**Project Details :**

**Project objective:**

The objective is to develop a comprehensive QA and test suite for the Sporty Shoes website. The QA effort will require the following:

1. Browser-based end-user testing using Selenium WebDriver with TestNG Framework.
2. Load Testing using JMeter.
3. API Testing with Cucumber.
4. API Testing with Postman and Rest Assured.

The end deliverables will be executable scripts and modules that can be run on demand for testing the Sporty Shoes web app.

**Background of the problem statement:**

Sporty Shoes has an e-commerce website that has the following existing features in place:

* Users can view products.
* If users want to purchase something, they can first sign up and then log in.
* Users can add multiple items to their cart and do a checkout.
* Users have a dashboard that lets them edit their profile, view past purchases, and view their cart.
* Once users do a checkout, the items are cleared from their cart and an order is generated which is stored in their order history.

The above application is already functional. What is needed now is to add a testing layer that will ensure that everything is passed through QA.

**Implementation Requirements**

The following deliverables are expected:

1. Automate the below API endpoints using Rest-Assured

* Retrieve the list of all products in the store.
* Retrieve the list of all registered users.
* Add the product.
* Delete the product.
* Update the product.

1. Create Selenium scripts using TestNG to test all the pages in the web app that will automate:

* Login page
* Registration Page
* Add Product to cart page.
* Place Order Page

1. Create JMeter scripts to do load testing of the homepage and the product detail page.
2. Setup Cucumber in Java Project and write Feature Files using Gherkin to test the API endpoints mentioned in point 1 above.
3. Create Postman scripts to test the following API endpoints:

* Retrieve the list of all products in the store.
* Retrieve the list of all registered users.
* Add the product.
* Delete the product.
* Update the product.

**Tester details**

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**Concepts used in the project.**

1. Browser-based end-user testing using Selenium WebDriver with TestNG Framework.
2. Load Testing using JMeter.
3. API Testing with Cucumber.
4. API Testing with Postman and Rest Assured.

**Links to the GitHub repository to verify the project completion.**

GitHub Link : [HEY-DEMO/ATE\_Capstone: Final project (github.com)](https://github.com/HEY-DEMO/ATE_Capstone)

Git Clone : git clone https://github.com/HEY-DEMO/ATE\_Capstone.git

Open Rest Assured Test, selenium and cucumber bdd : [ATE\_Capstone/rest assured(bdd) and selenium/capstone\_project at master · HEY-DEMO/ATE\_Capstone (github.com)](https://github.com/HEY-DEMO/ATE_Capstone/tree/master/rest%20assured(bdd)%20and%20selenium/capstone_project)

Documents link : <https://github.com/wahidKhan74/ATE_Capstone/blob/main/1.%20Rest%20Assured%20Test/Rest%20Assured%20Test%20-%20Tech%20Spec.docx>

Execution Steps :

Got to scr/test/java and select the test and run it using testing

Open jmeter add the jmx file by drag and drop and click on run

Document link: [ATE\_Capstone/JMeter at master · HEY-DEMO/ATE\_Capstone (github.com)](https://github.com/HEY-DEMO/ATE_Capstone/tree/master/JMeter)

Open postman and drag drop the json collection file and select each

request and click on send.

Document link: [ATE\_Capstone/postman at master · HEY-DEMO/ATE\_Capstone (github.com)](https://github.com/HEY-DEMO/ATE_Capstone/tree/master/postman)

**Your conclusion on enhancing the application and defining the USPs (Unique Selling Points)**

I was able to successfully test the website using selenium, rest assured and cucumber. Everything was working as it was intended. Did load testing using jmeter and the system was handling the load well enough.

Using postman, tested the endpoints with different methods like get, post, put, delete.