

Create a Testing Framework for the Medicare Website

Write up:

Rest Assured for API endpoints.

- 1) Create the new maven project and add the package with the java class.
- 2) Add the maven dependencies in the pom file .
- 3) Update the project to get the maven dependencies to run the project.
- 4) After creating the java class, write the test cases with TestNG by using the rest assured framework.
- 5) Add the validation statements to check the response of the API.
- 6) To generate the logger, we need to add the log4j.properties file to the project.
- 7) In console window, we will get the printed statements which is written inside the logger.
- 8) Logger is commonly used to printout the statements in case of the API response not the printout statements.
- 9) In order to create the logger file in the separate folder we need to add the Rolling File Appender and certain statements to the log4j.properties file.
- 10) Run the java class and validate the output.
- 11) In order to generate the report in html format, create the testNG.xml file and add all the classes.
- 12) Refresh the project, html report will be generated inside the test output folder.
- 13) To generate the extent report we need to add the plugins to the pom file and listeners to the testNG file.
- 14) Clone the below the github link to get the complete code of the project.

GitHub Link: <https://github.com/Prajwal-Diwakar/Capstone-Project-Medicare>

Selenium with TestNG:

- 1) Create a new maven Project in the Eclipse editor.
- 2) Add the required dependencies in the POM.XML file
- 3) Create a testNG.xml file in the same Maven project to generate the report of all the test classes
- 4) Create a new Java file for the TestNG test implementation with the selenium webdriver.
- 5) Create the Java class for the login page, register page, add to cart page, place order page, submit page, filter page and logout page
- 6) Add the delay for each execution in order to locate the web elements.
- 7) Add the description to the test cases to know which test cases passed and failed.
- 8) Add the assert statements to check the current url is matching the expected url.
- 9) Run the TestNG scenario using the testNG.xml file
- 10) Refresh the project and check for the report generated in the HTML format.
- 11) Clone the below Github link to get the code for this project.

GitHub Link: <https://github.com/Prajwal-Diwakar/Capstone-Project-Medicare>

JMeter

- 1) Download the JMeter apache-jmeter-5.6.2 through the browser
- 2) After downloading Launch the Jmeter in the system through the path, C:\Users\Dell\software\apache-jmeter-5.6.2\bin and click on the jmeter of type windows batch file
- 3) Create the thread group
- 4) Create the HTTP Cookie Manager to clear the cookies after each iteration.
- 5) Create the HTTP Cache Manager to clear the cache after each iteration.
- 6) Create the user defined variable and the HTTP request inside the thread group.
- 7) Setup the HTTP request for home page, register page, login page, add to cart page, view page, place order page and logout page.
- 8) Add the constant timer as child to each request to have the delay and it executes accurately.
- 9) Assign the user defined variable for the base URL to each HTTP request.
- 10) Also add the concurrency Thread group to test the localhost:9010 platform
- 11) Add the listeners such as view result tree, summary report and aggregate report, View Results in Table.
- 12) Clone below the github link by typing the command git clone <URL> in the command prompt.

Github Link: <https://github.com/Prajwal-Diwakar/Capstone-Project-Medicare>

Cucumber Test for the API endpoints

- 1) Create a new Maven project in the eclipse workspace.
- 2) Add the cucumber, rest assured, JUNIT and required dependencies to the pom.xml file from the maven website.
- 3) Once the project is set up, write the cucumber feature code for the Medicare API to test the various scenarios such as getting product details, registered users, adding the product, updating the product details and deleting the product.
- 4) After completion of writing the feature file, create the new java class for the step definition for each feature file and implement with rest assured.
- 5) Run and execute the feature file by right clicking on the page file and check all the scenarios passed.
- 6) Debug if any of the scenarios failed.
- 7) Once all the scenarios passed, create TestNG file to run all the feature file and to generate the html report.
- 8) Refresh the project , the extent report will be generated on the respective path.
- 9) Upload the project to the GitHub repository.
- 10) Clone the project using the below github link to get the similar testing example.

Github Link: <https://github.com/Prajwal-Diwakar/Capstone-Project-Medicare>

Postman for API endpoints:

- 1) Download the postman application in the browser, Create the account and login to the postman application.
- 2) Once the postman application is ready, create a new workspace by adding the name and summary into the input text.
- 3) After the creation of the workspace, create the new blank collection and name accordingly.
- 4) Add the request that is the GET request method , in order to get the products details and the registered users by passing the API link to the address bar.
- 5) Create the environment and add the variables which can be accessed by all the request method.
- 6) In order to generate the test results, write the test scripts in the test body.
- 7) After the response is received, check the data generated is matching to the expected outcome by using the methods in the test scripts of the request.
- 8) Finally export the collection to the particular folder and upload to the github repository.
- 9) To get the code, clone the below github link to your system by typing the command `git clone <url>` in the command prompt.

Github Link: <https://github.com/Prajwal-Diwakar/Capstone-Project-Medicare>

