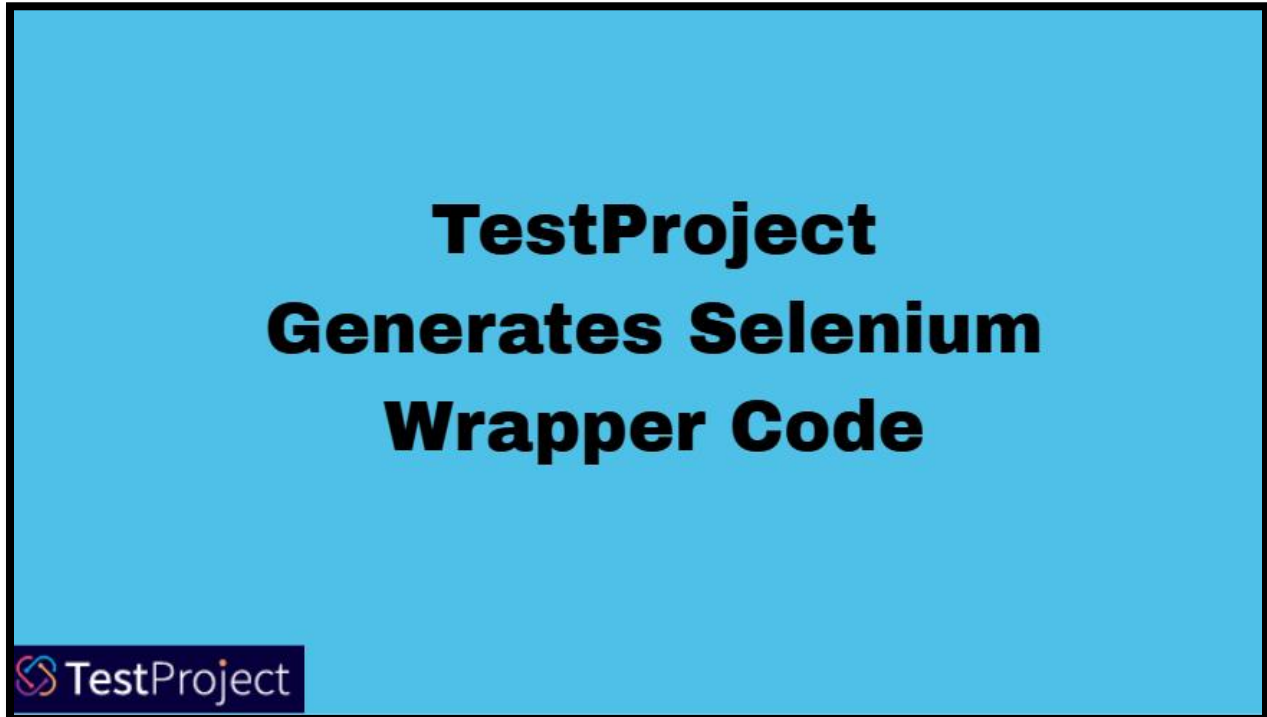


(Transcript) Test Project Generates Selenium Wrapper Code

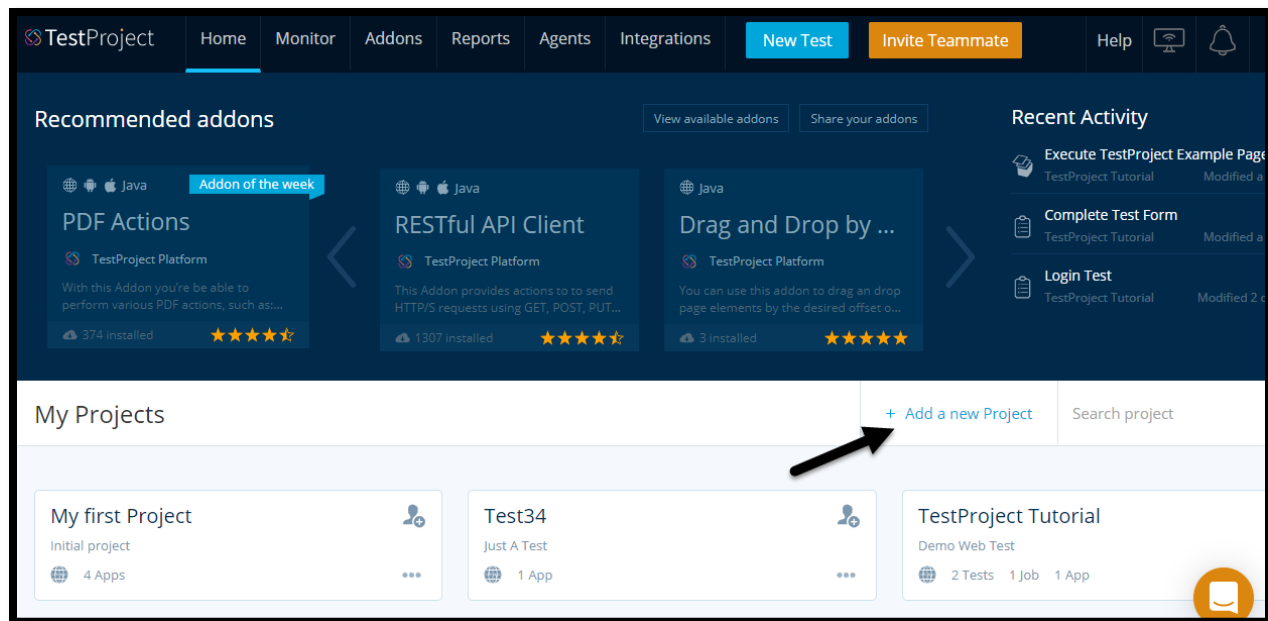


TestProject Generates Selenium Code

In this session, I am going to create a Web Test using TestProject's Recorder. With the recorder, we can create a new test, add steps, reuse steps, take screenshots, export the generated code, and so much more.

First, we must setup a project. Let's go to TestProject Platform. The purpose of a project is to manage all of our test and promote collaboration with other team members. If I hover an existing project, we see Invite Team Member. Under the Home tab, we click Add New Project.

Add a name like TestProject Tutorial; Description Demo Web Test then click the Create button. We are going to perform 6 steps: Create A Test, Record A Test, Add the Test Steps, Execute The Steps, Reuse The Steps then Export The Generated Code.

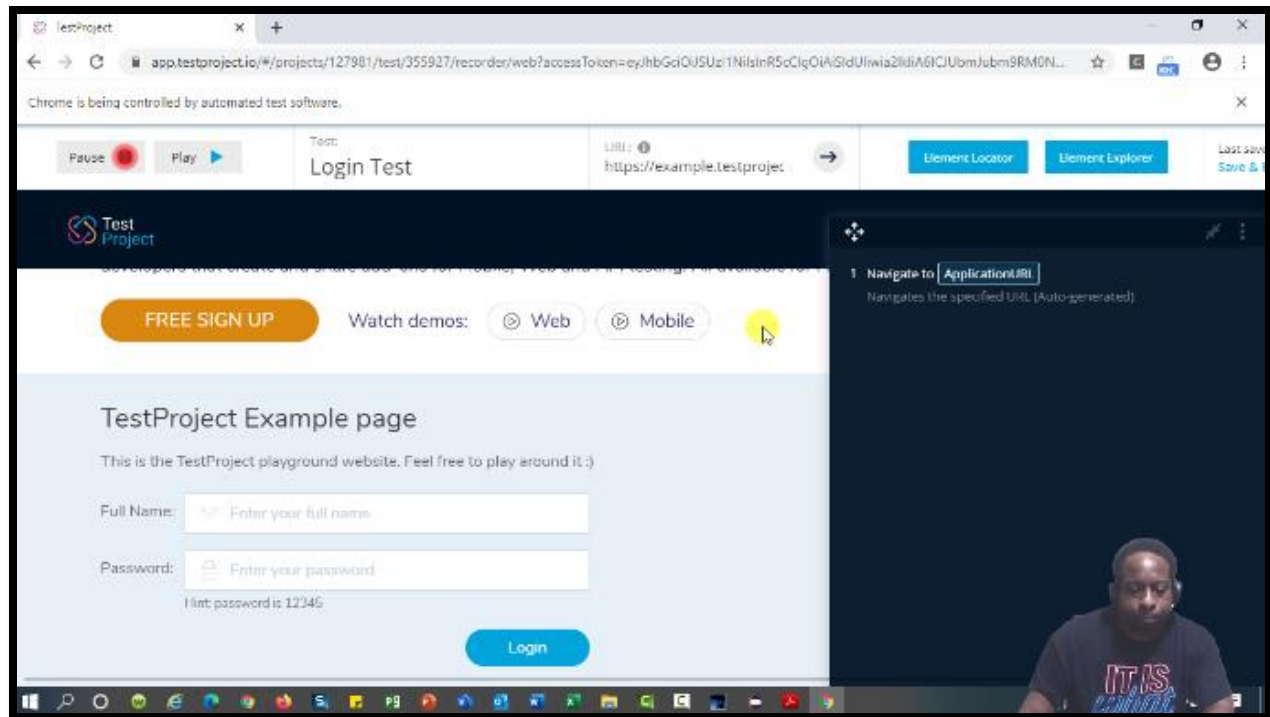


Step 1: Create A Test

On this screen, we can create a test, add a job, add an element, add application, add a data source, or add a parameter. Let's create a test: Mobile, Web, and Code. Select Web then Next. Test Name is Login Test and Test Description is Log Into TestProject Example Page. We are going to use this Example Page developed by TestProject. Copy the URL, Go back, and click Next. We have to add a Web Application, click the drop down, then click Add new application for testing. Name is TestProject Example Page, paste the URL, click Finish then click Next.

Step 2: Record A Test

Before recording, you have to make sure your agent is running. If this icon is green then that mean your agent is running successfully. We have the option of Record, Edit, and create a Blank Test. Click Record and Start Recording. A new tab will open in your browser with the web application in a few seconds. Please Wait. Waiting for website to finish loading. This dialog window is called a Test Step Widget. We can reposition or minimize it. Scroll to the bottom of the page. Do you see this drop-down arrow for each step? It allows us to Run, Run until here, Run from here, Disable, Duplicate, and Delete. I am going to delete this last step. It showed up when I scrolled to the bottom of the page.



Step 3: Add Test Steps

Let's start our test. Enter Full Name: Rex Jones II, Password is 12345 then click the Login button. When we perform an action, the Test Step Widget automatically records each step. TestProject offers some valuable features with this Test Step Widget. We can click the Add Step plus icon to manually add a step. There are 6 sections available when adding step and the same sections are available if we click a step like #3 enter name.

The first section is Comments which allows us to be clear on our intention for this step. Recall from the previous video, I got the text "Hello Rex Jones II, let's complete the test form:". Let's do it again. Comment is Get Greeting Message.

Second is the Type of Step. There are 3 options: Element action, Action, and Test. Element action is default. Action is a direct action like compare an image, compare 2 files, and more options. Test will run another test.

The third section depends on #2 the step. For Action, we select Get text. Bingo, we can select a Output Parameters, Add Validation such as selecting a text field, select Validation, making sure the validation type contains Rex Jones II. Click the check mark. Next is On Failure Behavior. The purpose is to determine what will happen when the test fail. We can also take a screenshot. Let's select take a screenshot Always. We must remember to always select the checkmark after making a change. Last section is Step Pause. Default is set to None because TestProject implicitly takes care of waiting for an element. Close the browser after I Save to save the test.

Step 4: Execute The Steps

Add a Job. We have 3 options: Web, Android, and iOS then click Next. Name is Execute TestProject Example Page and Description is Add All Test To Validate TestProject Example Page, Click Next.

Select the Agent then click the Agent Browser. We are going to select Chrome then Create. Drag and Drop Login Test then Run. Job Execution has started. Go to Report for this Job to see the steps and how long it took to run. It shows Passed and all of the steps. Expand the last step and we the screenshot. Message the Text “Hello Rex Jones II, let’s complete the test form”. Validation shows the Field, Validation, and Value.

The screenshot displays the TestProject.io interface. The main content area shows the execution details for a test named 'Execute TestProject ...' which was run on 7/6/20 at 11:13 PM. The test was executed by 'Rex Jones II' using 'Rex's Agent'. A green circular progress indicator shows '100% Passed'. Below this, a table lists the test steps:

Test Name	Application Name	Total Duration	Status
Login Test	TestProject Exam...	00:00:04.779	Passed

To the right of the table, the 'Login Test' step is expanded, showing a message: 'Text = Hello Rex Jones II, let's complete the test form:'. Below the message, the 'Validations' section shows: 'Field: text', 'Validation: Contains', and 'Value: Rex Jones II'. The 'Output' section shows the text 'text'. A small video inset in the bottom right corner shows a man wearing a headset and a shirt with 'IT IS' on it.

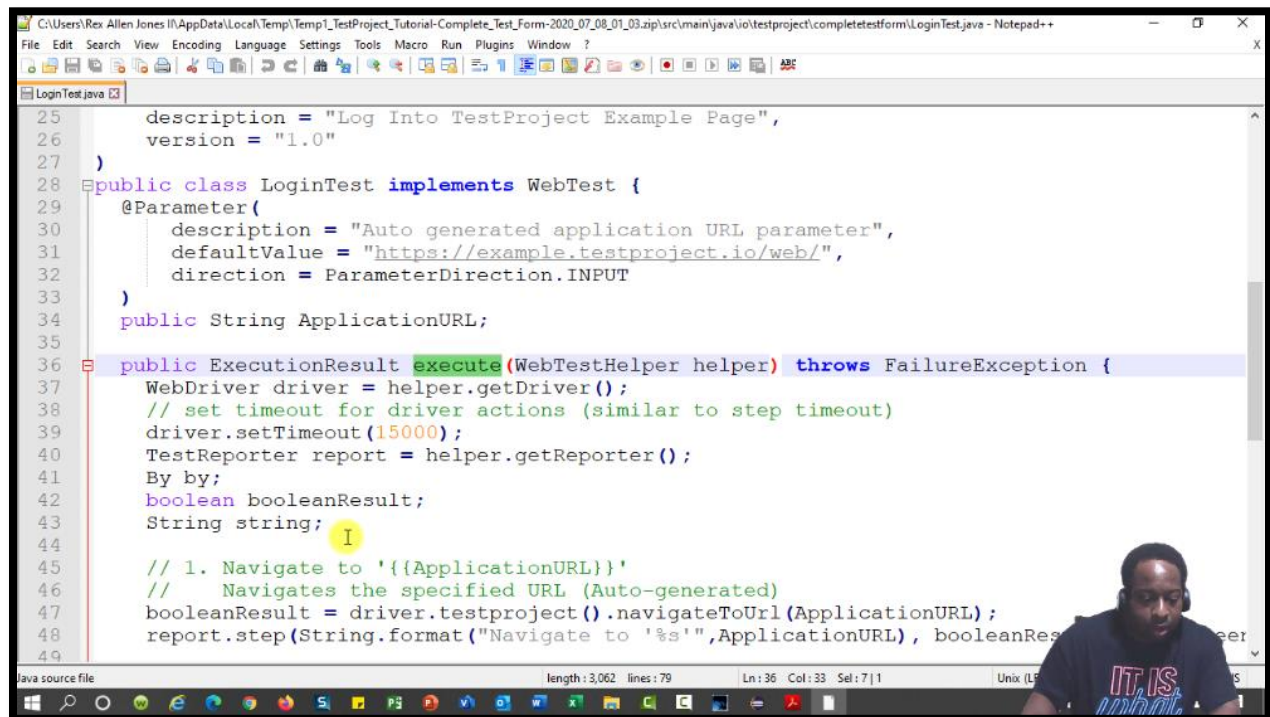
Step 5: Reuse The Steps

Go to New Test, Select Web, and click Next. Name is Complete Test Form and Description is Complete TestProject Example Page Form then click Next. Select web application, Next, Record, and Start Recording. Please Wait. Waiting for website to finish loading. This time, open the first step and select Type. We are going to reuse an existing set of steps. Therefore, we select Test and click the checkmark. The Select test will be the previous Login Test and click Save. Now the first step shows Login Test. Re-enter Name, Password, and click Login. Remove these steps by clicking Multiple select at the bottom, and check each box then, click Delete Steps then the checkmark. Next, we will select Country – United States, Address is 1234 TestProject Avenue, Email is Rex.Jones@Test4Success.org, Phone Number is 214-225-1234 then click Save. Close the browser. Go to test Under Test Name.

Step 6: Export The Generated Code

Now let's Run. We see there's 1 test in a job. Drag Complete Test Form to the Job and now we see 2 tests but we are going to remove Login Test and only Execute Complete Test Form Test. Job Execution has Started. Bingo, it's complete. Go to Reports, select our test that ran. We see all of the steps. Step 1 only shows Test Login Test but it shows all of the reused steps if we click the steps. Run Login Test.

We see the remaining steps for Country, Address, Phone Number and Save. Go to test for Complete Test Form. Select the 3 horizontal dots then click Generated Code. We see the programming languages: Java and C# and the browsers. We can choose to rename the package to io.testproject.completetestform then Generate. Open the zip file, select src, main, java, io, testproject, completetestform. We see 4 Java files. Let's open up the files that wrap around Selenium. LoginTest was the first one, we see the Import Packages, the execute() method showing WebDriver driver, and there's more code. Look at the comments in green. Step 5 shows the Get Greeting Message. Scroll to the right and we see TakeScreenshotConditionType Always. Let's look at the CompleteTestForm file. First step shows Log Into Test Project which is the reused steps. We see all of our steps exported into a Selenium Wrapper using Java. Next, I will show you how to develop an Addon Using TestProject's SDK.



```

25     description = "Log Into TestProject Example Page",
26     version = "1.0"
27 )
28 public class LoginTest implements WebTest {
29     @Parameter(
30         description = "Auto generated application URL parameter",
31         defaultValue = "https://example.testproject.io/web/",
32         direction = ParameterDirection.INPUT
33     )
34     public String ApplicationURL;
35
36     public ExecutionResult execute(WebTestHelper helper) throws FailureException {
37         WebDriver driver = helper.getDriver();
38         // set timeout for driver actions (similar to step timeout)
39         driver.setTimeout(15000);
40         TestReporter report = helper.getReporter();
41         By by;
42         boolean booleanResult;
43         String string;
44
45         // 1. Navigate to '{{ApplicationURL}}'
46         // Navigates the specified URL (Auto-generated)
47         booleanResult = driver.testproject().navigateToUrl(ApplicationURL);
48         report.step(String.format("Navigate to '%s'", ApplicationURL), booleanResult);
49     }

```