1. Katalon Studio Record Mode

Overview:

The Record Mode allows testers to automatically capture user actions on a web or mobile application and generate test scripts.

Steps to Use Record Mode:

- 1. Open Katalon Studio and click on "Record Web" from the toolbar.
- 2. Enter the **URL of the web application** and select the browser (Chrome, Firefox, Edge).
- 3. Click on "Start", and Katalon Studio will launch the browser.
- 4. Perform actions (click, type, navigate) on the website, and Katalon will **record** them.
- 5. Once done, click "Stop Recording" and save the test case.
- 6. You can edit recorded steps in Manual Mode or Script Mode.

Use Case:

- Best for beginners who don't have coding knowledge.
- Quick test creation without writing scripts.

2. Katalon Studio Manual Mode

Overview:

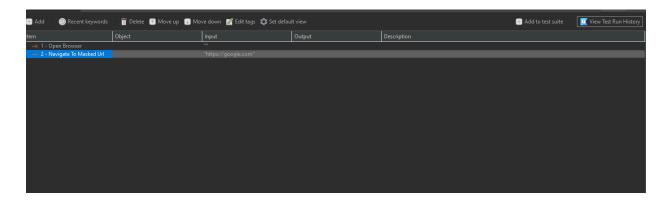
Manual Mode allows users to create test cases step by step by adding test objects, actions, and validations without writing code.

Steps to Use Manual Mode:

- 1. Open Katalon Studio and create a new Test Case.
- 2. Click the "Manual" tab (next to the "Script" tab).
- 3. Use the Test Case Editor to:
 - Add Test Steps (e.g., Click, Input, Verify).
 - Select an **Object** from the Object Repository.
 - Choose Keywords (e.g., Open Browser, Set Text).
- 4. Save and execute the test case.

Use Case:

- Ideal for testers who prefer a **scriptless** test case design.
- Allows easy editing of test cases without coding.



3. Katalon Studio Keywords Mode

Overview:

Katalon Studio provides built-in keywords that act as pre-defined actions (similar to Selenium commands).

Types of Keywords in Katalon:

- Web UI Keywords: WebUI.click(), WebUI.verifyElementPresent(),
 WebUI.setText(), etc.
- Mobile Keywords: Mobile.tap(), Mobile.swipe(), Mobile.setText(), etc.
- **Database Keywords**: Database.connect(), Database.executeQuery().
- $\bullet \quad \textbf{API Testing Keywords} : \texttt{WS.sendRequest()}, \texttt{WS.verifyResponseStatusCode()}.$
- Custom Keywords: Users can create their own Groovy-based keywords.

Steps to Use Keywords Mode:

- 1. In Manual Mode, click Add Step → Choose Keyword.
- 2. Select a built-in keyword like "Open Browser" or "Click Element".
- 3. Assign a **Test Object** (e.g., a button or input field).
- 4. Save and execute the test case.

Use Case:

- Great for testers who want **reusable** functions.
- Reduces coding effort by using pre-built commands.

4. Katalon Studio Script Mode

Overview:

Script Mode allows advanced testers to write test scripts in **Groovy (Java-based scripting language)** using Selenium WebDriver and Katalon APIs.

Steps to Use Script Mode:

- 1. Open Katalon Studio and create a new Test Case.
- 2. Click the "Script" tab (next to "Manual").
- 3. Write custom automation scripts using Groovy.

Example Script:

```
groovy
CopyEdit
import com.kms.katalon.core.webui.keyword.WebUiBuiltInKeywords as
WebUI

WebUI.openBrowser('https://example.com')
WebUI.setText(findTestObject('Page_Login/txt_Username'), 'admin')
WebUI.setEncryptedText(findTestObject('Page_Login/txt_Password'),
'encrypted_password')
WebUI.click(findTestObject('Page_Login/btn_Login'))
WebUI.verifyElementPresent(findTestObject('Page_Home/lbl_Welcome'),
10)
WebUI.closeBrowser()
```

Use Case:

- Suitable for experienced testers who prefer **flexibility**.
- Allows integration of custom logic and advanced test automation techniques.

Comparison of Automation Modes in Katalon Studio

| Mode Suitable for Features |
|----------------------------|
|----------------------------|

| Record Mode | Beginners | Auto-generates test scripts from recorded actions |
|---------------|-----------------------------------|--|
| Manual Mode | Testers with no coding experience | Drag-and-drop test steps without writing code |
| Keywords Mode | Intermediate users | Uses built-in Katalon keywords for test automation |
| Script Mode | Advanced testers | Uses Groovy for writing customized test scripts |