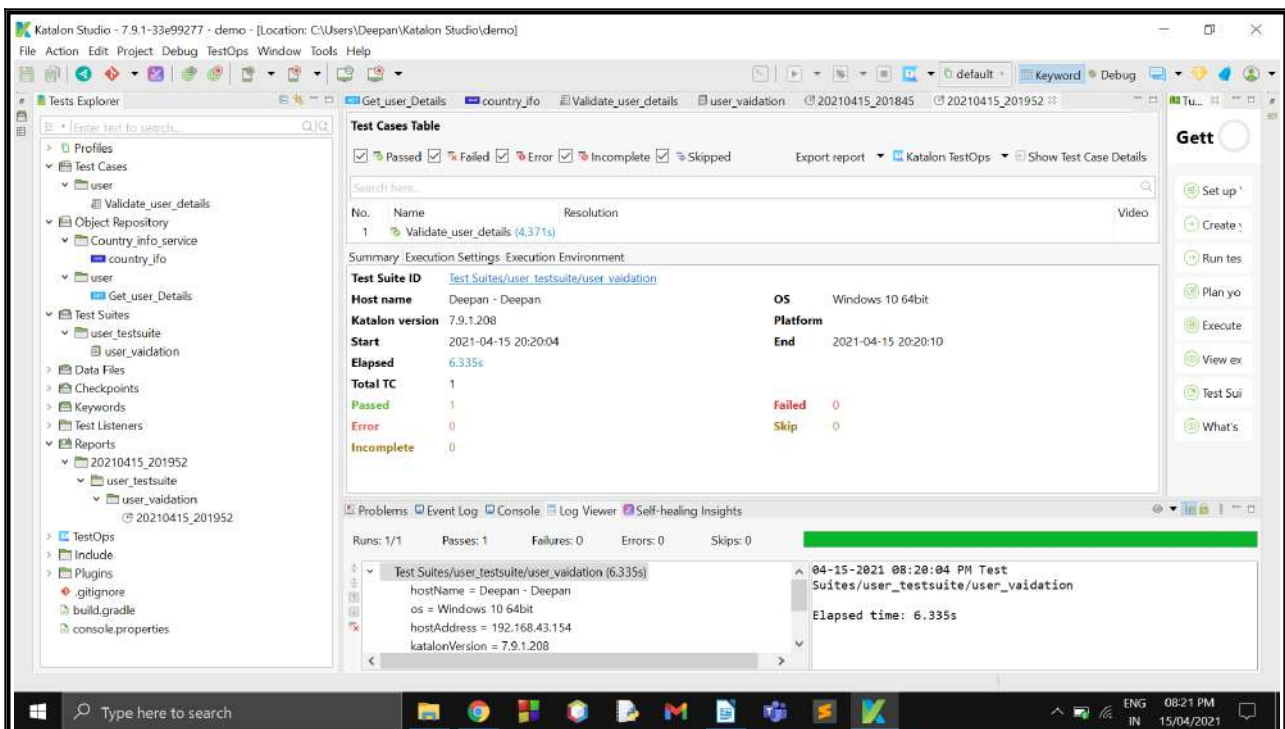
### *Test Suite Collection :*

- Test Suite Collection is a collection of Test Suites verifying a larger target.
- Test Suite at Test Suite Collection level has specific Test environments specified.

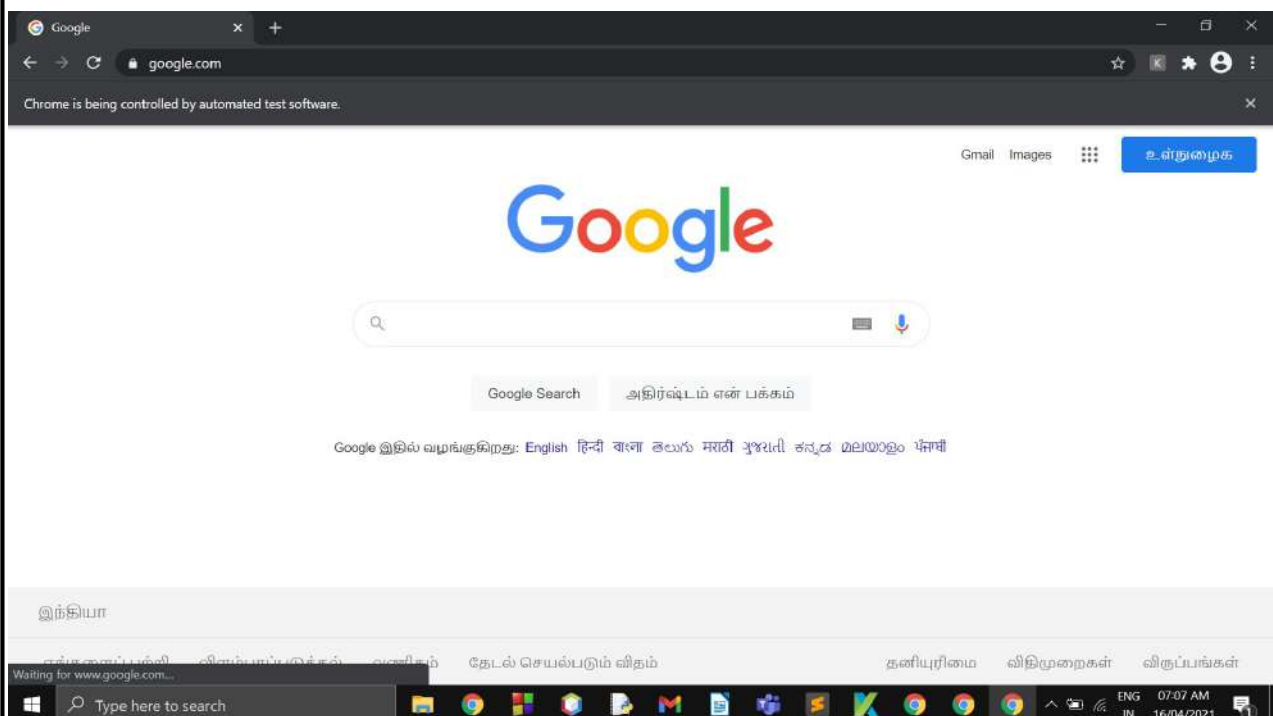


- Report generation :



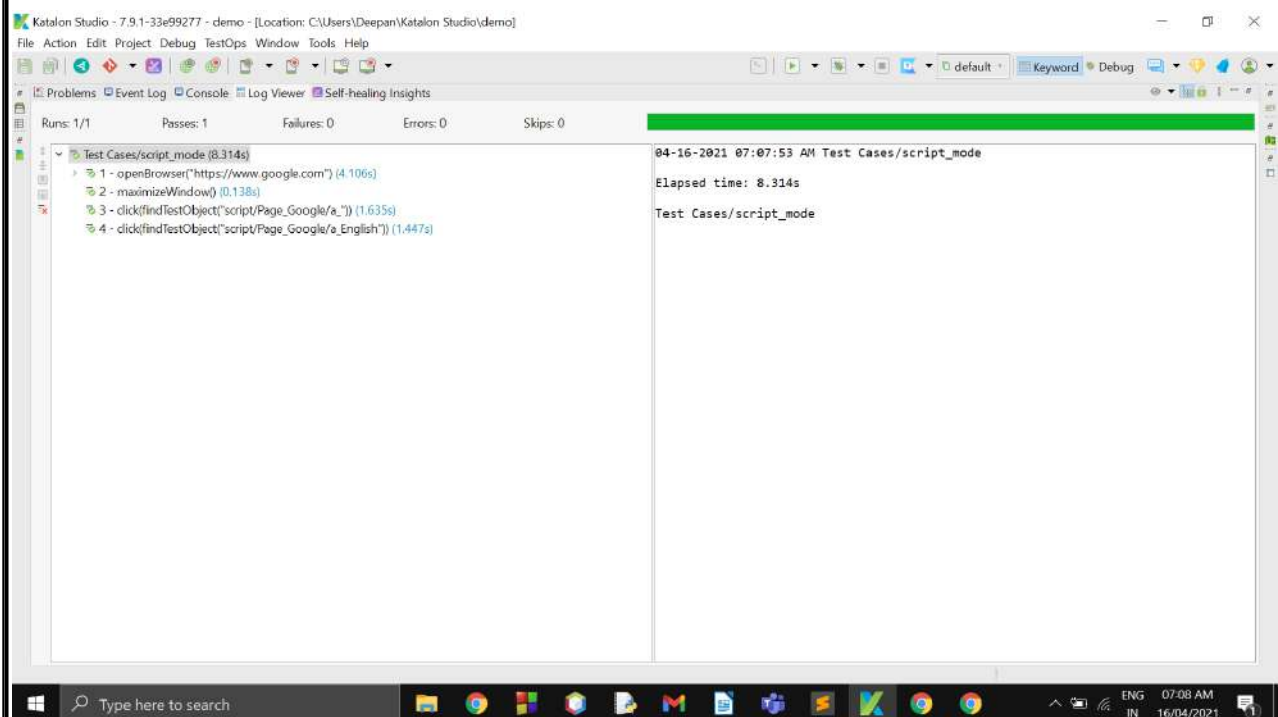
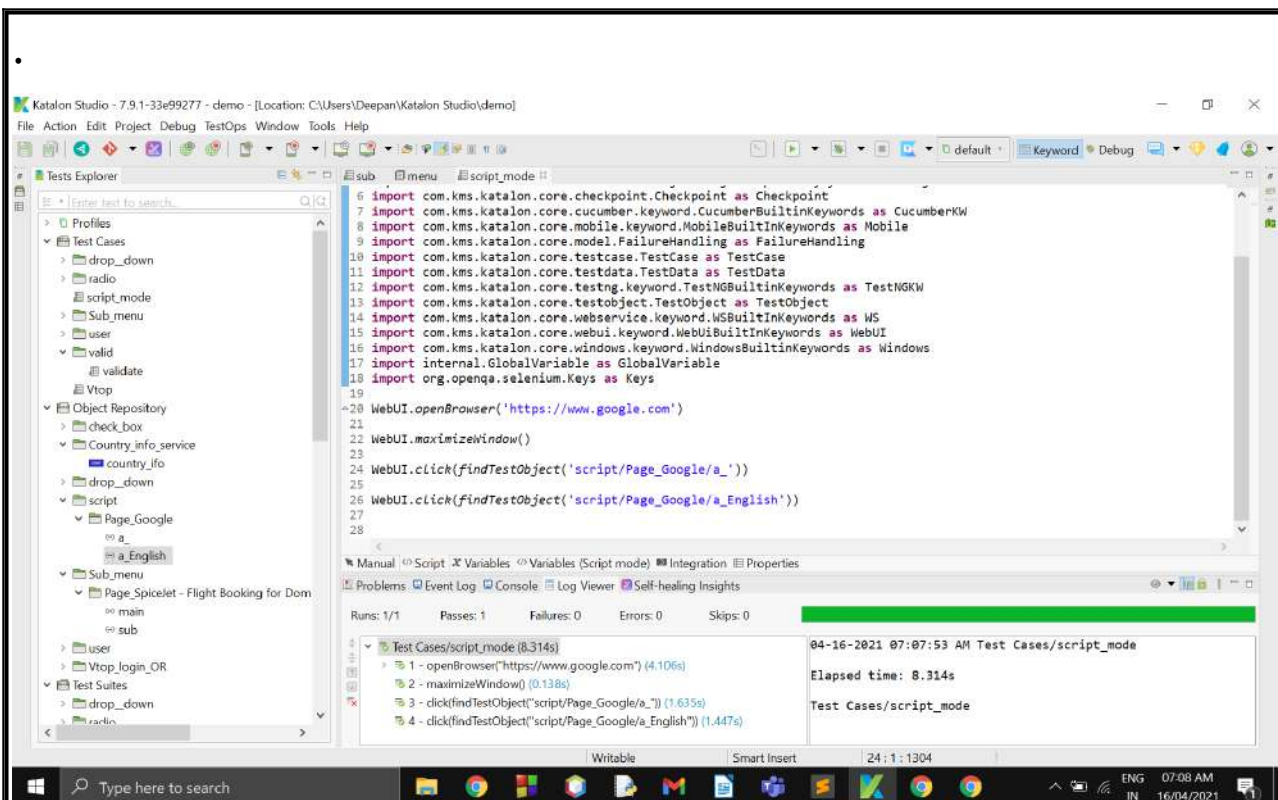


## 2. Working with Script mode in katalon:



**Step 1 :** Select File > New > Test Case from the main menu to create a test case. Provide the name for the new test case, then click OK.

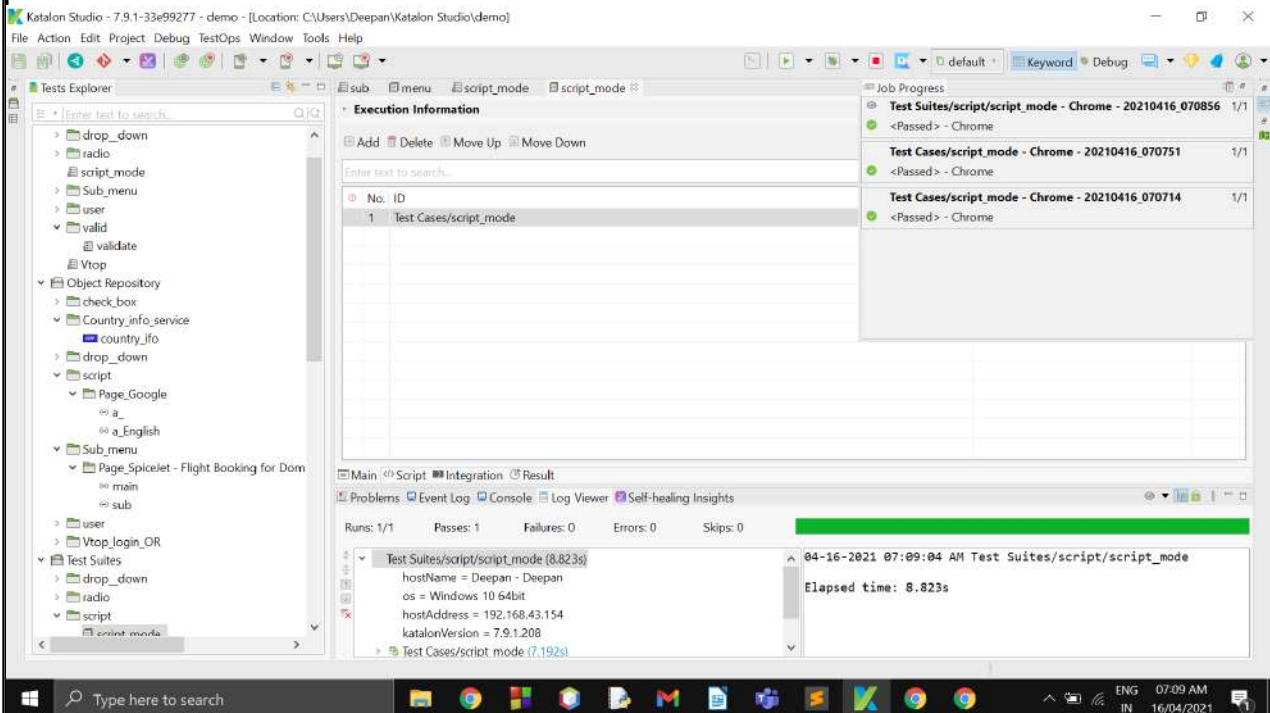
**Step 2 :** Once a new test case is created, you switch to the Script view. Test steps specified in the Manual view are automatically translated to Java script in the Script view.



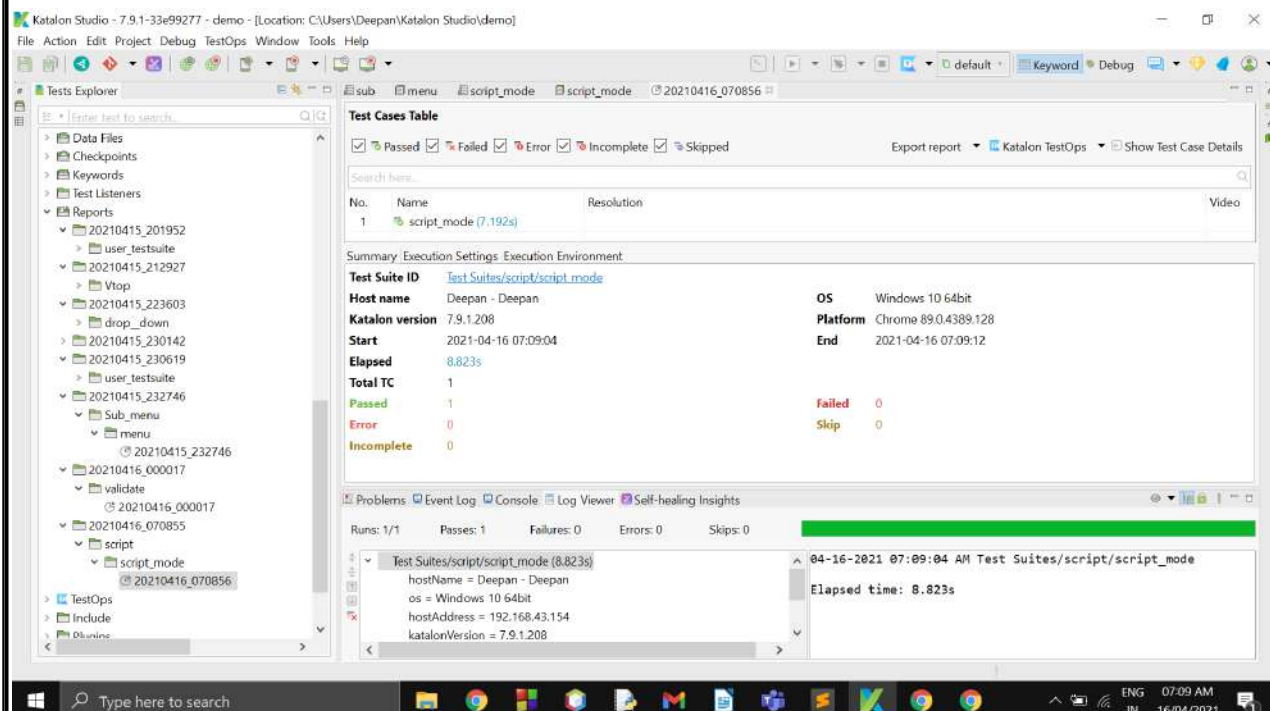
**Step 3 :** Creating test suite to store the test cases of the script mode to translate from Tamil to English Google home page

# 19MIS0102

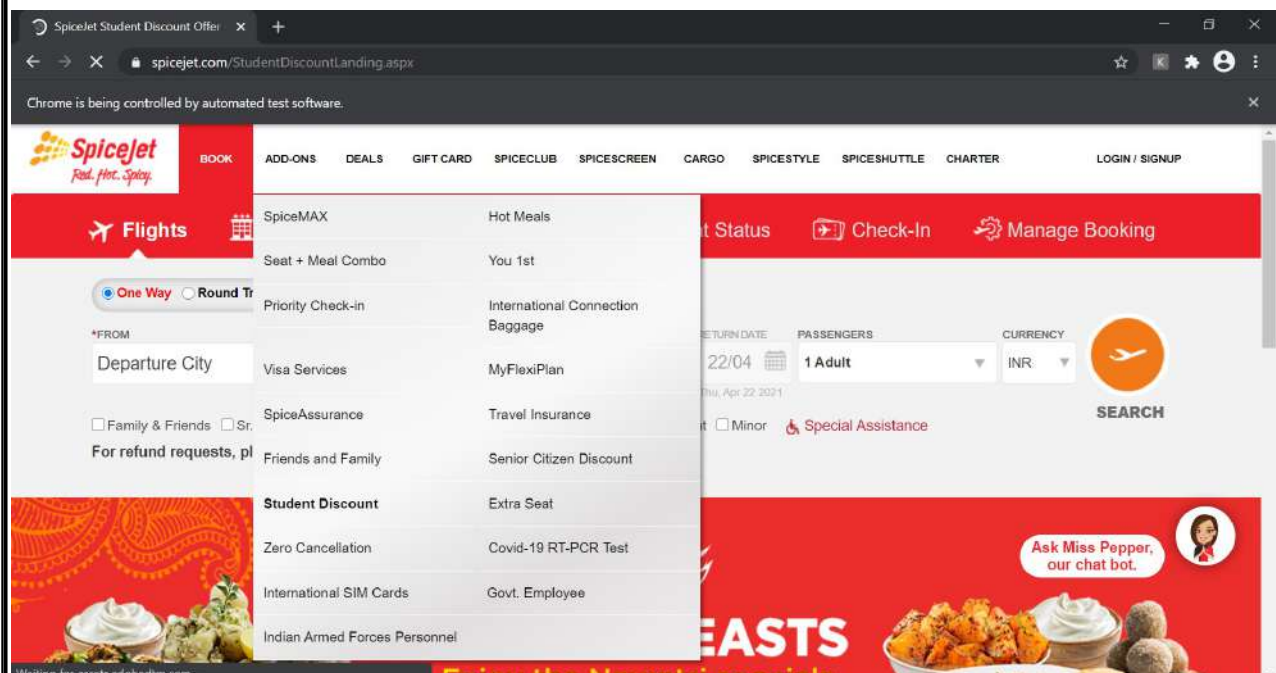
## S.DEEPAN



### Step 4 : Report generated from the test suite.



### 3. Working with Sub-menu option in katalon :



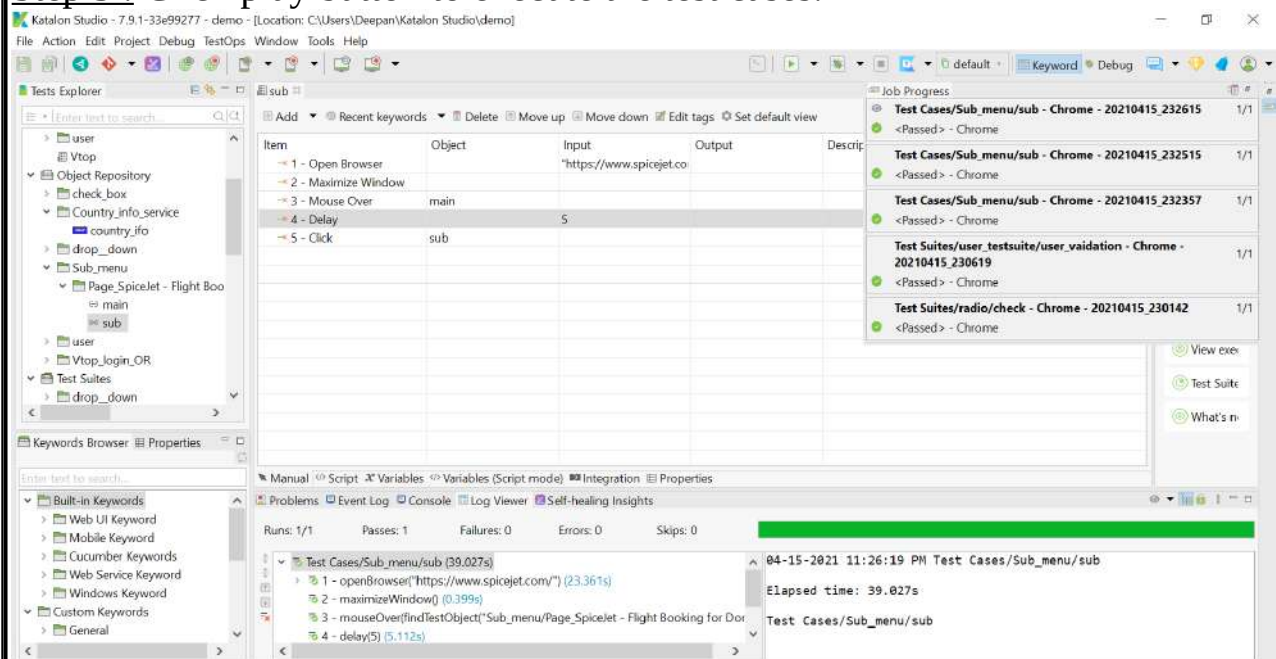
Step 1 : Choose a particular website where the sub menu option is available.

Step 2 : Copy the link of the website.

Step 3 : Specify the activity like mouseover to the main menu.

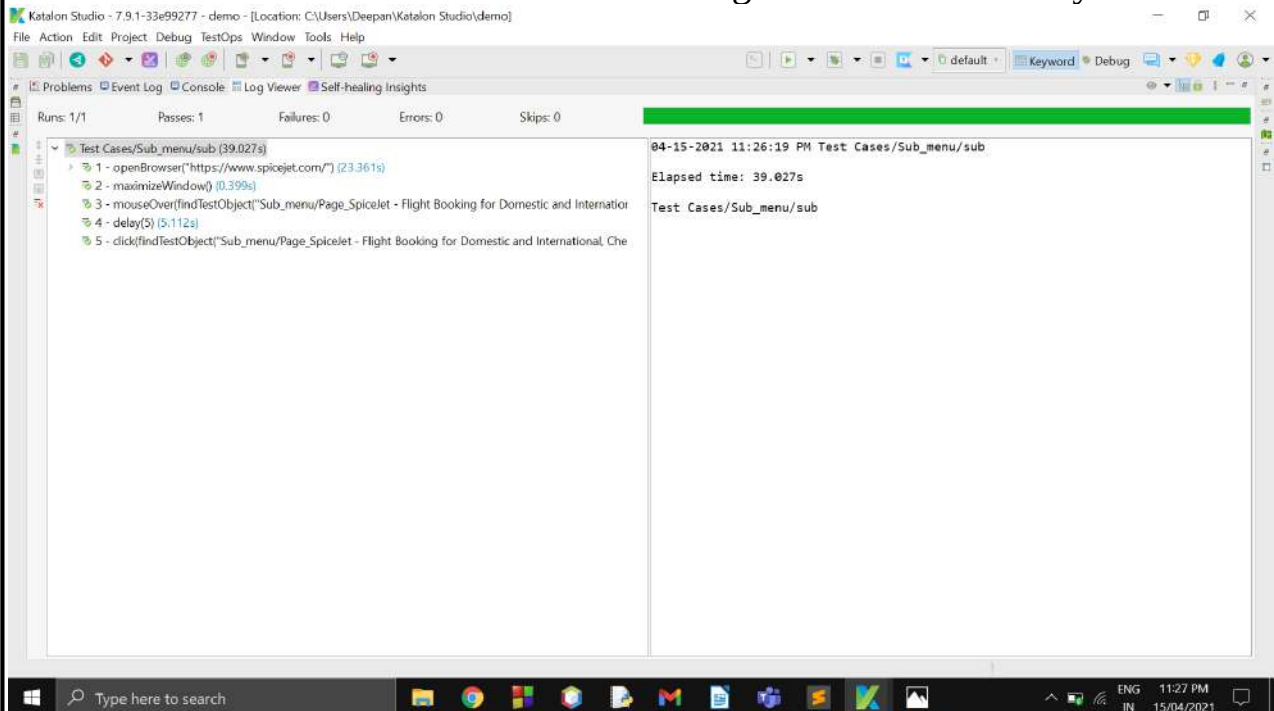
Step 4 : Add another keyword like click which refers to the sub menu as mentioned below.

Step 5 : Click play button to execute the test cases.





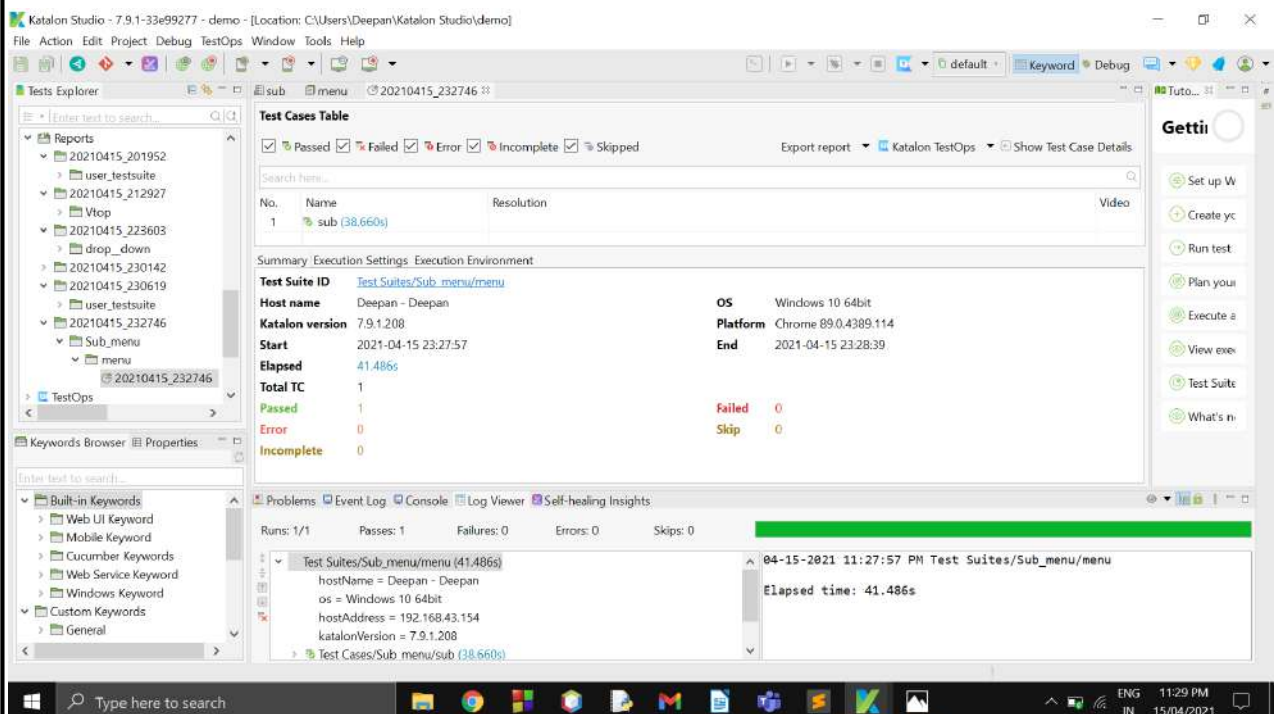
- From below we can see the test case is generated successfully



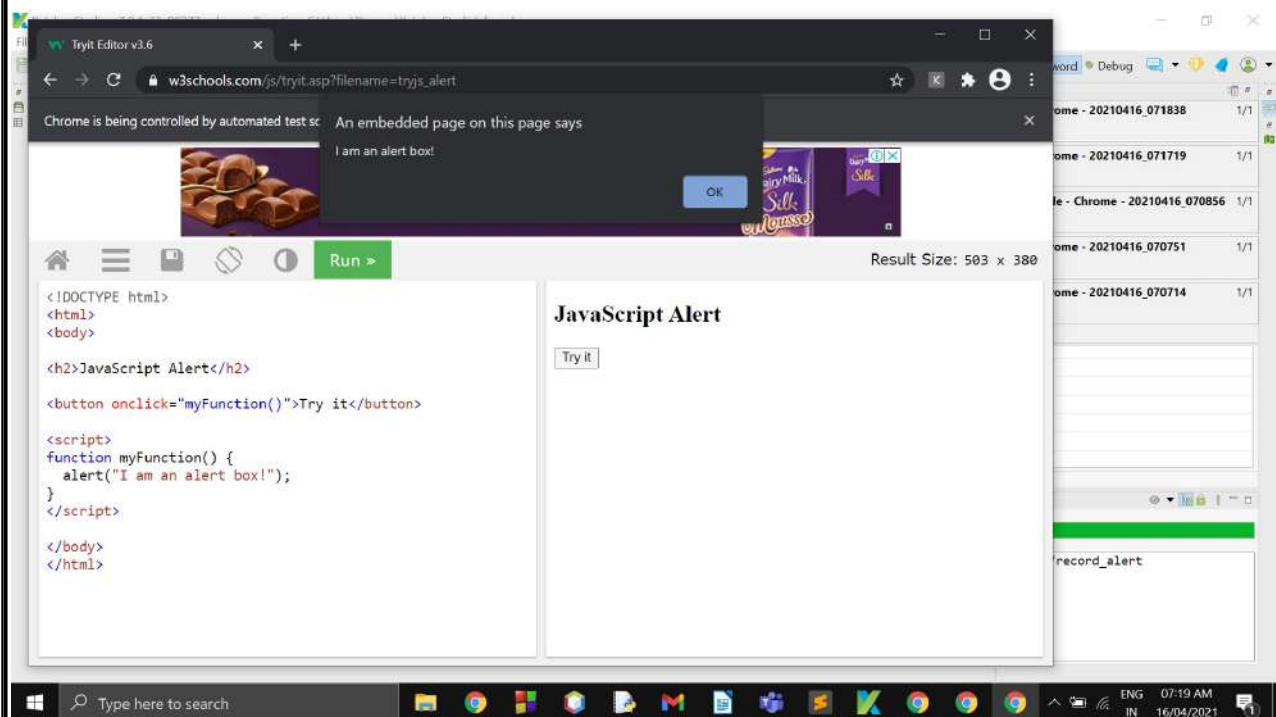
Step 6 : Add a new test suite to the above test case and click ok.

Step 7 : Report generated successfully

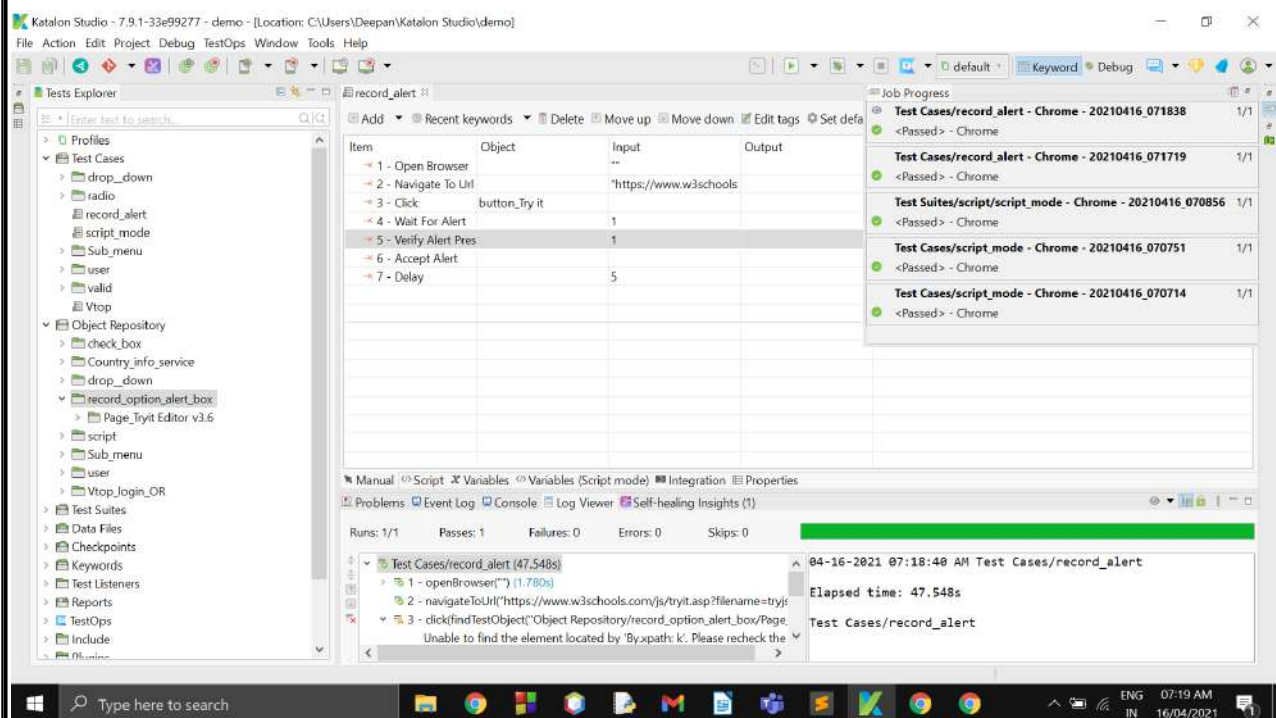
Step 8 : We can export the final report as a HTML and PDF documents and many more options available.



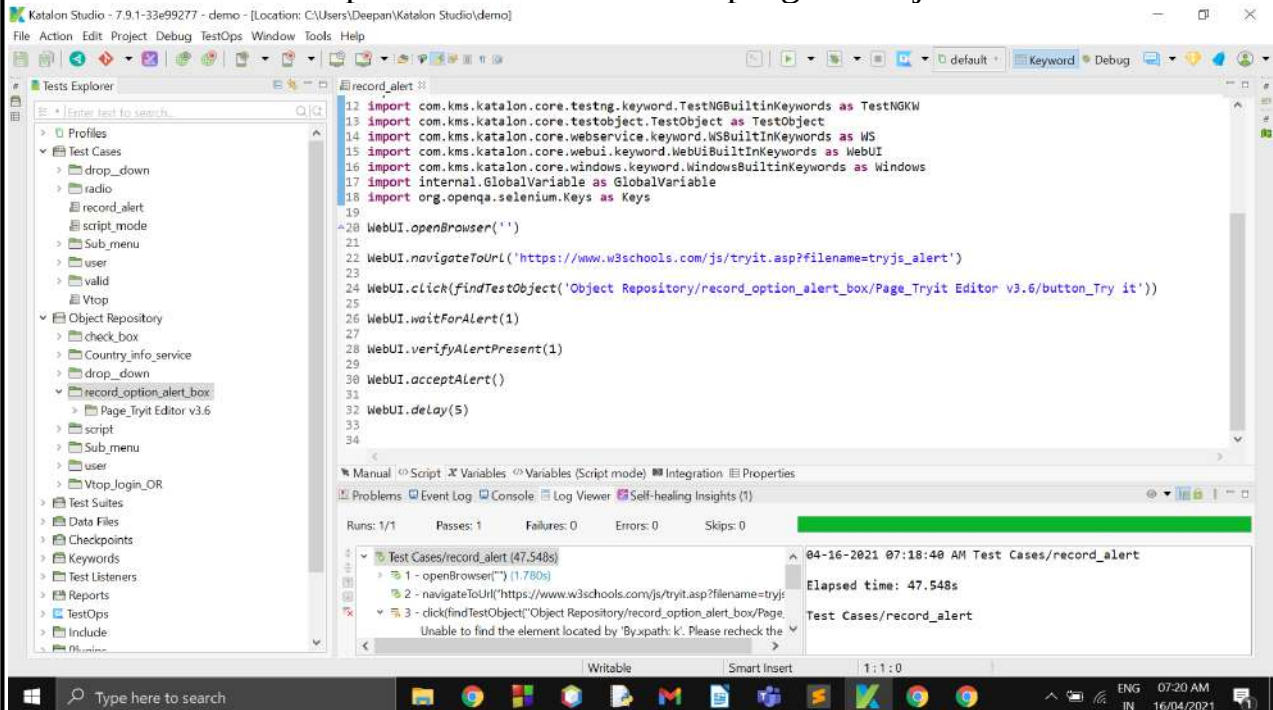
## 4. Working with alert box in katalon :



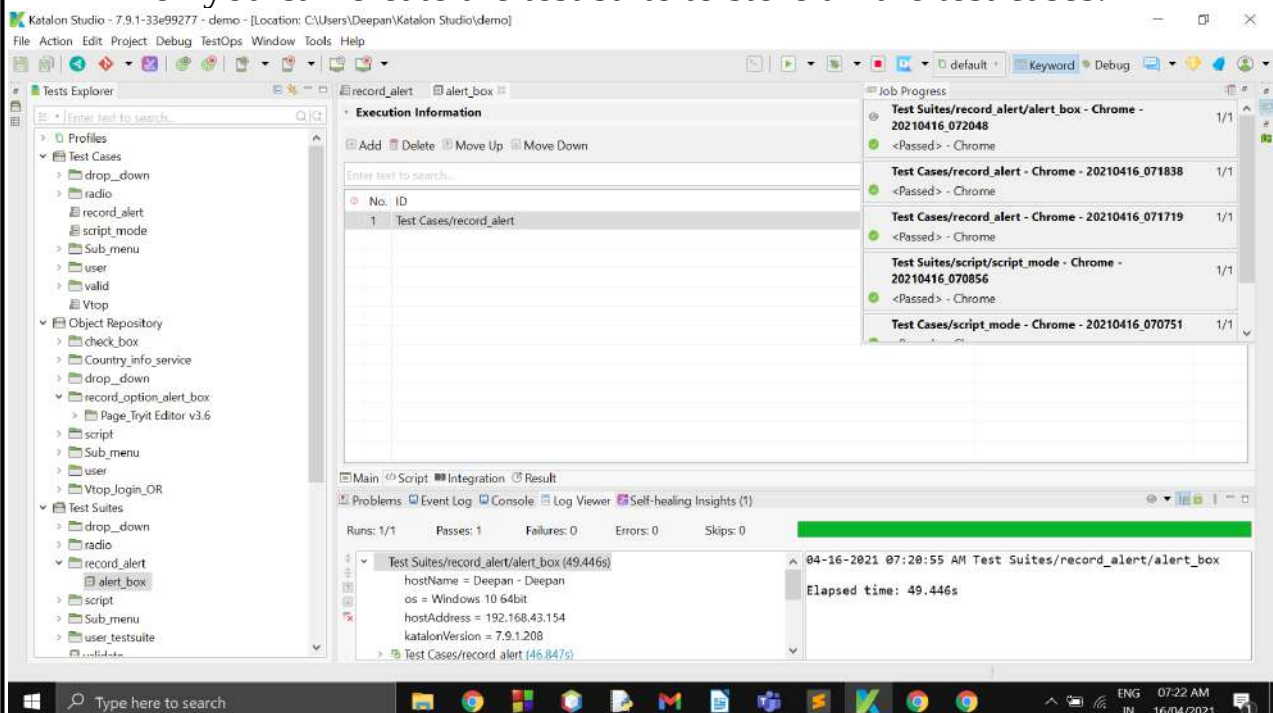
- **Step 1 :** There is a option called spy web click that and add the url link [https://www.w3schools.com/js/tryit.asp?filename=tryjs\\_alert](https://www.w3schools.com/js/tryit.asp?filename=tryjs_alert)
- **Step 2 :** Add all the requirements you needed and save the new repository.
- **Step 3 :** Perform the activity in the test cases as mentioned above
- **Step 4 :** click run button to execute successfully



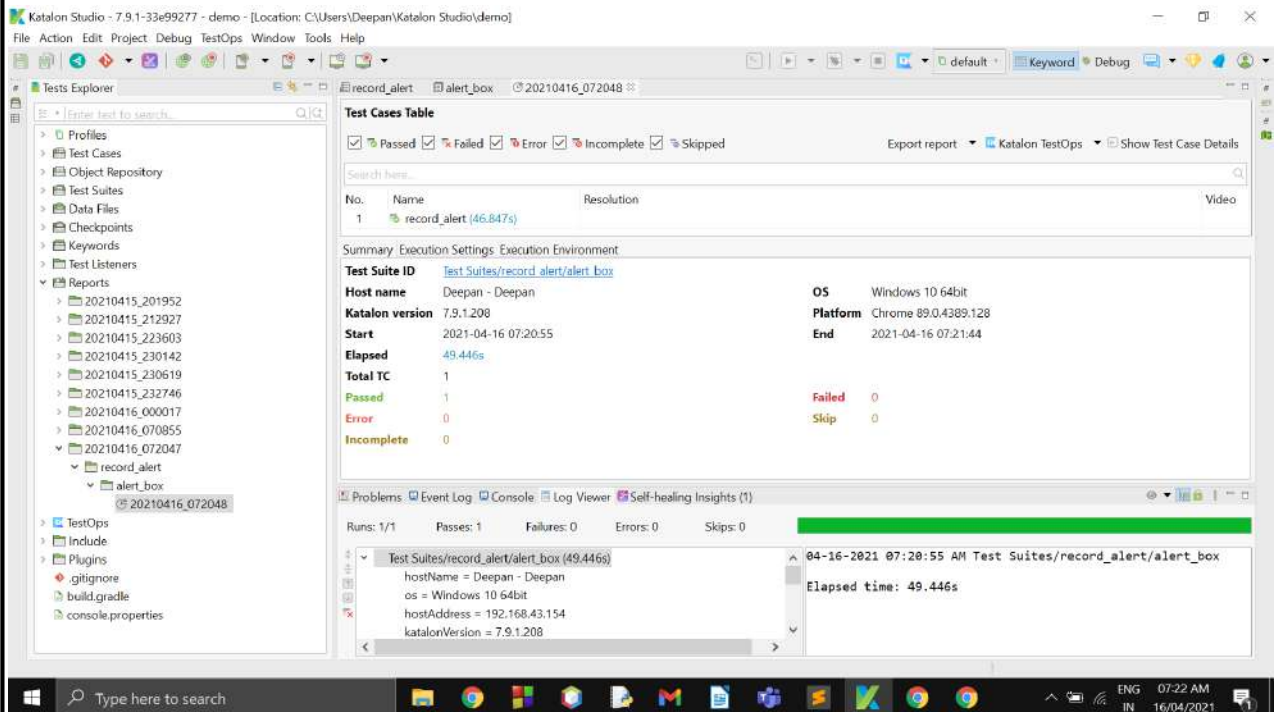
- Here is the script view of the alert box program in java



- Test cases are generated successfully as mentioned green symbol
- Then you can create the test suite to store all the test cases.



- Test suite is created.
- Report generated successfully.



- The final report of the alert box

## alert\_box Test Log

### Execution Environment

Host name: Deepan - Deepan  
OS: Windows 10 64bit  
Katalon version: 7.9.1.208  
Browser: Chrome 89.0.4389.128

### Test Execution Log

**TEST SUITE: alert\_box** Expand All

**Full Name:** alert\_box

**Start / End / Elapsed:** 2021-04-16 07:20:55.135 / 2021-04-16 07:21:44.581 / 00:00:49.446

**Status:** 1 test total, 1 passed, 0 failed, 0 error, 0 incomplete, 0 skipped

**TEST CASE: Test Cases/record\_alert** Expand All

**Full Name:** alert\_box/Test Cases/record\_alert

**Start / End / Elapsed:** 2021-04-16 07:20:55.872 / 2021-04-16 07:21:42.719 / 00:00:46.847

**Status:** PASSED

**TEST STEP:** openBrowser("")

**TEST STEP:** navigateToUrl("https://www.w3schools.com/js/tryit.asp?filename=tryjs\_alert")

**TEST STEP:** click(findTestObject("Object Repository/record\_option\_alert\_box/Page\_Tryit Editor v3.6/button\_Try it"))

**TEST STEP:** waitForAlert(1)

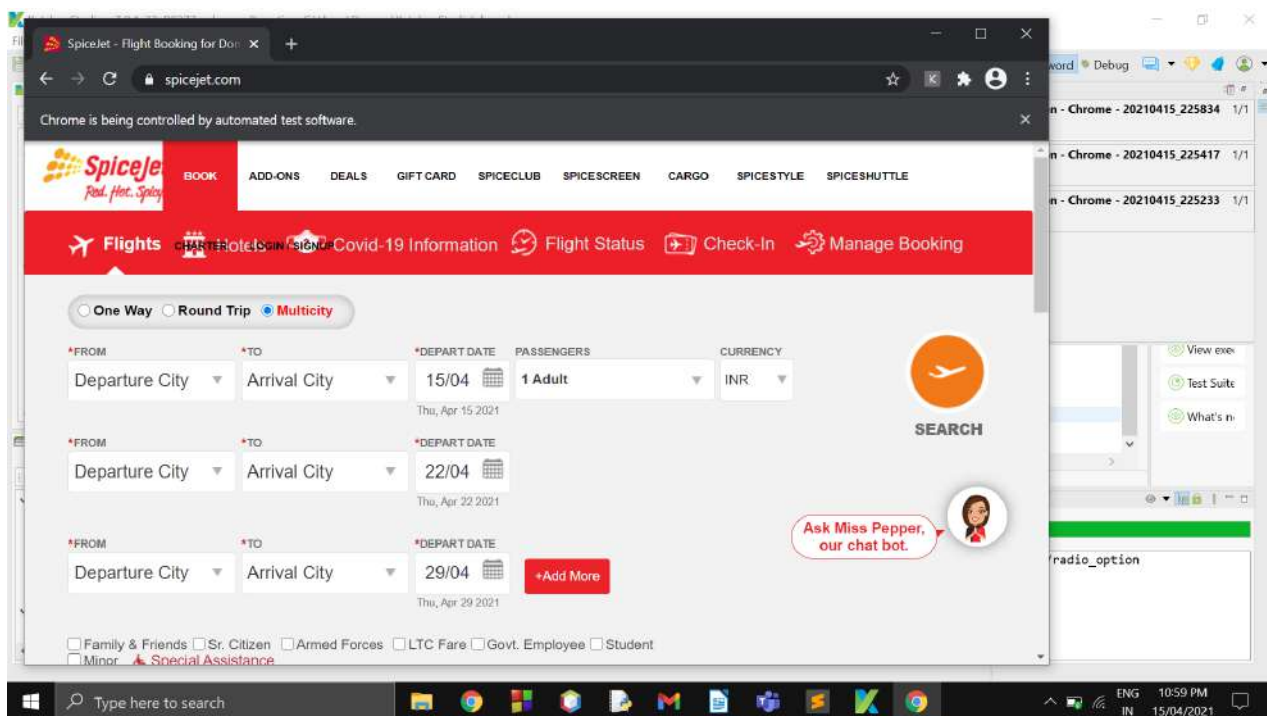
**TEST STEP:** verifyAlertPresent(1)

**TEST STEP:** acceptAlert()

**TEST STEP:** delay(5)

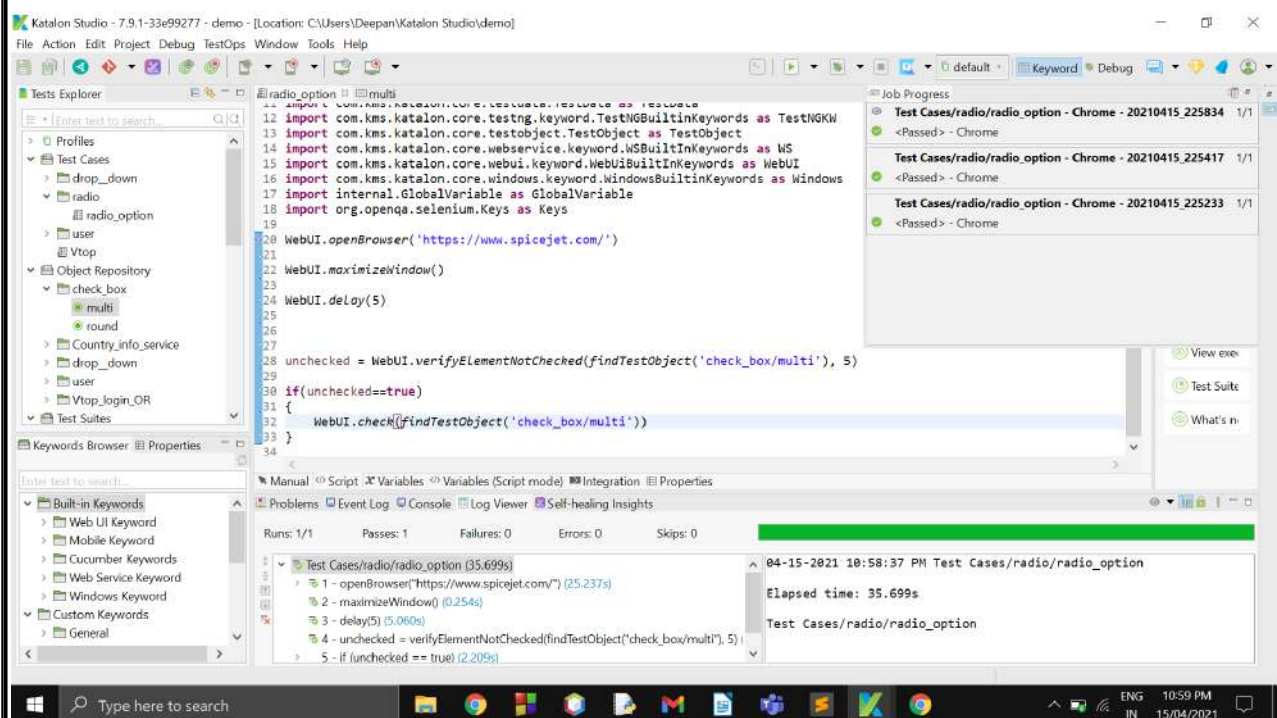


## 5. Working with check box in katalon :

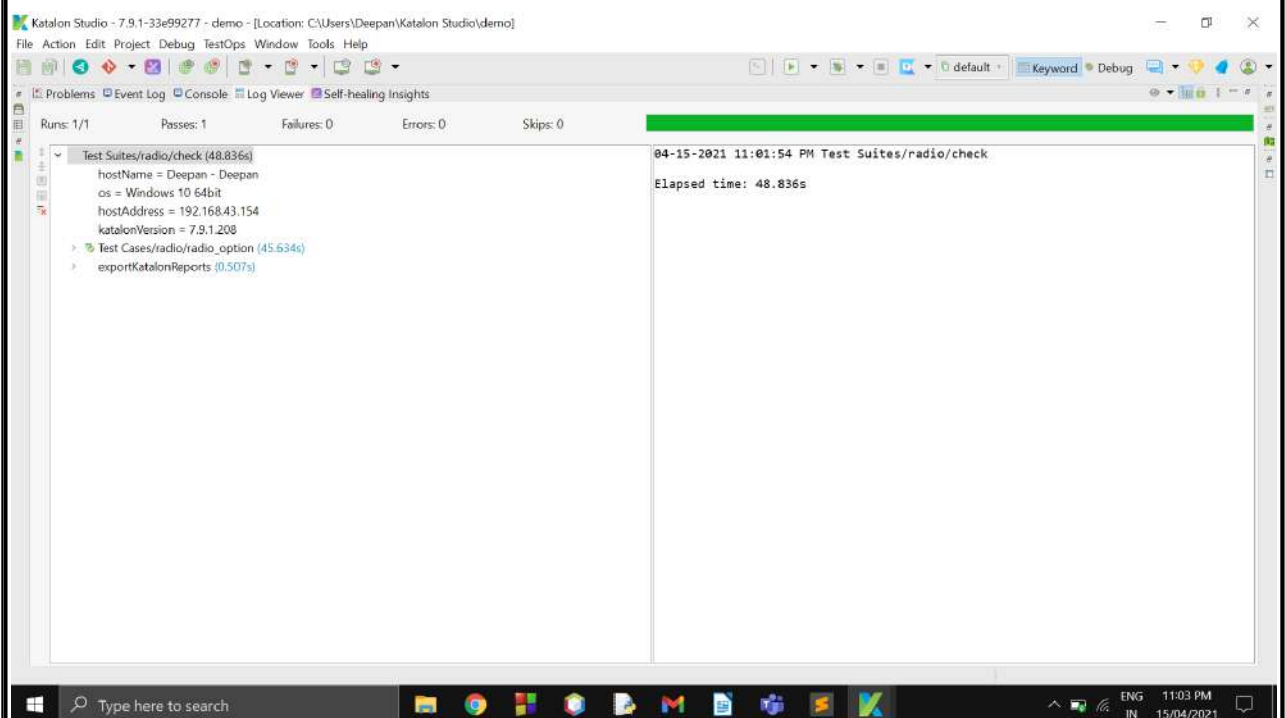
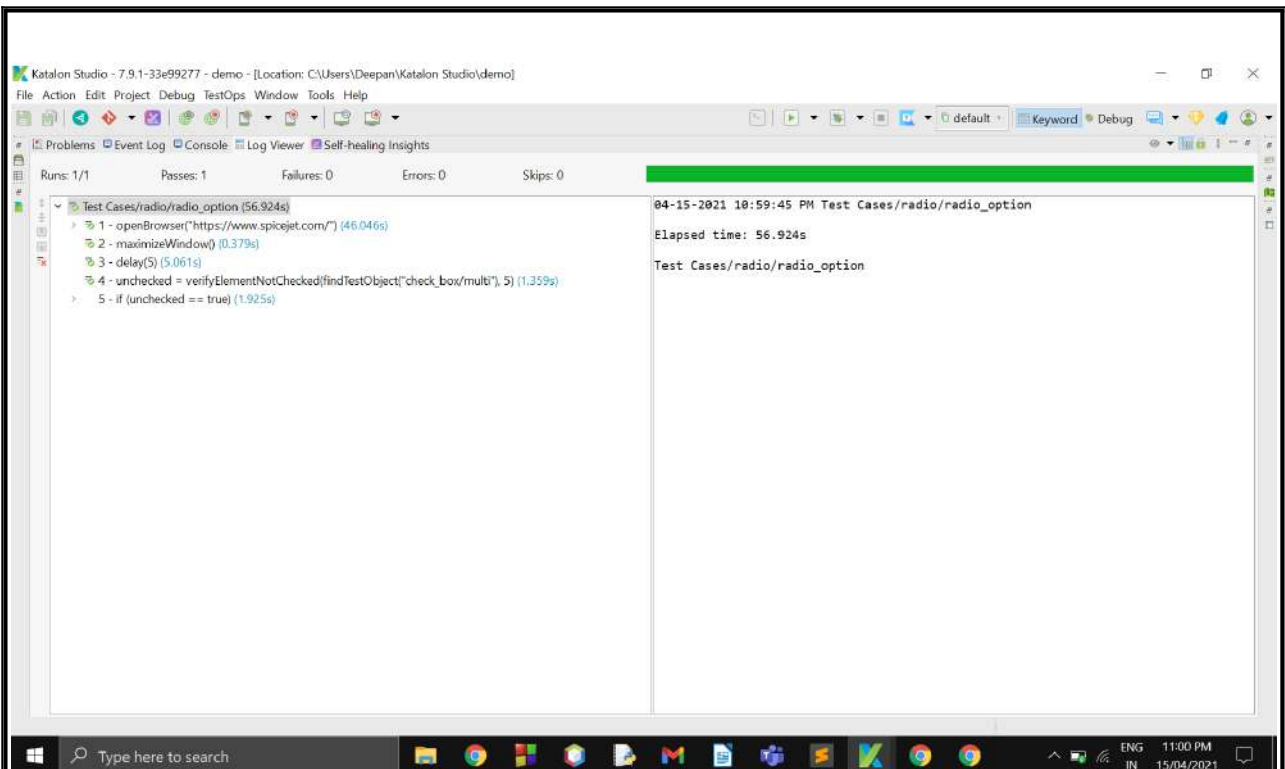


Step 1 : Working with check box. We should click on the spy web and do all the relevant options to do

Step 2 : Checking with the if statements as mentioned below as a source code.



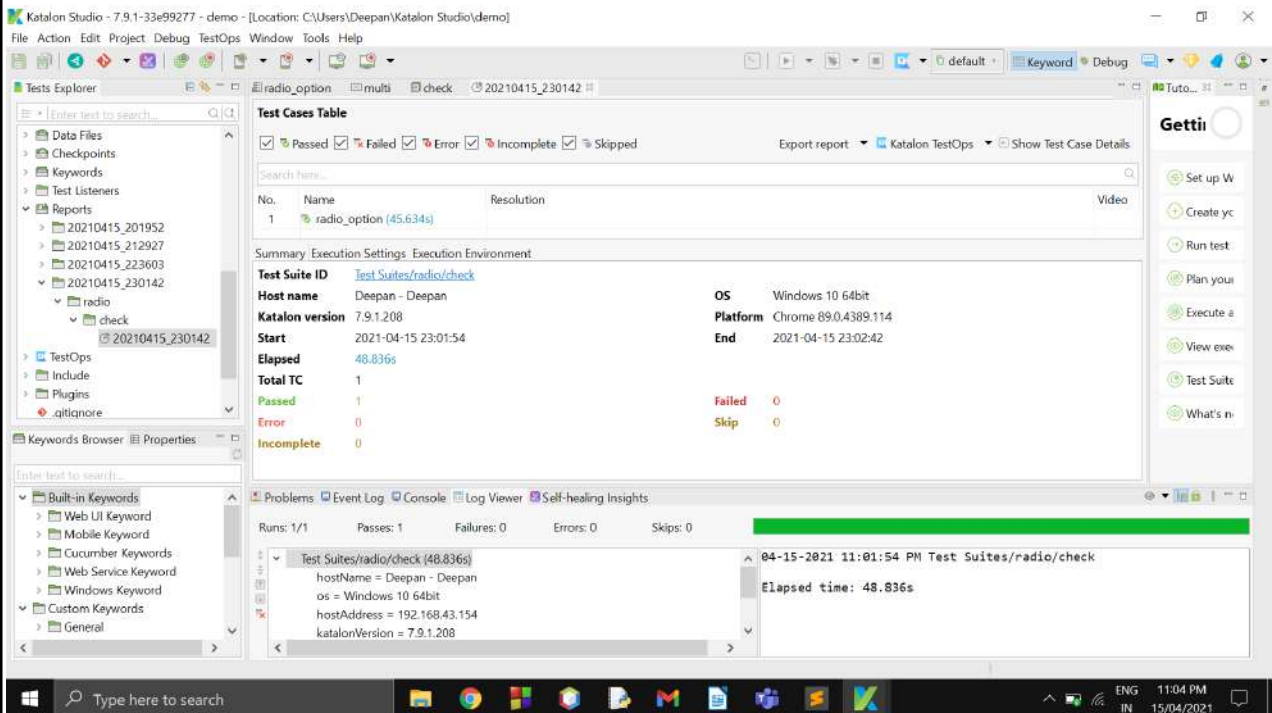
Step 3 : Click Run Button to execute the test cases.



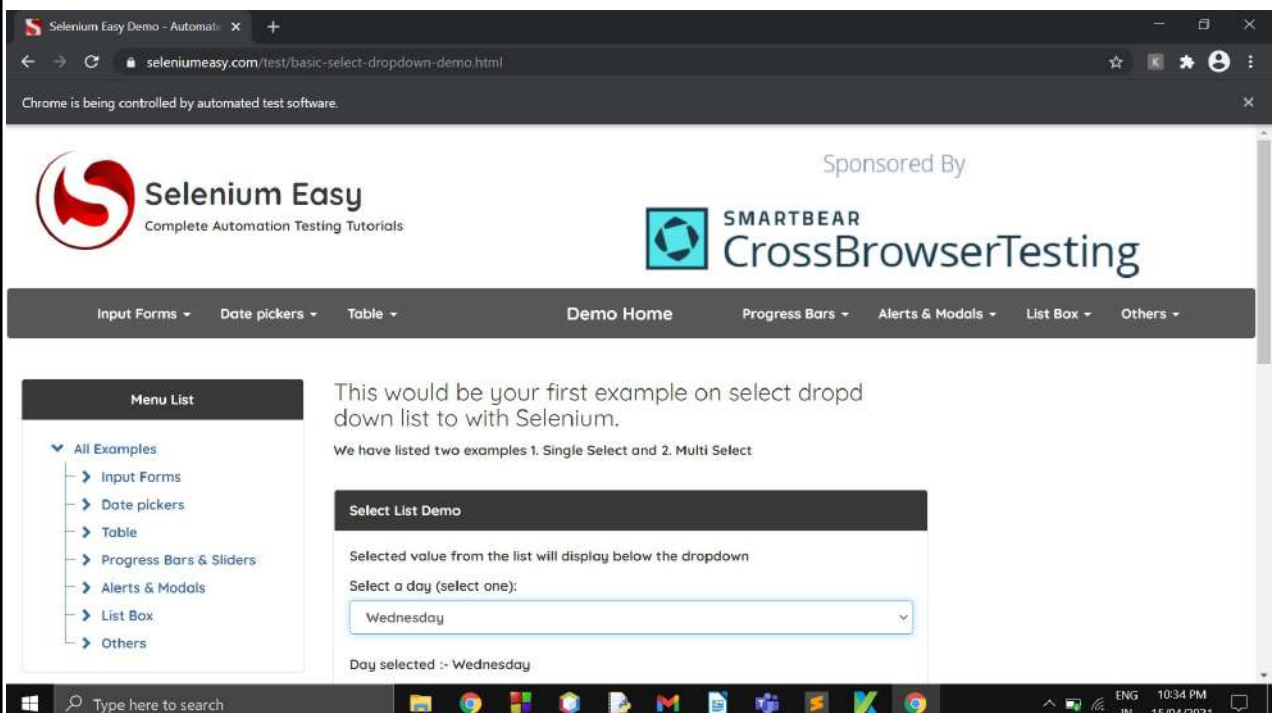
Step 4 : Test case generated successfully.

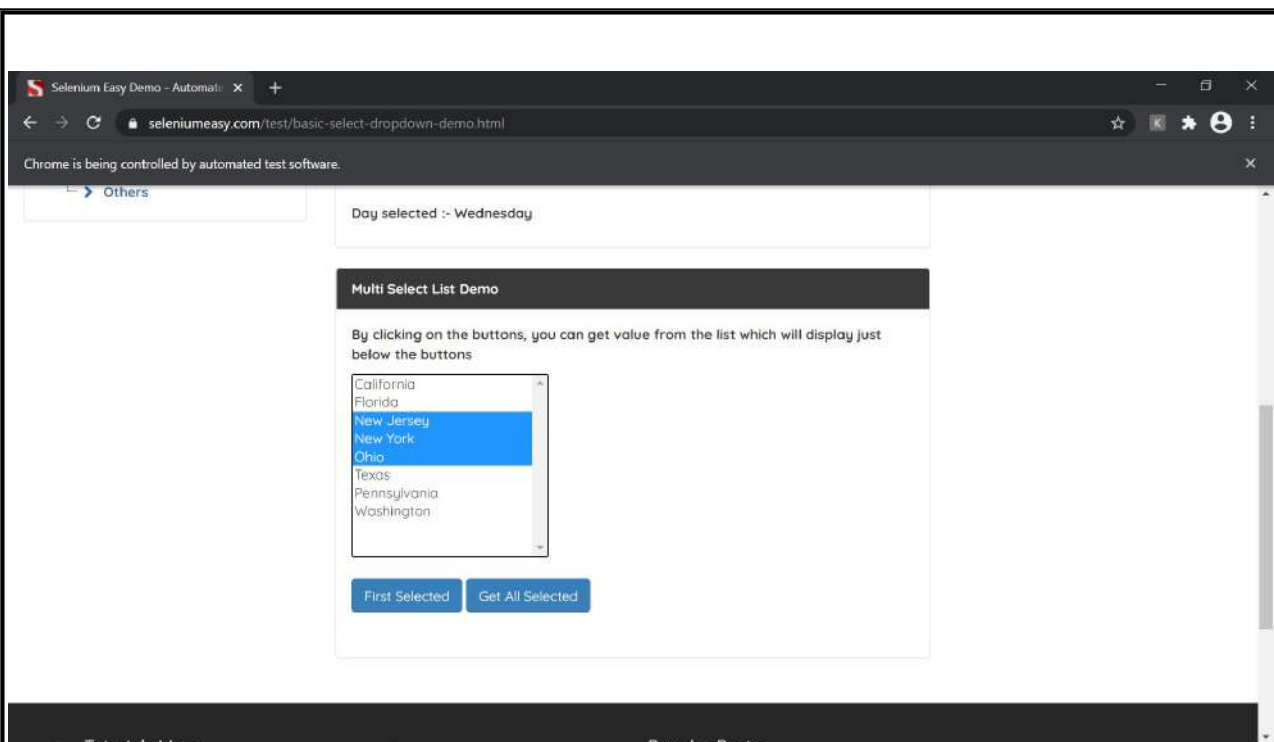
Step 5 : Create new test suite and add the test cases click the run button to generate the test report.

Step 6 : Test report generated successfully.



## 6. Working with drop down boxes in katalon :



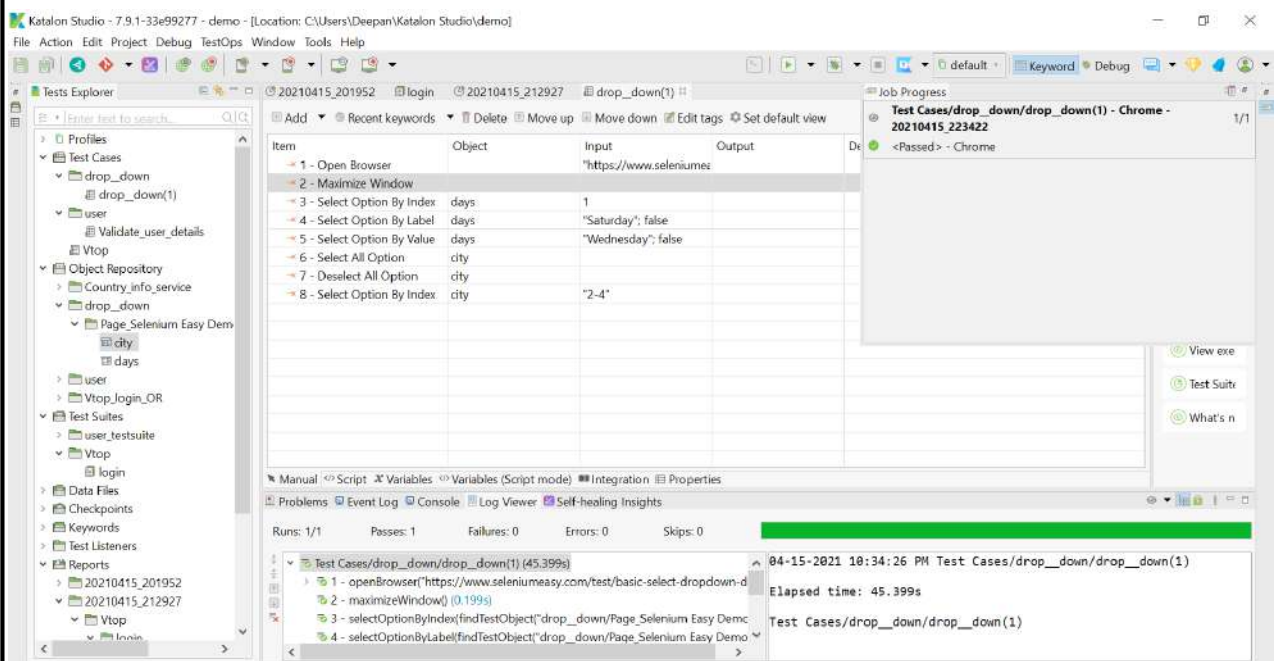


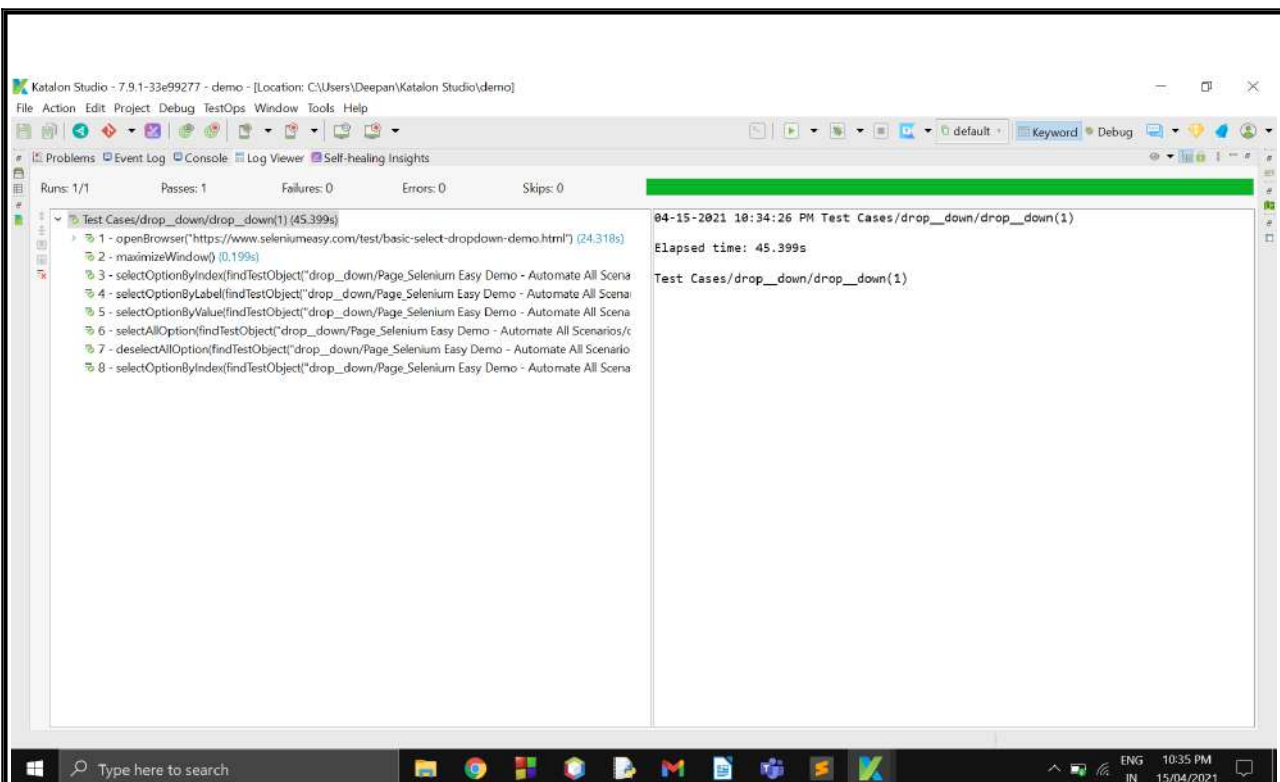
**Step 1 :** Click on the spy web and do the activity you needed by pressing (Alt + `) to save the details.

**Step 2 :** Add to new repository to store all the details of the drop-down.

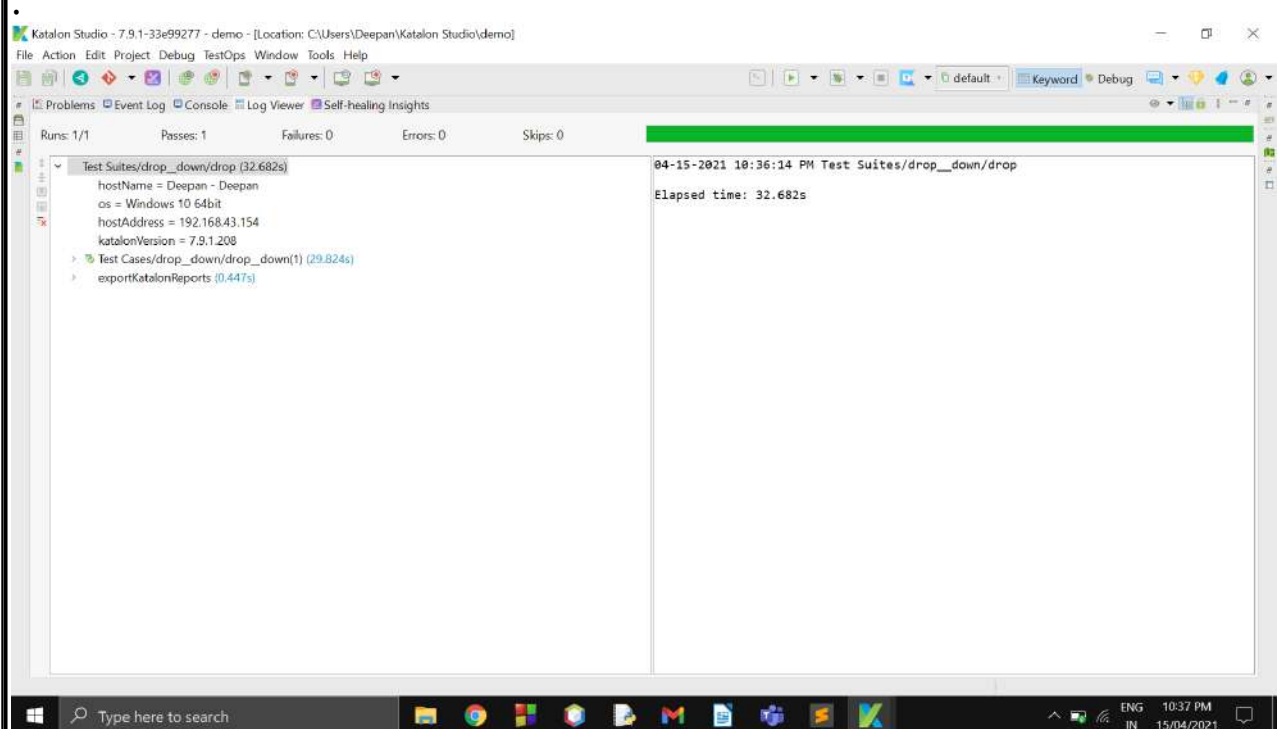
**Step 3 :** Create the new test case and add all the details you added in the repository.

**Step 4 :** Click on the run button to execute the test cases in your default browser.



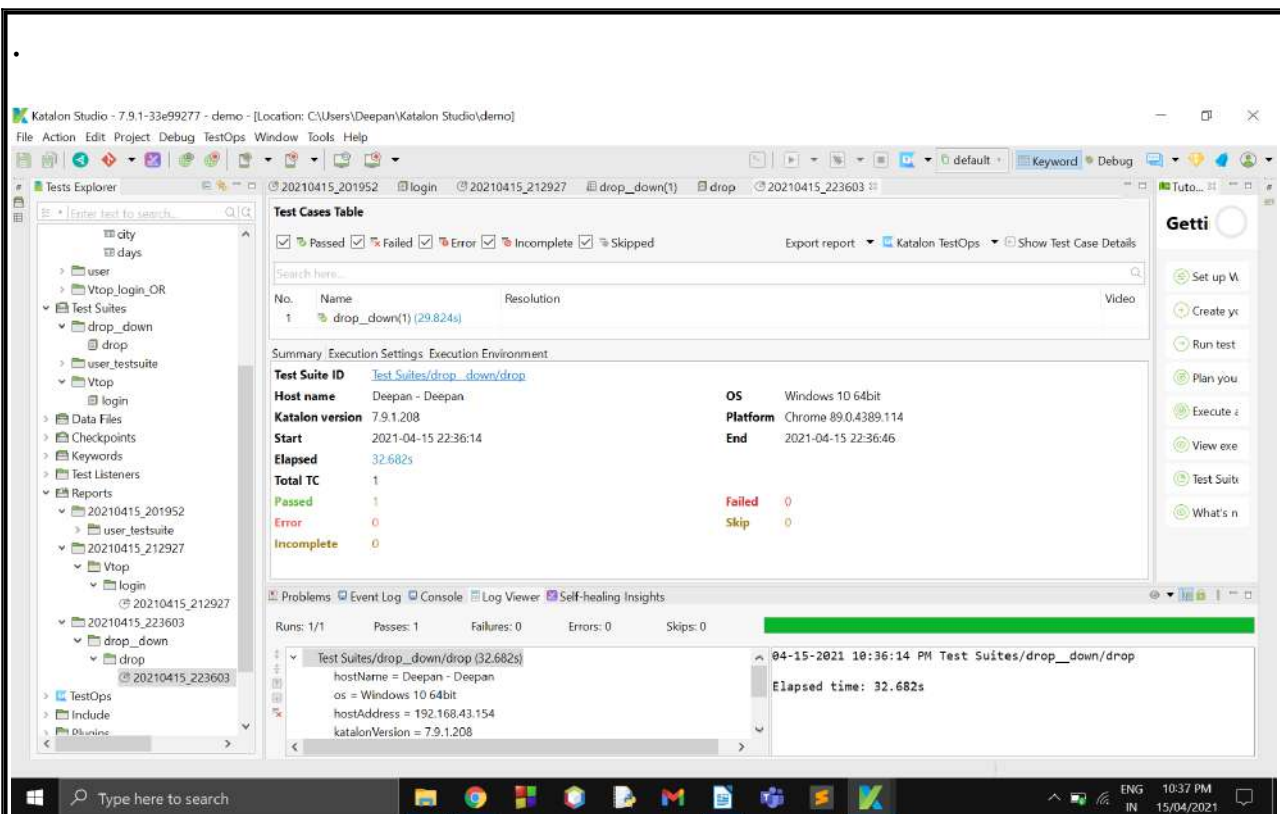


**Step 5 :** click on new test suite to add the test cases and then click play button to generate the test reports



- Test report generated successfully.





## Conclusion :

Katalon studio is a powerful automation testing tool, in this review I have demonstrated the API, Script Mode and some more testing operations and functionality of this tool. In the next review I will cover the rest of the functionality and some advanced or I will go deep into the API and desktop application testing features on Katalon Studio.

## References :

1. ["How to Integrate Katalon Studio With Kobiton".](#)
2. ["Katalon and Sauce Labs Collaborate to Deliver Better Automation and Continuous Testing Experience ".](#)
3. ["Katalon Releases Selenium Migration Feature and Demonstrates Maturity With Codeless Testing".](#)

## **Introduction:**

Katalon software is a basically simple to use tool from the test suite and should even be used by someone new developing automated test cases for his or her own web applications, desktop application and android application etc. It synchronizes both requirements specification and test specification together and automated testing execution of Test cases is possible in these software. And also the software supports to multiple projects, User can create test project and document test cases using this particular tool.

This platform offers support for test cases, test suites, test plans, test projects and user management, also various reports and statistics of the project. So Test Plans are the essential report unit for executing a group of tests on an application like Summary/Scope. The tester can manage your test cases using GUI only. One doesn't required any special setup to urge started with Katalon Studio. Katalon provides you with a GUI (Graphical User Interface) for easily recording your interactions with the online site.

Katalon studio software allows a user or the test suite developer to create the test cases and test suites and edit it later as per their requirements specification. The development environment also provides the potential of converting test cases to different programming languages, which makes it easier for the user and doesn't mandate the needs of knowing a selected programming language by the user.

One doesn't required any special setup to urge started with Katalon Studio. Katalon studio software allows a user or the test suite developer to create the test cases and test suites and edit it later as per their requirements specification. The development environment also provides the potential of converting test cases to different programming languages.

## **Why I am choosing Katalon studio over other open source frameworks ?**

- Because the Katalon Studio hides all technical complex details behind the screen and provides user friendly with the manual/script mode (user can drag and drop, select the keywords and test the objects to form test steps), but the software still keeps the necessary items for more technically tester or users who are able to score into coding with the scripting mode that all supports the main development faces like syntax highlighting, code debugging and supports java language.
- With the software Selenium, the testers can have to go through given guidelines for their Desktop, API and integrate them into with an environment and a preferred coding language. By Katalon Studio is built as a particular bundle which includes and excludes almost all necessary things like Java, grovy, Android SDK, Web drivers to drive all the browsers, and required dependencies. The users have to do is to download and install it on the desktop.
- While Selenium (or) Appium requires the tester or users to build the common and reusable actions on their own desktop, katalon Studio contains the pre-defined functions of the used keywords or actions, the tester or users will find the creation to start implementing all the test cases, if testers have more knowledge they still have a way to create there own custom keywords for their new or existing projects. Custom keywords are an extension of built-in keywords in this particular .

### **Uses :**

- Katalon Studio supports the built-in with the Continuous Delivery or the Continuous Integration of the system and DevOps integrations of a applications
- Katalon Studio support top-to-bottom solution for application automation, which allows the optimization for the type scripting, debugging, and maintaining tests of a system.



- Katalon Studio will support the productive IDE compiler with centralized application testing capabilities, and the data-driven testing while requiring with a quantity of maintenance for application testing projects.
- Katalon Studio offers mobile application testing capabilities with the mobile web, windows iOS and Android application apps.
- It supports powerful object spying utility and prebuilt keywords for a straight forward setup. Cross-functional (cross-environment) with the excellent feature of cloud platform support are available in Katalon for mobile application test cases.
- The latest feature addition to Katalon Studio testing capabilities — desktop app testing covers all testing needs from the user ends.
- Katalon Studio allows the tester to spy objects, record actions and locate windows elements effectively for your testing needs. With these fashionable set idea of windows built-in and custom keywords, the testers can simplify their own test steps significantly.

## **Platform :**

### 1. Windows :

Katalon Studio that fully supports automation test for desktop apps written within the following platforms: Universal Windows Platform (UWP), Windows Forms (WinForms), Windows Presentation Foundation (WPF), and Classic Windows (Win32).

### 2. Mac OS :

- OS: 9.x onwards
- Xcode :9.4.1 - latest

### 3. Linux :

## **Advantages :**

- Katalon studios caters to the necessity of non-programmers by providing record & playback feature and scripting in manual mode for test case and test suite creation. Together with that it's a comparatively simpler learning curve which helps manual tester to simply create automation tests.

- For tester who have good programming expertise, Katalon provides tester case creation in scripting mode also.
- The script recorded in one browser is made to run in any of the supported browsers, making cross browser testing fast and compactable.
- Its test result reports are graphically intative and might be exported to pdf and CSV formats.
- It software provides a creative inherent logging mechanism and screenshot on failure of feature.

### **Disadvantages :**

- As of now there's no support for distributed testing.
- If the script fails due to the connection on the application it can causes a lot of problems in the application.
- This tool Verify text and objects within Iframes can be a challenge to the tester
- This software does not capture objects sometimes while recording.
- As of now there is no support for the distributed testing.
- This software cannot automate desktop applications unlike some licensed tools like UFT and TestComplete.

### **Features :**

#### **1. Simple Deployment :**

A single, well-organized deployment package that contains everything a tester needs for deploying a strong test automation tool.

#### **2. Quick & Easy Set-up :**

Beyond the installation, Katalon Studio makes it easy to line up the environment. Using Katalon's pre-built templates which is useful to the tester with the test scripts, it's very easy for testers to run their first test script with this tool.

#### **3. Faster & Weightier Outcomes :**

With the clear steps on field-specific tester training, help testers to create there own test cases and run the automation test rough writings expeditiously. Every step starting from the undertaking

organization, test engendering, execution, report generation and support, are often executed using Katalon.

#### 4. Flexible Modes :

New testers can use recordings and keywords to make or create automation tests, while expert testers can employ a full IDE to make or create increased rough writings.

#### 5. Easy Usage :

Manual testers with the some quantity programming skills that helps the tester with full benefits with very easy steps.

### **Software requirements :**

Operating System (OS) : Windows 7, Windows 8, Windows 10, macOS 10.11+, Linux (Ubuntu based)

### **Hardware requirements :**

CPU capacity : Minimum: 2 GHz or faster 32-bit (x86) or 64-bit (x64) processor

Memory capacity : Minimum : 2 GB RAM (32-bit) or 4 GB RAM (64-bit)

Recommended : 4 GB RAM or 8 GB RAM (32bit - 64-bit).

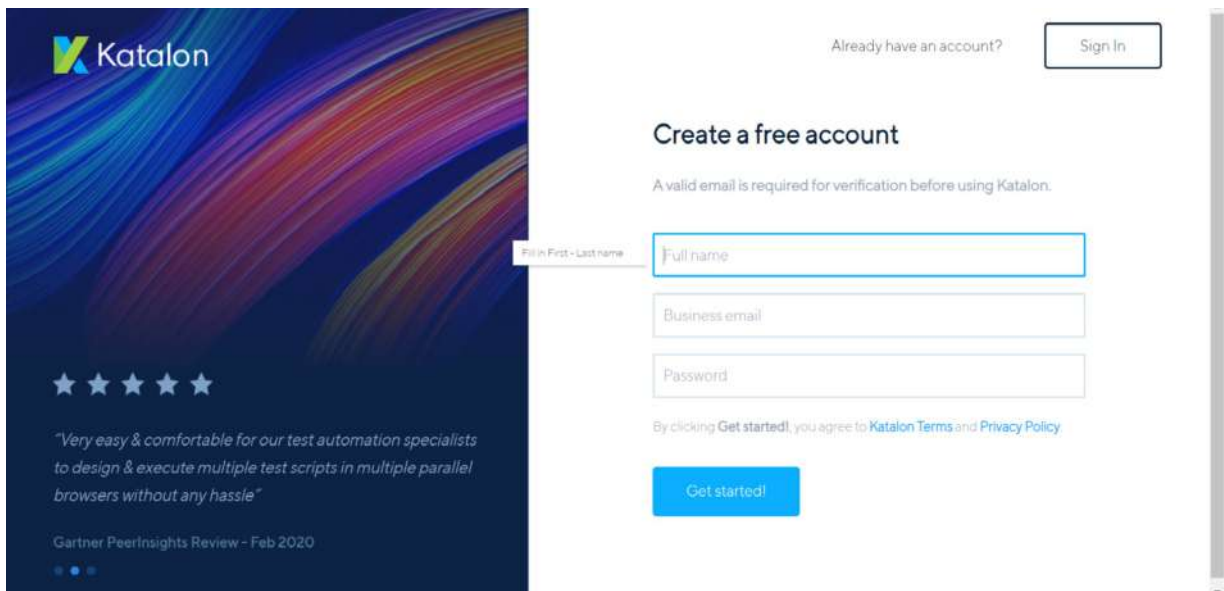
Hard Drive capacity : At least 1 GB available hard disk space.

### **How to install the software :**

Environment Requirements :

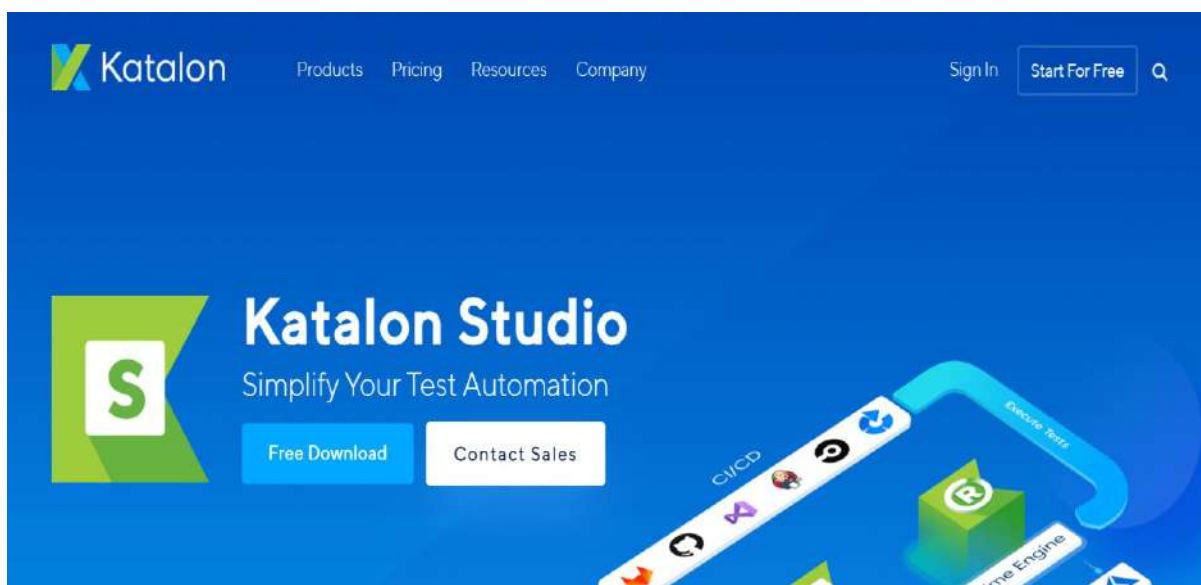
Verify whether your computer meets the System requirements to work with Katalon Studio.

- New users will be asked to SignUp.
- Enter the required fields and click on 'Download' button (save the login information as the same to be used in activate the tool on start of the software).



The screenshot shows the Katalon Studio registration page. On the left, there is a dark blue banner with the Katalon logo, five stars, and a quote: "Very easy & comfortable for our test automation specialists to design & execute multiple test scripts in multiple parallel browsers without any hassle". Below the quote, it says "Gartner PeerInsights Review - Feb 2020". On the right, the "Create a free account" section is visible. It includes a link for "Already have an account? Sign In". Below this, a note states "A valid email is required for verification before using Katalon." The form has three input fields: "Full name" (with a tooltip "Fill in First - Last name"), "Business email", and "Password". Below the fields, a line of text says "By clicking Get started!, you agree to Katalon Terms and Privacy Policy". At the bottom of the form is a blue "Get started!" button.

- Download the latest version of the katalon studio which will be a bug free and new features when compared to the older version. But the software Katalon Studio will automatically detects the suitable version for your system specification, but there is a option that you can also select a preferred one on the page for this software.



## Start Katalon Studio :

### Windows :

- Double-click on the **katalon.exe** file.
- Now just do to extract the package and clicking on Katalon.exe(in case of windows) will launch the tool.
- To activate the Software, it pop up and will ask for the email Id and password. Enter the information which is used in creating the account on Katalon studio.

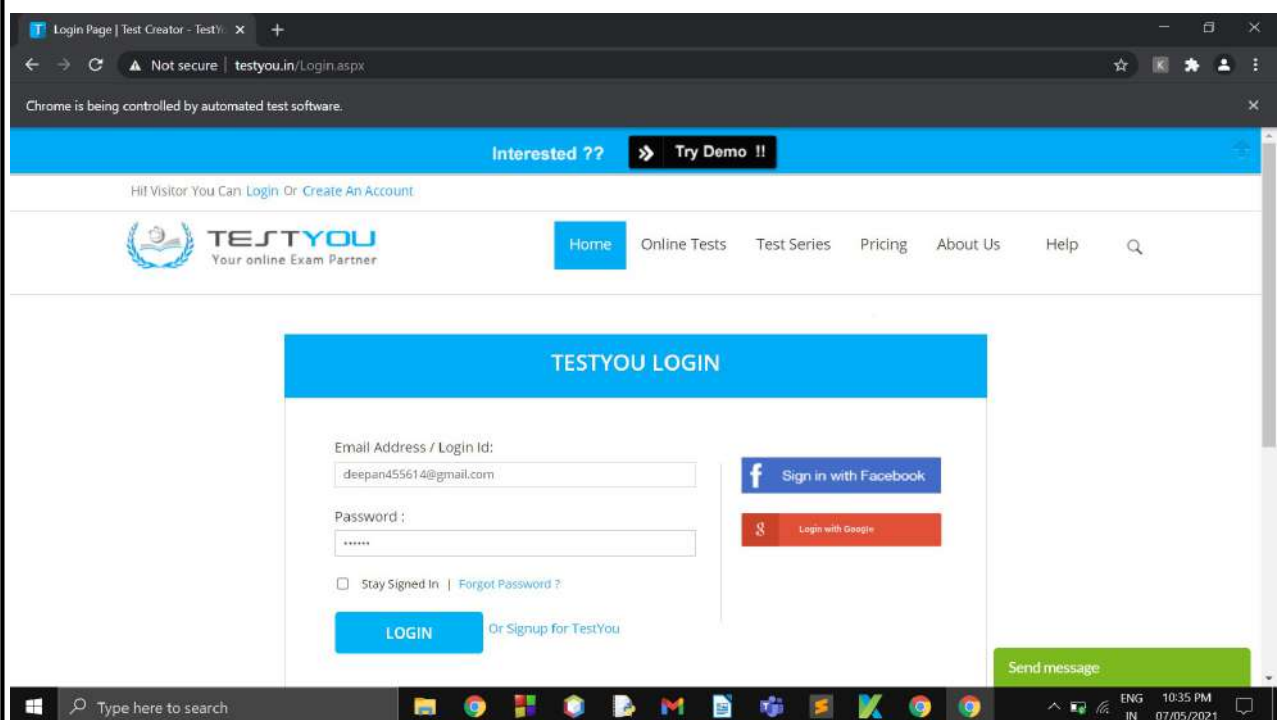
### macOS

- Just do the Double-click on the **Katalon Studio** for the(macOS) file in the directory where it is unpacked in your system.
- The tester can start the applications directly like in macOS.
- Once started, then the application will display the splash screen which is similar to the below screenshot :



## Verification and Validation :

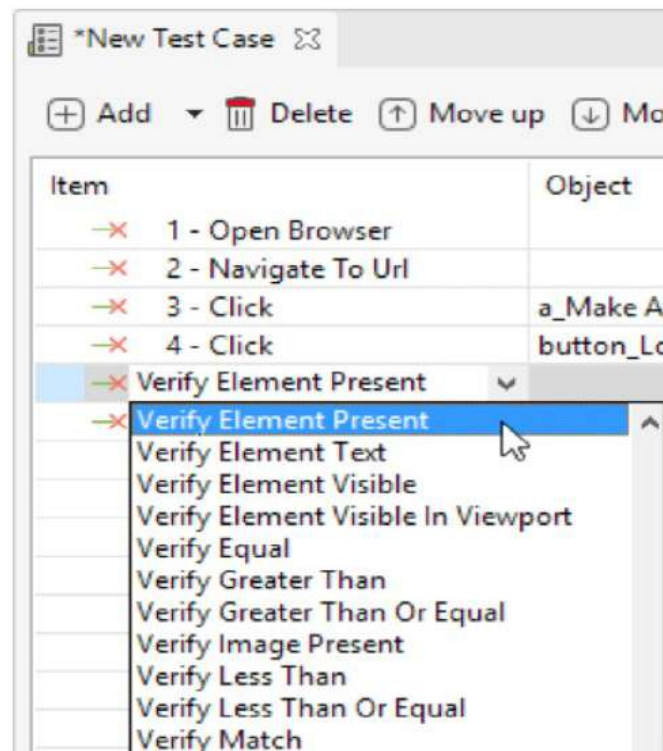
Verification in Software Testing : The Verification is the process of evaluating work-products of a development phase to determine whether they meet the specified requirements like checking documents, design, code, and in order to check if the software with there requirements or not. The main target of the verification process which is to ensure the quality of software application, as well as the design and the architecture etc. The verification process also involved in the activities inseption. In test case: Use Send Request and Verify keyword Katalon Studio supports the ability to write verification scripts directly in Web Service object's details. This validation support the greatly reduce with the time of going back in the application and forth between the test case and to request the object to add test cases. Verify the response can be done instaneously.



Validation process in Software Testing : It is the dynamic feature of the testing and validating if the application product actually meets the secure needs for the customer or not. The process helps to ensure that the software fulfils the desired use in an appropriate environment. The validation process involves in the activities like the integration testing, system testing and acceptance testing in the katalon studio. The Verification process finds the bugs in the application early in the

development process cycle whereas the Validation finds the bugs in the application that verification can not catch.

Katalon Studio supports two methods to validate. If the tester is using built-in keywords to verify the status of the certain test cases. The another way is using the checkpoints to verify the specific data which is set against a previously captured the data set of the application.



The Below example will give a demonstrate that how to add the Verify Checkpoint keyword in both Manual and Script mode in katalon studio. When the tester want to validate the current state of data sets, which verify the checkpoint keyword will come to compare it with a original data source taken at a certain state as given below.

Item	Object	Input	Output	Description
1 - Verify Checkpoint		chk_DataSnapshot; false		



Here I taken a simple login page to check the process of verification and validation .

The screenshot shows a web browser window displaying the TESTYOU website. The page title is "CREATE A FREE ACCOUNT". Below the title, it says "You Can Create Your Account By Filling Out The Form!". The form contains five input fields: "Name :", "Email :", "Login Id :", "Password :", and "Re-Enter Password :". There is a "Send message" button at the bottom right of the form. The browser's address bar shows "testyou.in/SignUp.aspx". The Windows taskbar at the bottom shows the search bar and various application icons.

For the verification part, we check whether the requirements are met.  
The main components of a login page are:

1. 'Name' Textbox
2. 'Email' Textbox
3. 'Login ID' Textbox
4. 'Password' Textbox
5. 'Re-Enter Password' Textbox
5. 'Captcha' Verification
6. 'Sign up/Create an account'

The above elements are present in the above login form. So, we can pass the verification part and move on to the validation part to login into the form to get in.

## BLACK BOX TESTING :

The Decision table testing:

The test cases performed are:

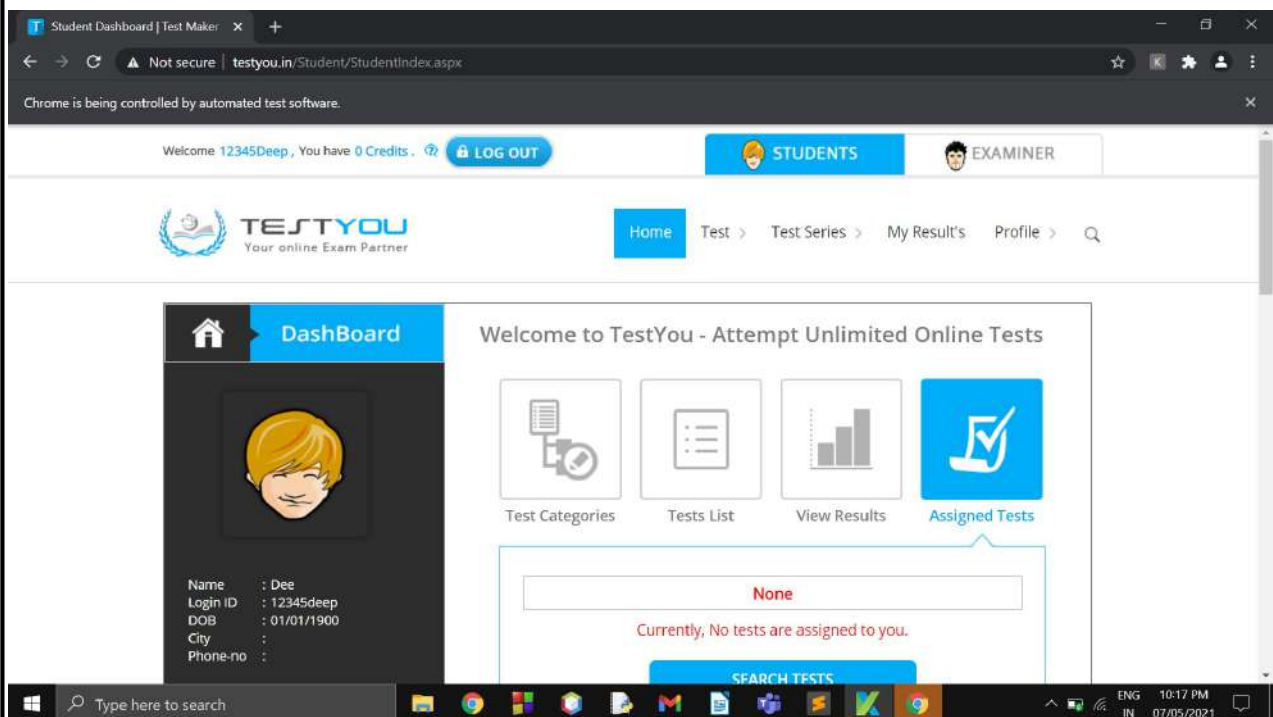
No.Test cases	Login	Duration	Expected	Executed	Status
Test Cases/Login_user	Test case 1	29.094s	Deepan	Deepan	PASSED
Test Cases/Login_user1	Test case 2	26.601s	Deepan	Deepan	PASSED
Test Cases/Login_user2	Test cse 3	51.571s	Deepan	deep	FAILED

The valid login credentials for the sample login is :

Email: deepan@gmail.com

Password : Deepan

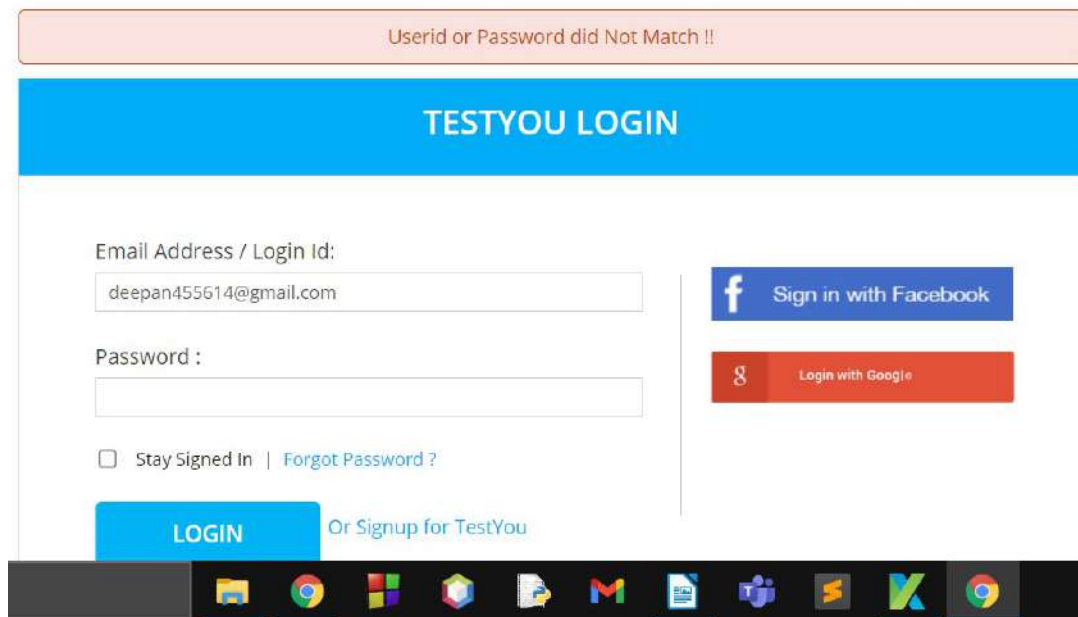
Password is expected and performed in the test cases



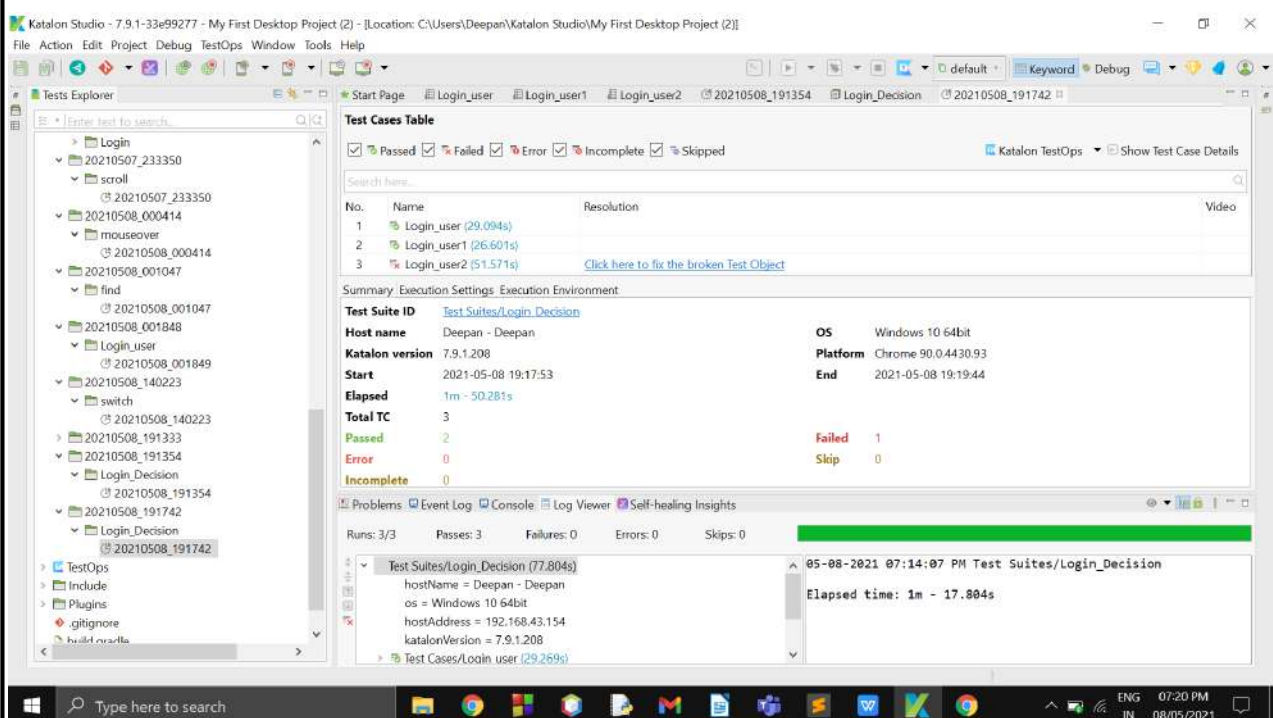
We can see this test passed and it redirected to the homepage.

Now let's try our third attempt with the invalid credentials:

We can see it throws error as we have given an invalid credentials.



The test suite report as follow :



So, after 4 consecutive attempts I have concluded the result of our test cases:

Test case 1 : PASSED

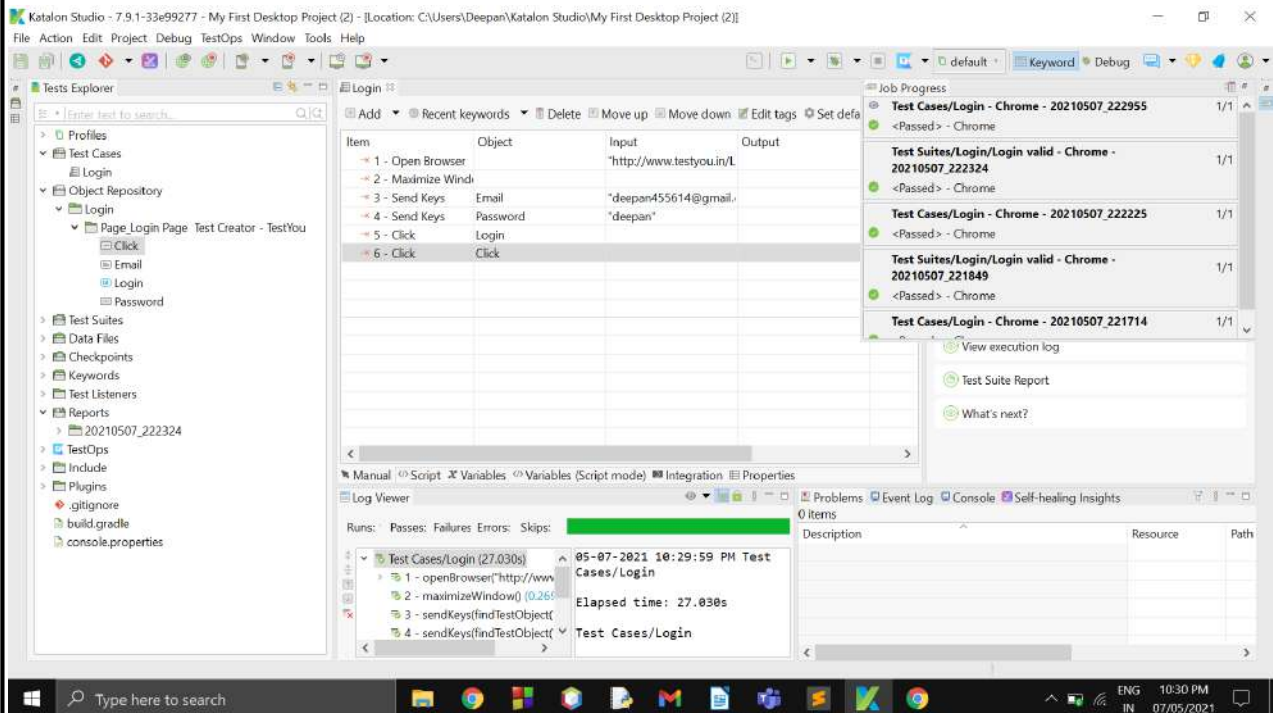
Test case 2 : PASSED

Test case 3 : FAILED

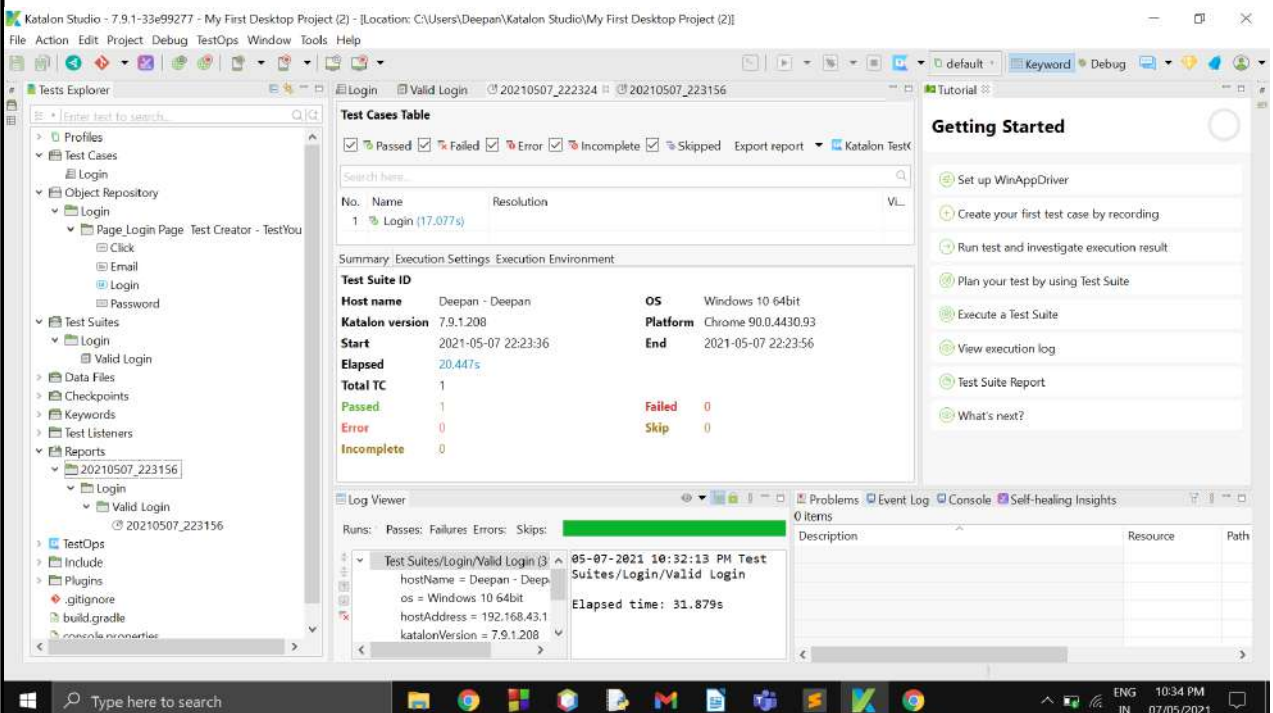
# WHITE BOX TESTING :

To perform the white box testing for the same login page using Katalon studios : Now let's first test the login with valid credentials.

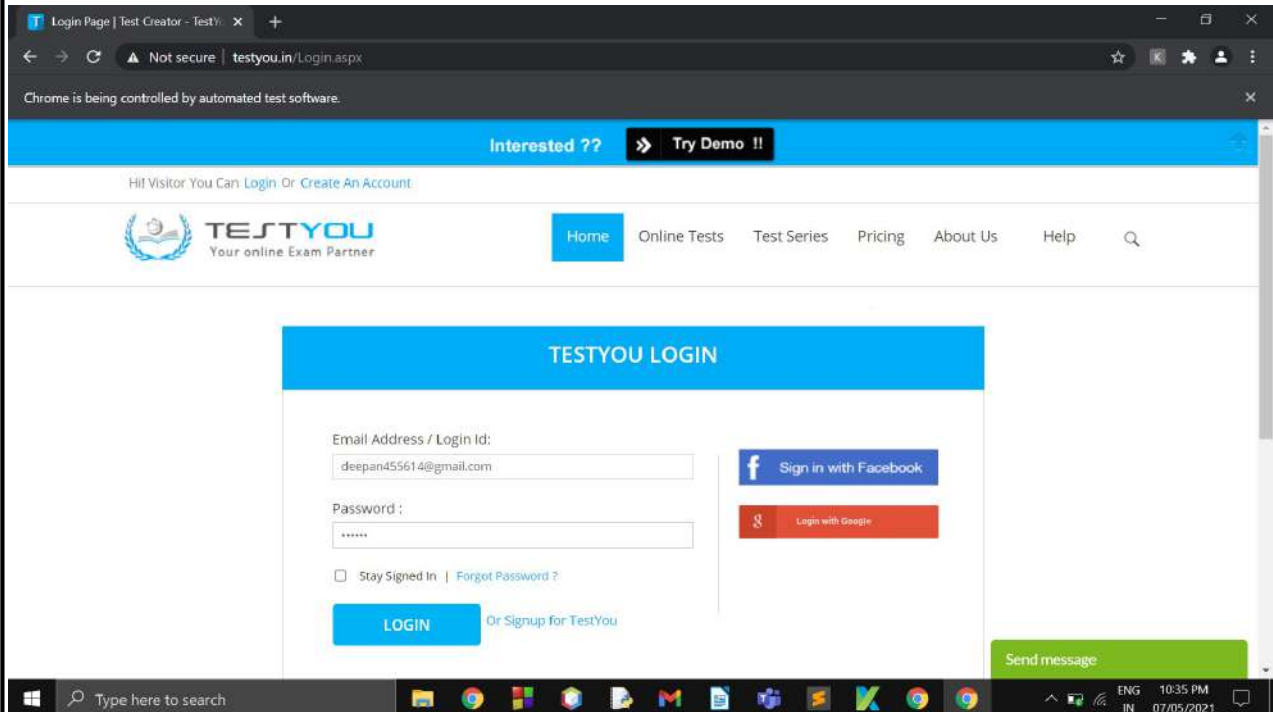
The code for the test automation by using the spy web option for the login form is as follow:



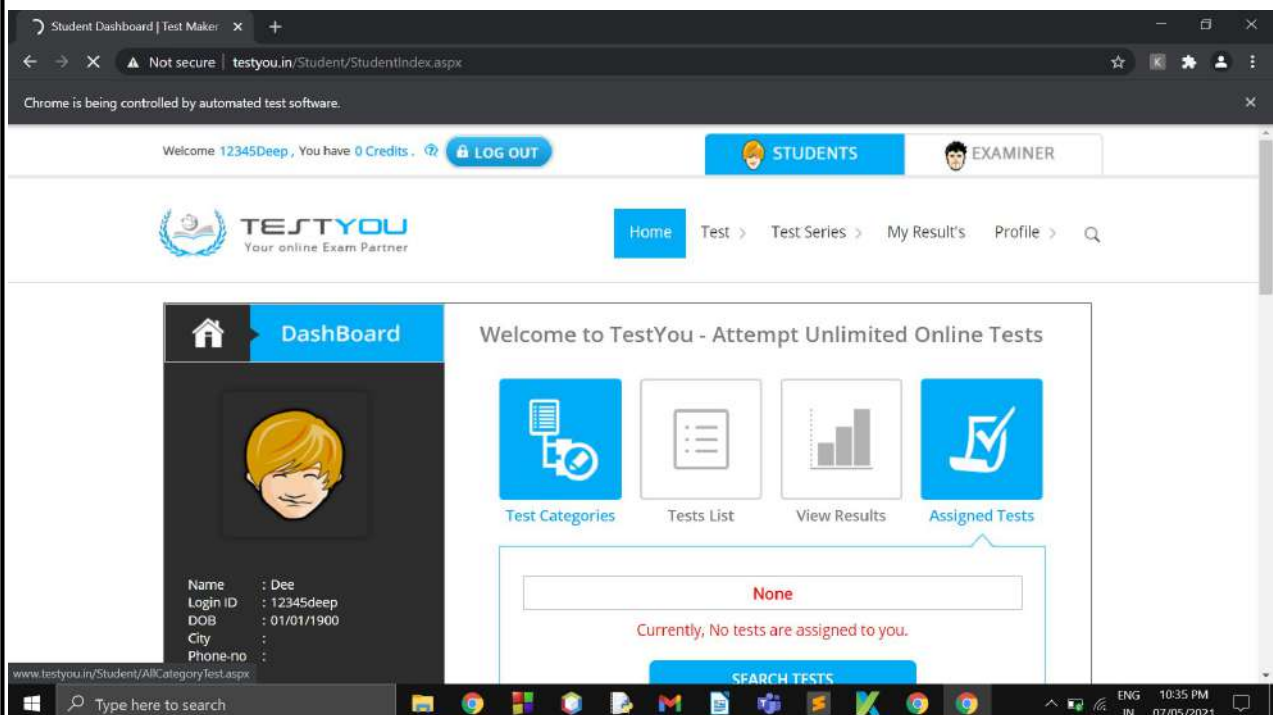
Here is the test suite report that says about the execution of the test case to check executed or not :



Here is the demo of the application for the simple login form : Which enters the Email Address and Password to validate the user login and clicks on the login button :

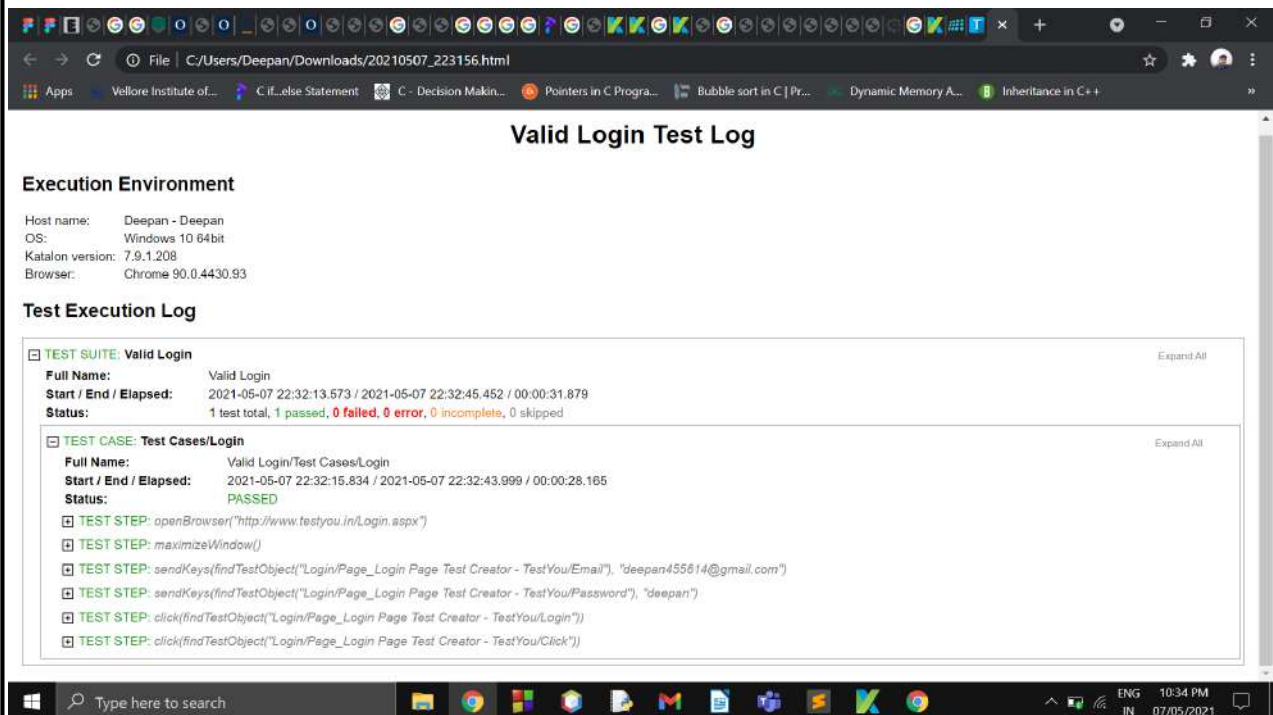


When user logs in and click's on the test categories to validate once again it's working properly or not :





The Test Report shows the following information about the user login :



The screenshot shows a web browser window displaying a test report titled "Valid Login Test Log". The report is organized into two main sections: "Execution Environment" and "Test Execution Log".

**Execution Environment**

- Host name: Deepan - Deepan
- OS: Windows 10 64bit
- Katalon version: 7.9.1.208
- Browser: Chrome 90.0.4430.93

**Test Execution Log**

**TEST SUITE: Valid Login**

- Full Name: Valid Login
- Start / End / Elapsed: 2021-05-07 22:32:13.573 / 2021-05-07 22:32:45.452 / 00:00:31.879
- Status: 1 test total, 1 passed, 0 failed, 0 error, 0 incomplete, 0 skipped

**TEST CASE: Test Cases/Login**

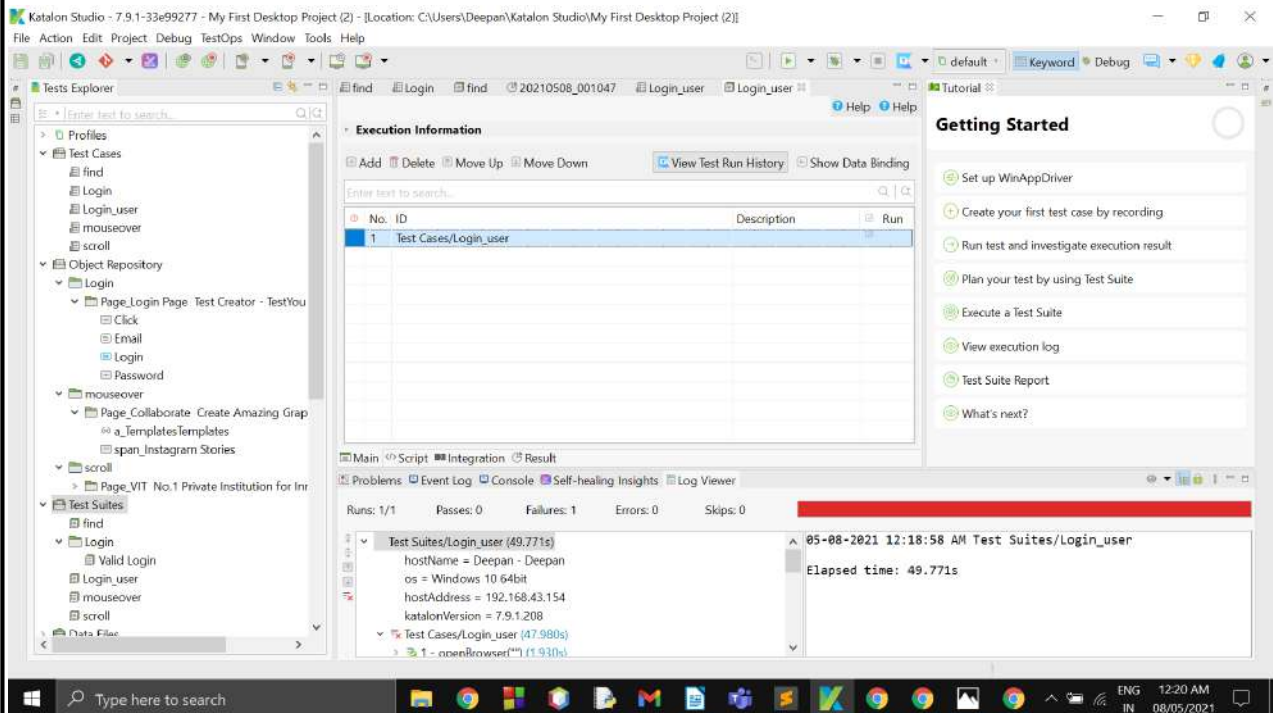
- Full Name: Valid Login/Test Cases/Login
- Start / End / Elapsed: 2021-05-07 22:32:15.834 / 2021-05-07 22:32:43.999 / 00:00:28.165
- Status: PASSED

**TEST STEP:**

- openBrowser("http://www.testyou.in/Login.aspx")
- maximizeWindow()
- sendKeys(findTestObject("Login/Page\_Login Page Test Creator - TestYou/Email"), "deepan455614@gmail.com")
- sendKeys(findTestObject("Login/Page\_Login Page Test Creator - TestYou/Password"), "deepan")
- click(findTestObject("Login/Page\_Login Page Test Creator - TestYou/Login"))
- click(findTestObject("Login/Page\_Login Page Test Creator - TestYou/Click"))

Now let's check the same functions with the invalid login credentials. Then the following process will occur :

Test cases failed :



The screenshot shows the Katalon Studio interface. The left sidebar displays the "Tests Explorer" with a tree view of test cases. The main window shows the "Execution Information" tab, which displays a table of test results. The table has columns for "No.", "ID", "Description", and "Run". The first row shows a failed test case: "1 Test Cases/Login\_user".

**Execution Information**

No.	ID	Description	Run
1	Test Cases/Login_user		

**Getting Started**

- Set up WinAppDriver
- Create your first test case by recording
- Run test and investigate execution result
- Plan your test by using Test Suite
- Execute a Test Suite
- View execution log
- Test Suite Report
- What's next?

**Main** | **Script** | **Integration** | **Result**

**Problems** | **Event Log** | **Console** | **Self-healing Insights** | **Log Viewer**

Runs: 1/1 Passes: 0 Failures: 1 Errors: 0 Skips: 0

**Test Suites/Login\_user (49.771s)**

- hostName = Deepan - Deepan
- os = Windows 10 64bit
- hostAddress = 192.168.43.154
- katalonVersion = 7.9.1.208

**Test Cases/Login\_user (47.980s)**

- 1 - openBrowser("http://www.testyou.in/Login.aspx")

**05-08-2021 12:18:58 AM Test Suites/Login\_user**

**Elapsed time: 49.771s**

Here is the Test suite report that say's about the invalid login and shows that failed Test case :

The screenshot displays the Katalon Studio interface with a test suite report for 'Login\_user'. The report shows a failed test case with the following details:

No.	Name	Resolution
1	Login_user (47.980s)	<a href="#">Click here to fix the broken Test Object</a>

Summary: Execution Settings Execution Environment

Test Suite ID	Test Suites/Login_user
Host name	Deepan - Deepan
Katalon version	7.9.1.208
Start	2021-05-08 00:18:58
End	2021-05-08 00:19:48
Elapsed	49.771s
Total TC	1
Passed	0
Failed	1
Error	0
Incomplete	0
Skipped	0

Problems: 1/1 Runs: 1/1 Passes: 0 Failures: 1 Errors: 0 Skips: 0

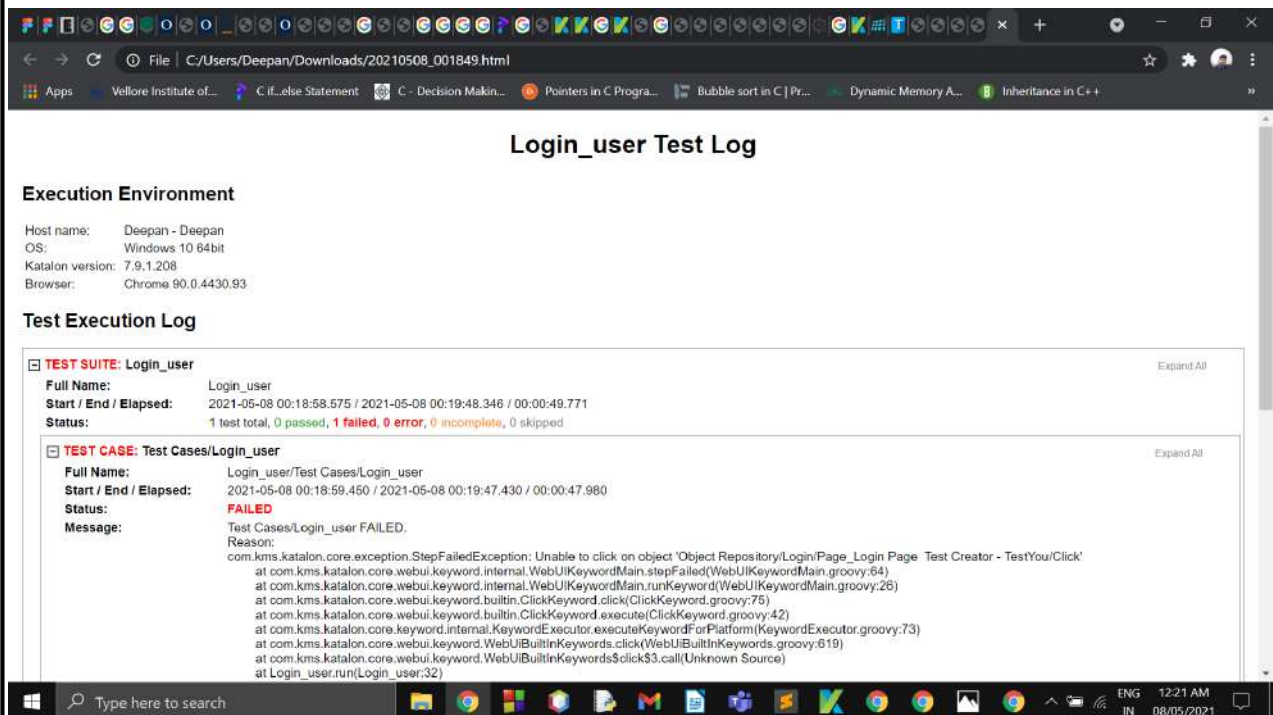
Log Viewer: 05-08-2021 12:18:58 AM Test Suites/Login\_user  
Elapsed time: 49.771s

The Demo for the invalid login form :

The screenshot shows the TestYou login page. At the top, there is a message: "Userid or Password did Not Match !!". Below this, the "TESTYOU LOGIN" form is displayed. The form includes fields for "Email Address / Login Id:" (containing "deepan45614@gmail.com") and "Password :". There are also buttons for "Sign in with Facebook" and "Login with Google". A "LOGIN" button is at the bottom of the form. The page also features a "Try Demo !!" button and a "Send message" button. The TestYou logo and navigation menu are visible at the top.



Here is the Test report and the status is failed :



## OTHER TESTING METHODS:

There are many testing methods which can be used to test the above sample login page with user details, I will mention some of other methods below.

### Integration :

- 1) when the cookie or the history is cleaned, the sign-up page should be re-loaded again.
  - 2) when the browser is closed after sign-up it check the sign-up is not re-loaded on opening again the applications.
  - 3) Check if the sign-up page works in browser incognito mode or not.
  - 4) Check if the browser stores passwords in cookie during a session in your system.
  - 5) Check if browser stores passwords in local desk when 'remember me' option is checked
- Performance: Sign-on to the website with multiple user accounts at the same time and capture latency of authentication

### Usability testing :

- 1) Availability of user id and password tab
- 2) Check if the user id and the password form field is long enough or not
- 3) If there is captcha, then check if the characters are visible and readable to the user
- 4) If there is 'remember me to login' option, then check if it's a tick box
- 5) Check if the 'sign up' button is available and clickable or not.
- 6) Check wheather if 'sign out' button is available and clickable or not
- 7) Check if the messages is displayed as 'Invalid user-id and password' are visible, clear and is not truncated in the applications.

### Appearance :

- 1) Check if the profile images is loaded when the page is requested or not.
- 2) Check if the browser is maximized or not when the application is open.

### **Test cases :**

### In Manual View :

The clear step-by-step instruction is given below to create an automation test case in manual mode :

When a sample test case with the steps as follow:

- Open the browser
- Navigate to a website
- Click on certain control
- Validate if a login credentials on the page
- Close the browser

*New Test Case		
<div> <div>+</div> Add           <div>🕒</div> Recent keywords           <div>🗑</div> Delete           <div>⬆</div> Move up           <div>⬇</div> Move down         </div>		
Item	Object	Input
➔ 1 - Open Browser		""
➔ 2 - Navigate To Url		"demoaut.katalon.com"
➔ 3 - Click	btn_MakeAppointment	
➔ 4 - Verify Element Present	btn_Login	0
➔ 5 - Verify Element Present	null	0
➔ 6 - Close Browser		

## Call Test Case in Scripting view :

In Scripting view, the Test Case method allows users to make a call to another test case. Refer to the following syntaxes:



```
WebUI.openBrowser(null)

WebUI.navigateToUrl('katalon.com')

WebUI.click(findTestObject('Object Repository/link_signin'))

WebUI.verifyElementPresent(findTestObject('Object Repository/btn_MakeAppointment'), 0)
```

## **Test Report :**

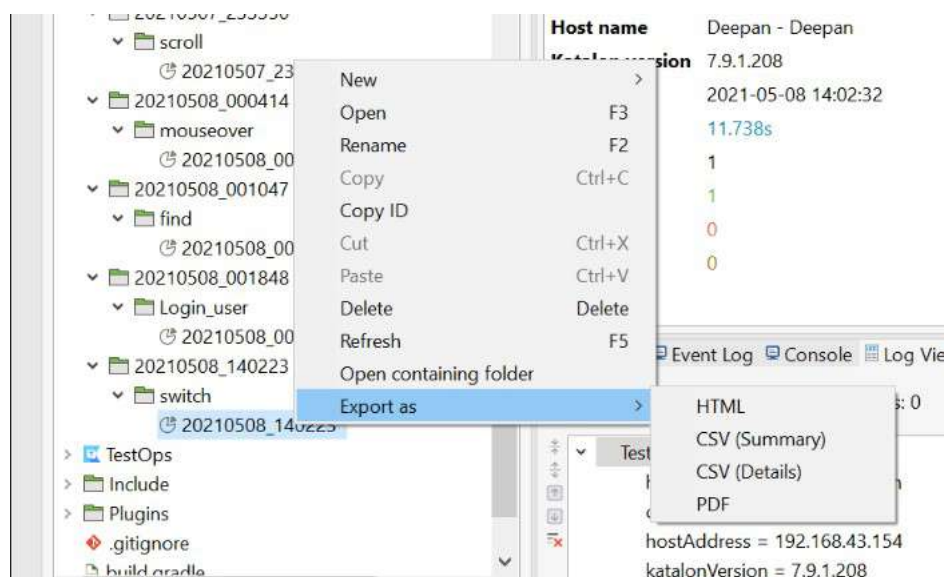
when the test suite/test suite collection finishes its execution, It gives a historical report will be automatically generated and stored in Reports section in the katalon studios.

## For example :

The downloaded report will be in the following format as follow :  
yyyymmdd\_hhmmss, which is the date time format when the test case/  
test suite collection starts its execution as an application.

## Export reports to other formats :

When the users want to share the test report he can export the reports of test suites into other formats such as HTML, CSV and PDF.



## Manually export reports :

To regenerate the current generated reports of the location, refer to the following code :

```
import com.kms.katalon.core.configuration.RunConfiguration
```

```
RunConfiguration.getReportFolder()
```

You can also check other information through the RunConfiguration package inbuilt in the katalon studios.

## View Reports :

The current Status Report gives a visual documentation of historical test result of data according to test case status, from which the tester can easily identify trends and patterns of each status. The current status report is created by following the certain steps as follows:

- The number of the test runs
- The number of test case executions
- The current status of the each test case run (Passed, Failed, Error, Incomplete or not)

### Execution Environment

Host name: Deepan - Deepan  
OS: Windows 10 64bit  
Katalon version: 7.9.1.208  
Browser: Chrome 90.0.4430.93

### Test Execution Log

☐ **TEST SUITE:** mouseover

**Full Name:** mouseover  
**Start / End / Elapsed:** 2021-05-08 00:04:22.996 / 2021-05-08 00:04:36.769 / 00:00:13.773  
**Status:** 1 test total, 1 passed, 0 failed, 0 error, 0 incomplete, 0 skipped

☐ **TEST CASE:** Test Cases/mouseover

**Full Name:** mouseover/Test Cases/mouseover  
**Start / End / Elapsed:** 2021-05-08 00:04:23.820 / 2021-05-08 00:04:35.967 / 00:00:12.147  
**Status:** PASSED

☐ **TEST STEP:** openBrowser("")

☐ **TEST STEP:** maximizeWindow()

☐ **TEST STEP:** navigateToUrl("https://www.canva.com/")

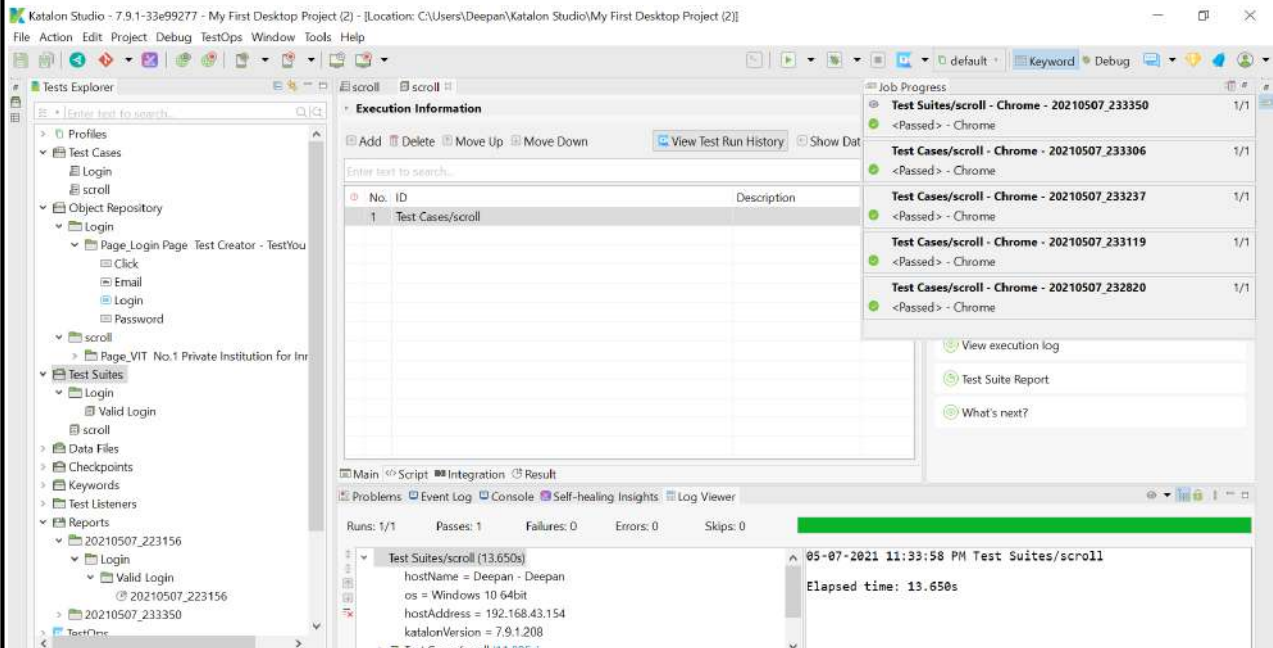
☐ **TEST STEP:** mouseOver(findTestObject("mouseover/Page\_Collaborate Create Amazing Graphic Design for f

☐ **TEST STEP:** click(findTestObject("mouseover/Page\_Collaborate Create Amazing Graphic Design for Free/spi

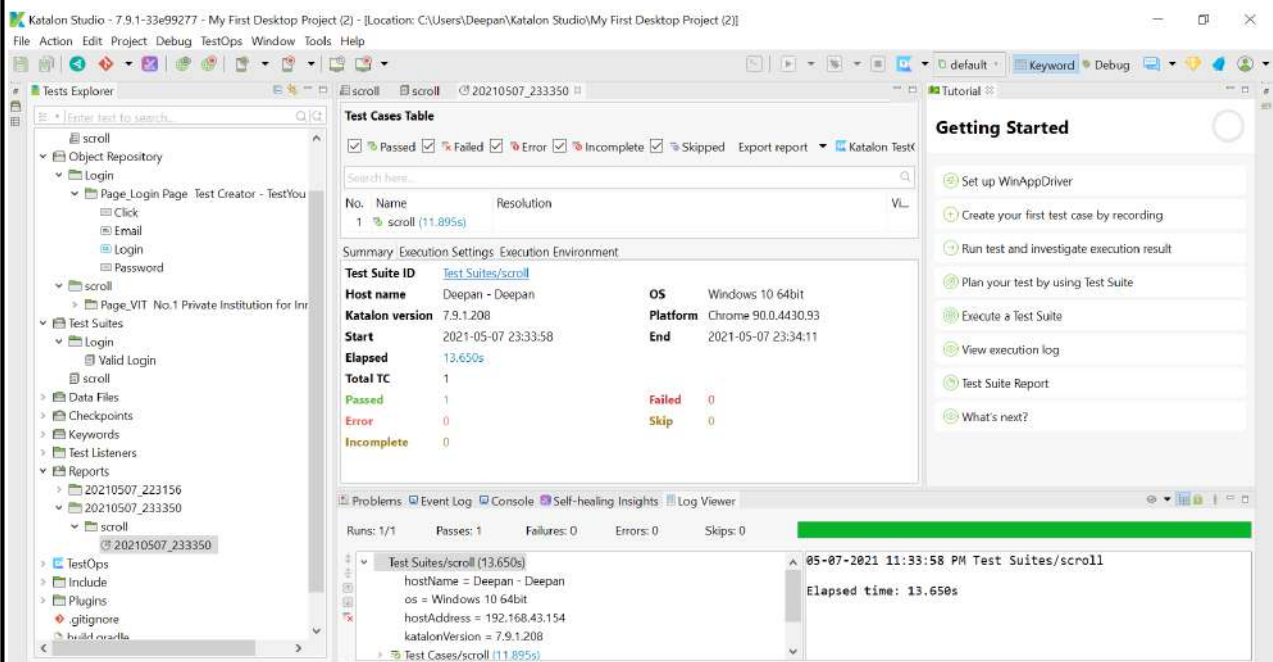
Test case executions Table gives a detailed view of the resultant dataset. The testers can read the difference between certain values with the case.

## Sample/Demo by creating the test cases and generate the test report:

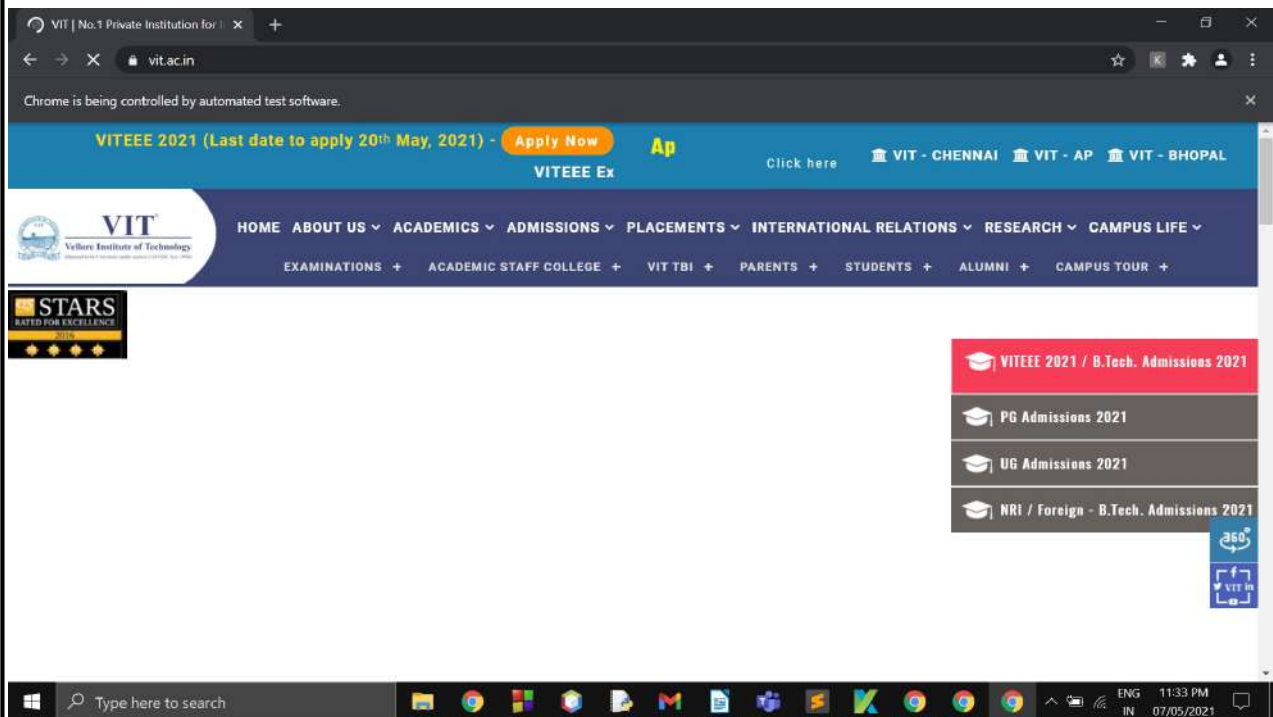
### 1. Scrolling down in the page using katalon studio :



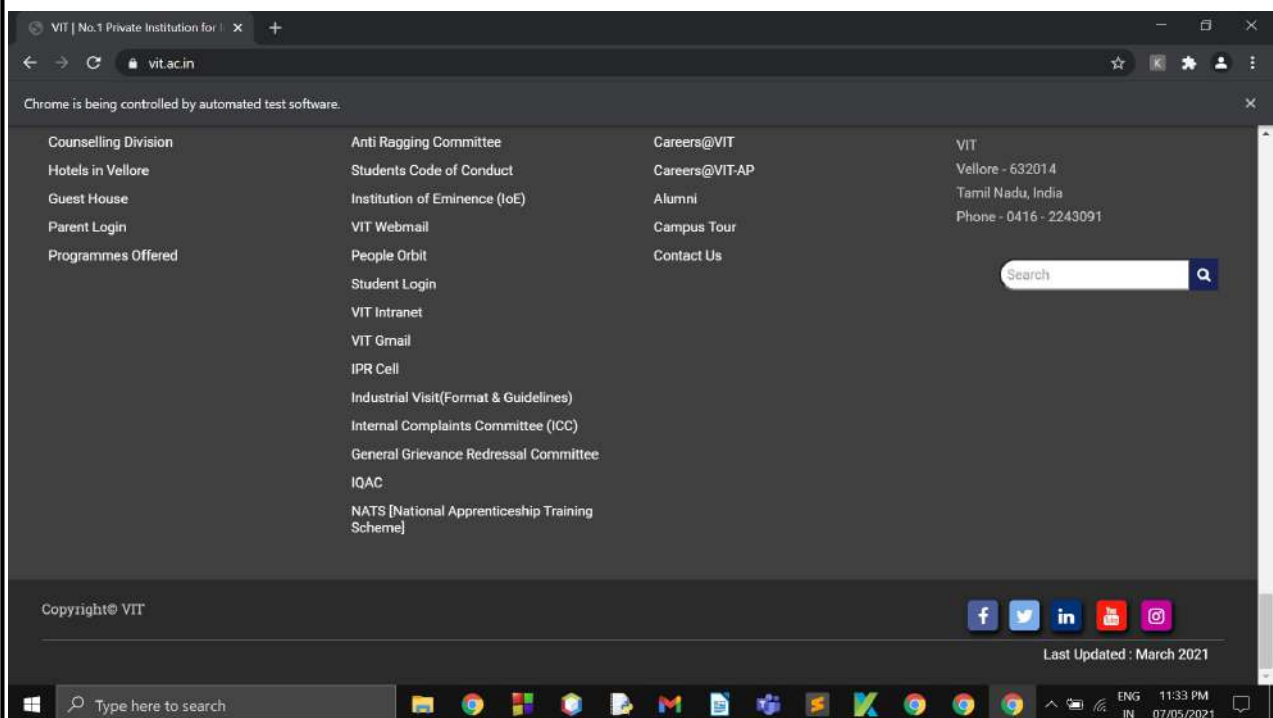
Here is the Test suite report for the scrolling down test process :



Demo of the scrolling down test using katalon studio :

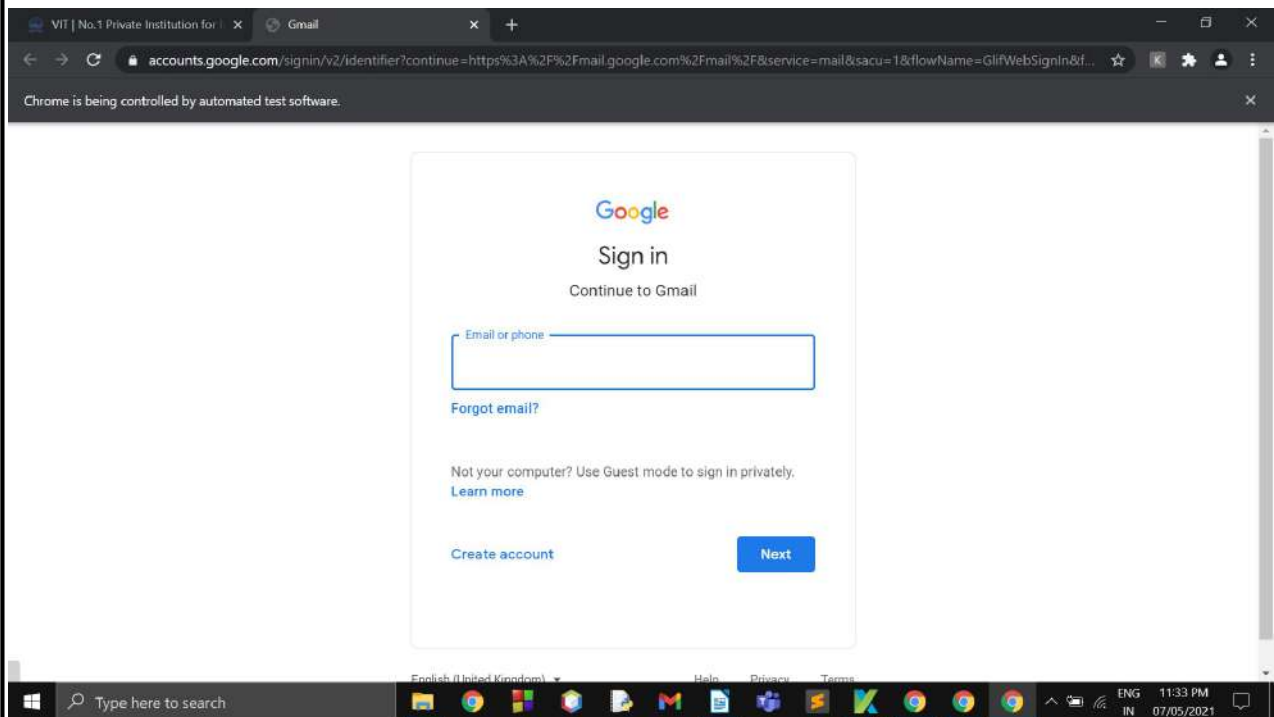


The down page of the vit website :

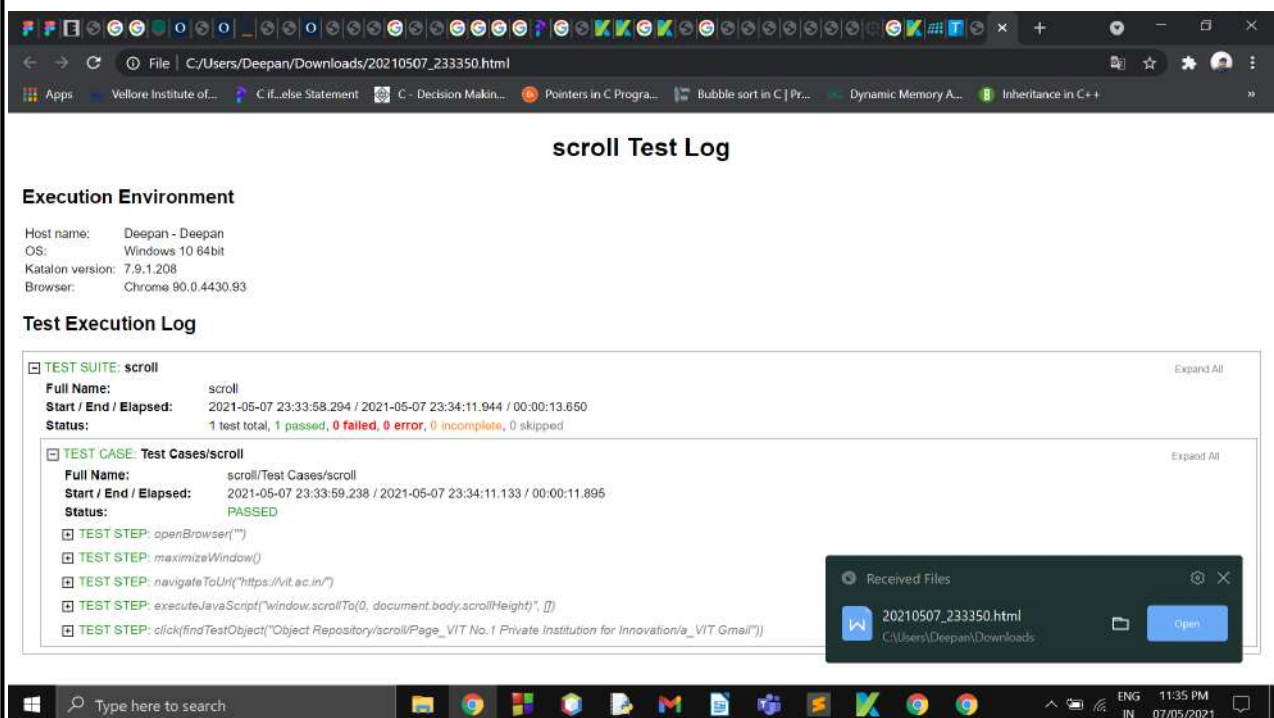




And clicks on the link which is available in the website (VIT Gmail) :

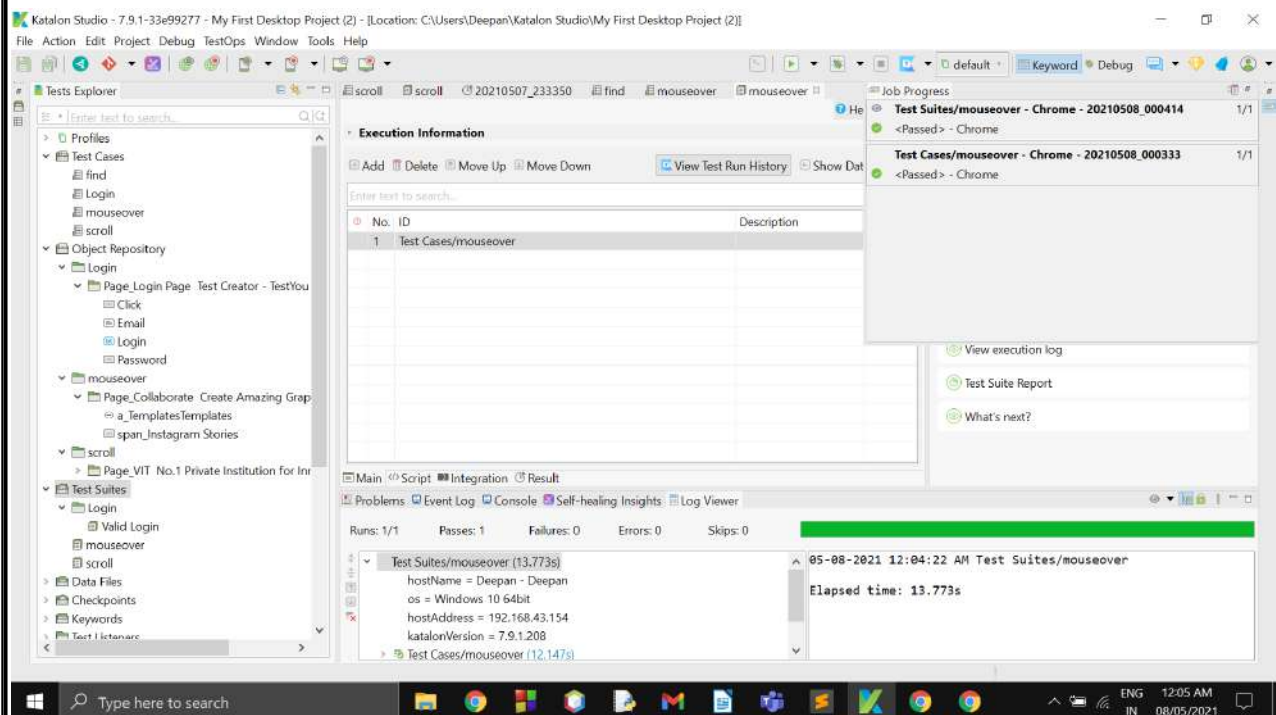


The Test report for the scrolling down page in katalon studios :

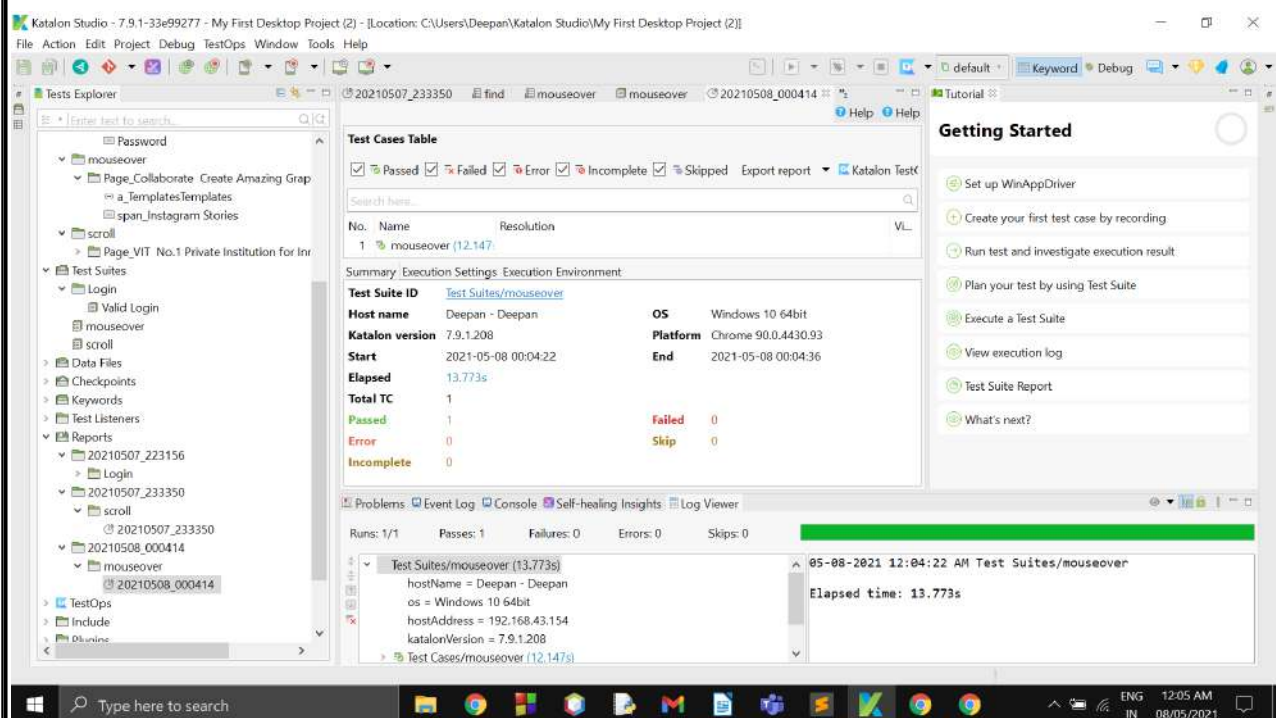




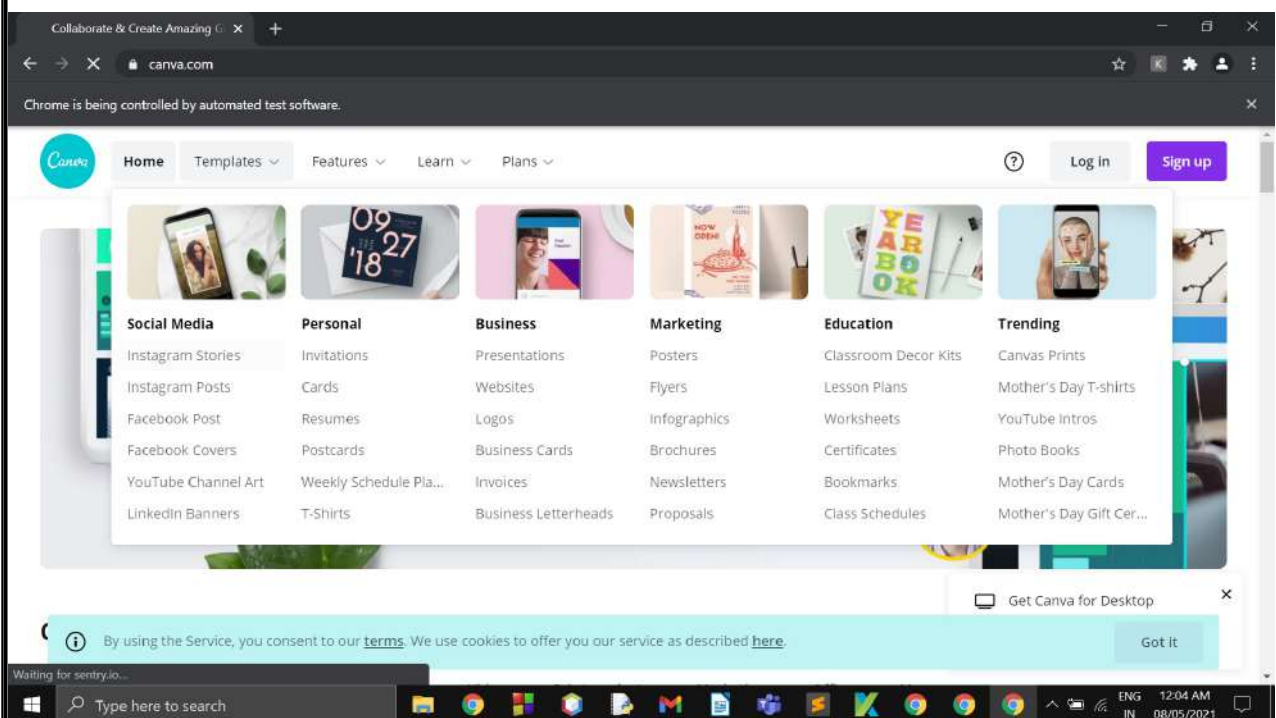
## 2. Navigating using Mouseover function in katalon studios :



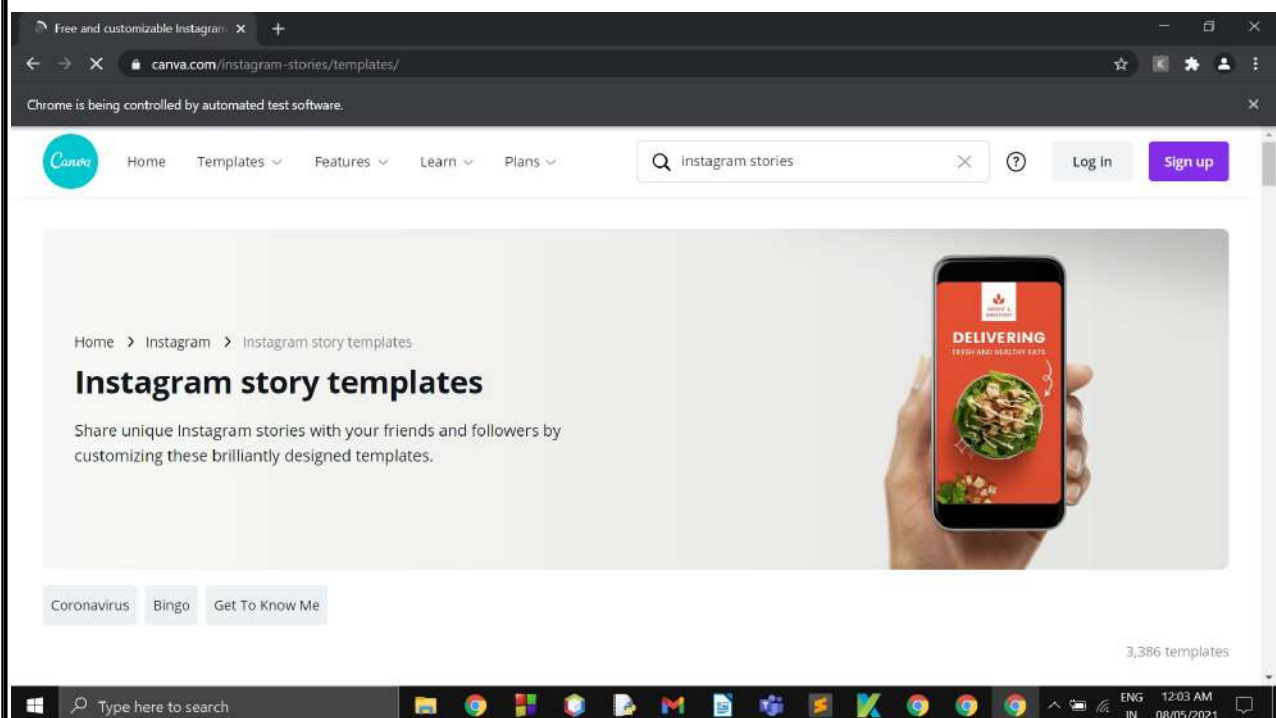
## Test suite generation report for the Mouseover function in katalon studios :



Demo of the Mouseover function using the website called canva.com :



In the above page when mouse get over on Templates and click on the Instagram Stories then the following screen will visible :



The test report for the mouse over function in katalon studios :

The screenshot displays the Katalon Studio interface with the 'mouseover Test Log' open. The log is titled 'mouseover Test Log' and shows the execution environment and test results.

**Execution Environment**

- Host name: Deepan - Deepan
- OS: Windows 10 64bit
- Katalon version: 7.9.1.208
- Browser: Chrome 90.0.4430.93

**Test Execution Log**

**TEST SUITE: mouseover**

- Full Name: mouseover
- Start / End / Elapsed: 2021-05-08 00:04:22.996 / 2021-05-08 00:04:36.769 / 00:00:13.773
- Status: 1 test total, 1 passed, 0 failed, 0 error, 0 incomplete, 0 skipped

**TEST CASE: Test Cases/mouseover**

- Full Name: mouseover/Test Cases/mouseover
- Start / End / Elapsed: 2021-05-08 00:04:23.820 / 2021-05-08 00:04:35.967 / 00:00:12.147
- Status: PASSED

**TEST STEP:**

- openBrowser("")
- maximizeWindow()
- navigateToUrl("https://www.carva.com/")
- mouseover(findTestObject("mouseover/Page\_Collaborate Create Amazing Graphic Design for Free/a\_TemplatesTempl"))
- click(findTestObject("mouseover/Page\_Collaborate Create Amazing Graphic Design for Free/span\_\_Instagram Stories"))

A 'Received Files' dialog box is visible, showing the file '20210508\_000414.html' located at 'C:\Users\Deepan\Downloads'.

3. Find Names of the Files in the disk drive using katalon studios :

The screenshot displays the Katalon Studio interface with a Java script being executed. The script is designed to find files in a specific directory and print their names.

**Script:**

```
1 *import static com.kms.katalon.core.checkpoint.CheckpointFactory.findCheck
19
20 File f=new File("D:\\Coding\\")
21 File[] d = f.listFiles()
22 for(File g:d) {
23     System.println(g.getName())
24 }
```

**Test Results:**

- 2021-05-08 00:10:06.971 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.972 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.973 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.974 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.975 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.975 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.975 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.976 DEBUG testcase.find - 1: System.println(g.getName())
- 2021-05-08 00:10:06.979 INFO c.k.katalon.core.main.TestCaseExecutor - END Test Cases/find

The 'Getting Started' sidebar is visible on the right, and the 'Test Explorer' on the left shows the project structure.

The test suite report for the file name generation :

The screenshot shows the Katalon Studio interface. On the left is the 'Tests Explorer' pane showing a project structure with 'Test Suites' and 'Test Cases'. The main area displays the 'Test Cases Table' for the 'find' test suite. Below this is a summary of the execution environment and results. On the right, a 'Getting Started' sidebar is visible.

No.	Name	Resolution
1	find	(0.467s)

Summary: Execution Settings, Execution Environment

Test Suite ID	Test Suites/find
Host name	Deepan - Deepan
OS	Windows 10 64bit
Katalon version	7.9.1.208
Platform	
Start	2021-05-08 00:10:57
End	2021-05-08 00:10:58
Elapsed	1.606s
Total TC	1
Passed	1
Error	0
Incomplete	0
Failed	0
Skip	0

Runs: 1/1 Passes: 1 Failures: 0 Errors: 0 Skips: 0

Test Suites/find (1.606s)  
hostName = Deepan - Deepan  
os = Windows 10 64bit  
hostAddress = 192.168.43.154  
katalonVersion = 7.9.1.208

Test Cases/find (0.467s)  
Elapsed time: 1.606s

And the test report for the file name is here :

The screenshot shows a web browser window displaying the test log for the 'find' test suite. The address bar shows the file path: C:\Users\Deepan\Downloads\20210508\_001047.html. The page title is 'find Test Log'.

## find Test Log

### Execution Environment

Host name: Deepan - Deepan  
OS: Windows 10 64bit  
Katalon version: 7.9.1.208

### Test Execution Log

**TEST SUITE: find** Expand All

**Full Name:** find  
**Start / End / Elapsed:** 2021-05-08 00:10:57.289 / 2021-05-08 00:10:58.895 / 00:00:01.606  
**Status:** 1 test total, 1 passed, 0 failed, 0 error, 0 incomplete, 0 skipped

**TEST CASE: Test Cases/find** Expand All

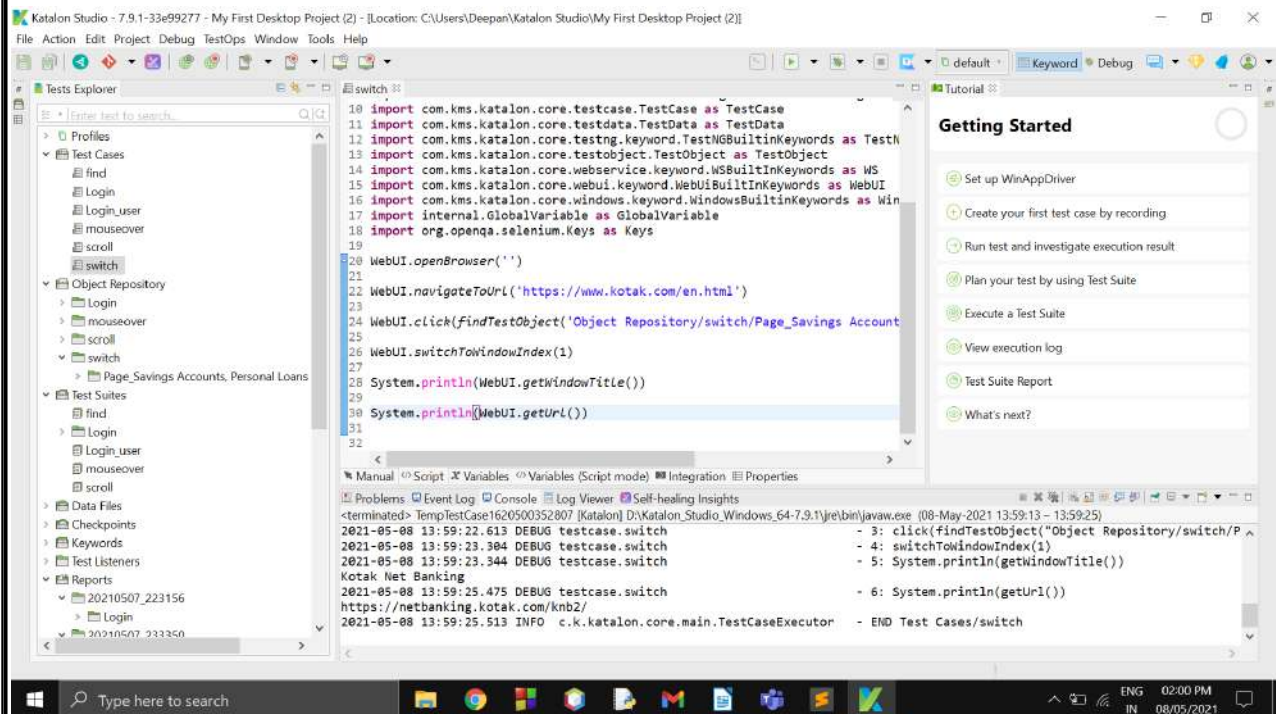
**Full Name:** find/Test Cases/find  
**Start / End / Elapsed:** 2021-05-08 00:10:58.171 / 2021-05-08 00:10:58.638 / 00:00:00.467  
**Status:** PASSED

**TEST STEP:** f = new java.io.File(D:\Coding\)  
**TEST STEP:** d = f.listFiles()  
**TEST STEP:** for (File g : d)

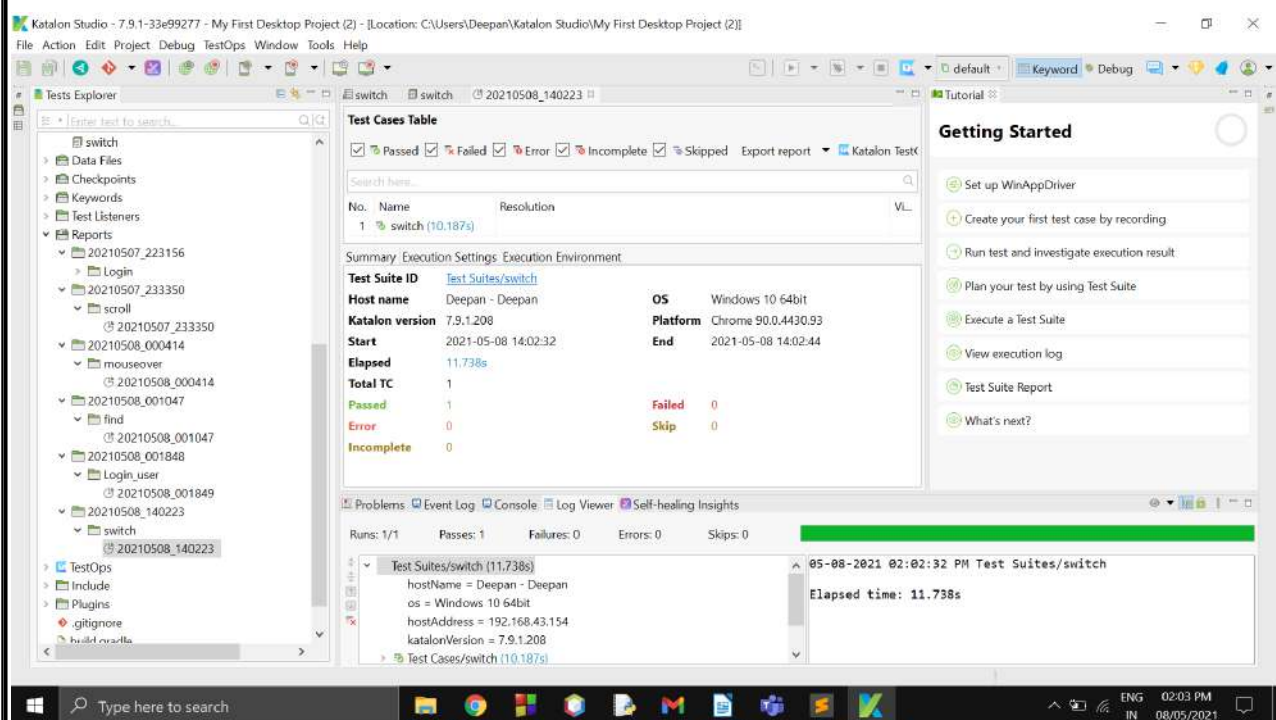


## 4. Switch the windows by index using katalon studios :

The script view of the code for switching the windows in katalon studio :

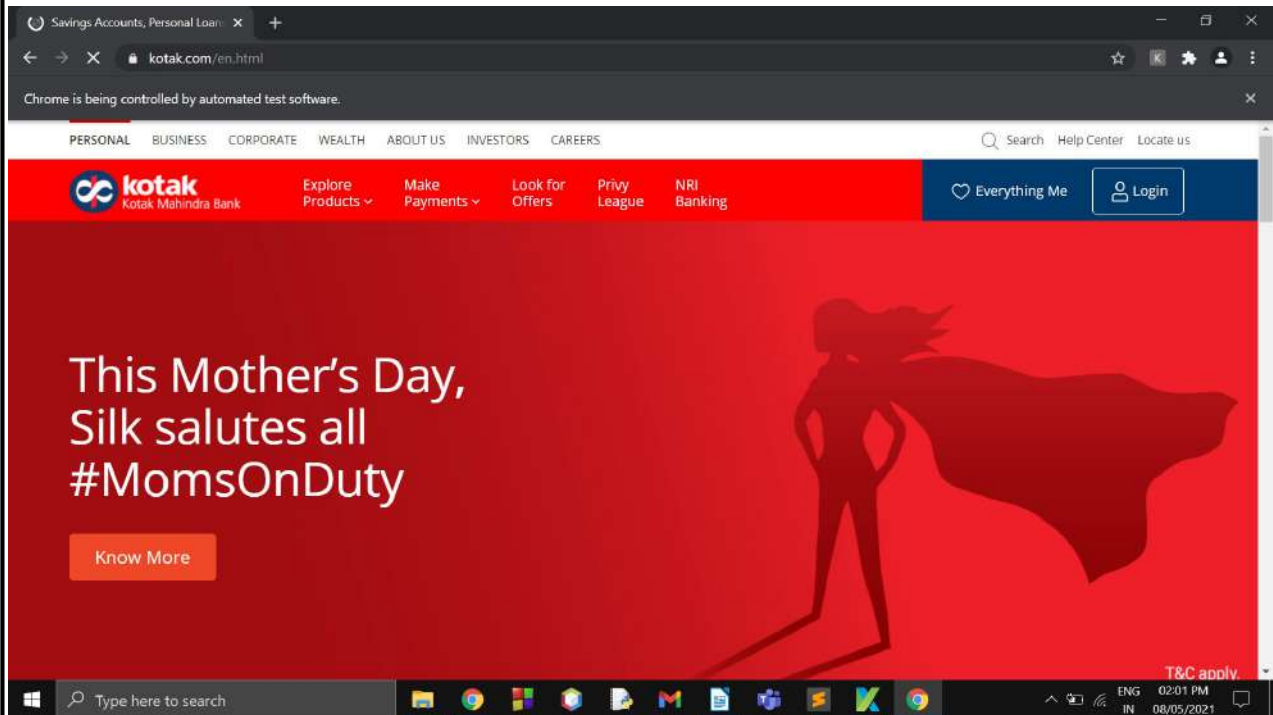


The test suite report for switching the windows :

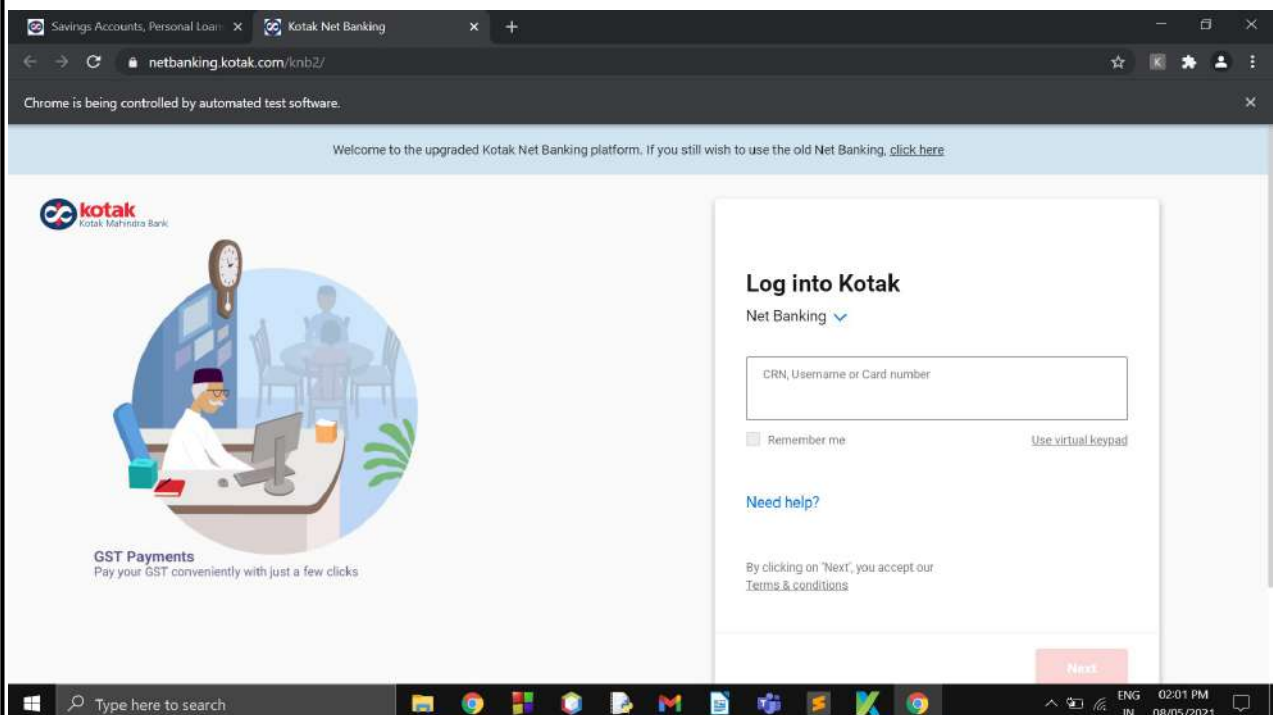


Demo for the switching windows using katalon studio :

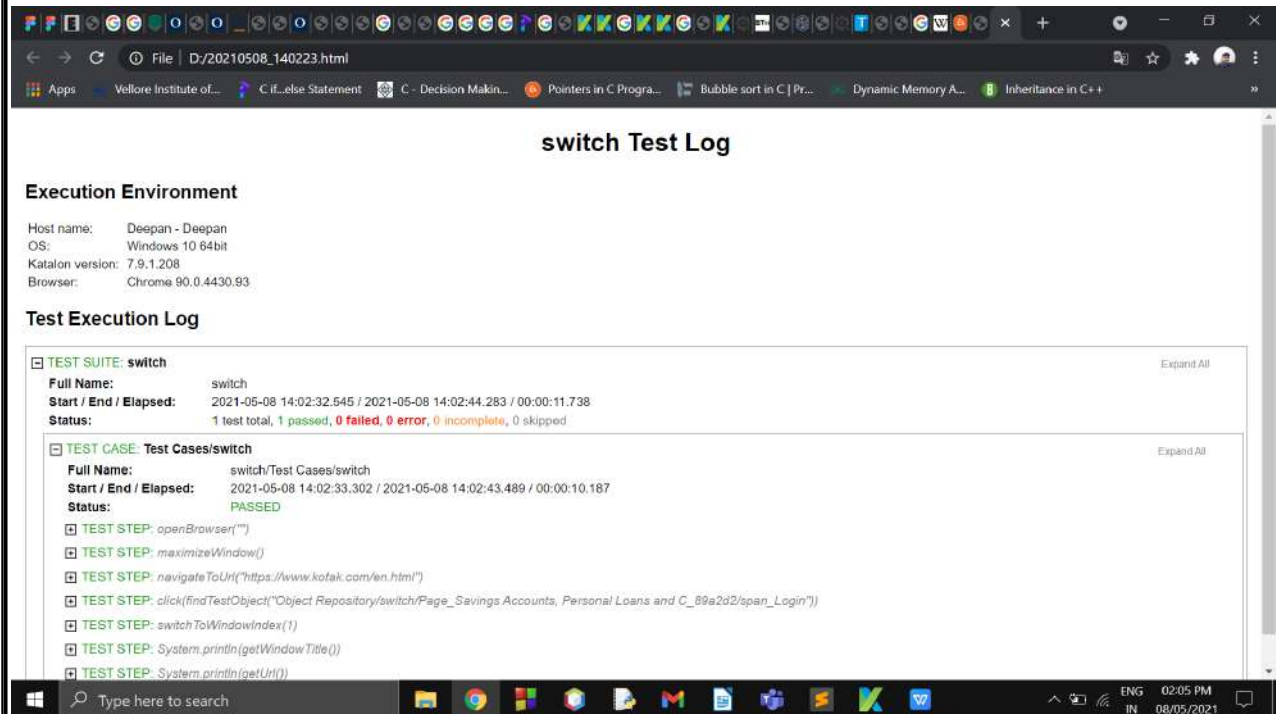
The first screen :



The second screen of switching using katalon studios :



The Test Report for the switching the windows by index using the katalon studios :



## Conclusion :

So from these way, I have covered all of the topics which are involved in the katalon studio using the sample login, Mouse over option, Switching the tabs and much more can be done using the katalon studios.

## References :

1. ["How to Integrate Katalon Studio With Kobiton".](#)
2. ["Katalon and Sauce Labs Collaborate to Deliver Better Automation and Continuous Testing Experience ".](#)
3. ["Katalon Releases Selenium Migration Feature and Demonstrates Maturity With Codeless Testing".](#)