



Faculty of Computers and Artificial Intelligence

Cairo University

2025

Software Testing & QA Course

API Testing + Automation testing using Robot Framework / Selenium - Assignment#2

Deadline & Submission:

1. Teams: Form a team of 3-4 students from the same group or the same TA.
2. Upload it on Classroom with a file named:
A2_student1ID_student2ID_student3ID_GroupName.zip
e.g., A2_20130001_20130002_S1_S2.zip
3. Cheating could lead to severe consequences.
4. Deadline is Saturday 3/5/2025

Assignment Description:

Q1- Test a public API using Postman, by creating and organizing requests into a collection. The goal is to validate various aspects of the API including basic GET/POST behavior and authentication.

Q2 - Given the below three scenarios, you're required to create one Test Suite containing 3 Test cases one separate test case for each scenario that can confirm the success of these scenarios using Robot Framework.

Question 1 (API Testing Using Postman):-

API: <https://fakestoreapi.com/>

Deliverables:

- Postman collection (.postman_collection.json).
- Environment file (.postman_environment.json) [Optional]
- **README.md** with instruction.

Test Scenarios:

1- Create User

Method: POST /users

Body: Valid user data

Test: Status 200, response has user ID

2-Get All Users

Method: GET /users

Test: Status 200, non-empty array

3-Login User

Method: POST /auth/login

Body: {"username": "mor_2314", "password": "83r5^_"}

Test: Status 200, response includes token

4- Get All Products

Method: GET /products

Test: Status 200, non-empty array

5- Get Product by ID

Method: GET /products/1

Test: Status 200, title field exists

6- Create Cart

Method: POST /carts

Body: JSON with userId, date, and products

Test: Status 201, response contains cart ID

7- Get a Single Cart by ID

Method: GET /carts/1

Test: Status 200, user id and products exists.

8-Delete a Cart

Method: Delete /carts/1

Test: Status 200

9- Get All Carts

Method: GET /carts

Test: Status 200, non-empty array

10- Add negative tests, at least one case for each scenario. (e.g., invalid login)

Question 2 (Robot Framework +Selenium):-

Deliverables:-

One folder containing one TestSuite.robot file.

Scenario 1: Verify user can search for a product (ex:smart watch) on the AliExpress homepage

- **Given** that the user is on the AliExpress homepage <https://www.aliexpress.com/>.
- **When** the user enters a search query "smart watch" (or any other product name) in the search bar.
- **And** clicks the search button
- **Then** the search results page should display products related to the search query.

Scenario 2: Verify user can filter results by category

- **Given** that the user is on the AliExpress homepage <https://www.aliexpress.com/>.
- **When** the user enters a search query ex:"smart watch" (or any other product name) in the search bar.
- **And** clicks the search button
- **Then** the search results page should display products related to the search query.
- **When** the user applies a category filter such as (Ex: select price range = 580 - 1249)
- **Then** the results should be narrowed to that category
- **And** the filter section should reflect the selected category

Scenario 3: Verify user can add an item to the cart

- **Given** that the user is on the AliExpress homepage <https://www.aliexpress.com/>.
- **When** the user enters a search query ex:"smart watch" (or any other product name) in the search bar.
- **And** clicks the search button
- **Then** the search results page should display products related to the search query.
- **When** the user clicks on a specific product (ex:smart watch) from the search results
- **And** clicks "Add to Cart" on the product page
- **Then** the cart icon should update with the item
- **When** the user clicks on the cart icon
- **Selected Item should be displayed in the cart page.**

Scenario 4: Verify user can change website language

- **Given** that the user is on the AliExpress homepage <https://www.aliexpress.com/>
- **When** the user opens the language settings.
- **And** selects a different language (e.g., **Arabic, English.**)
- **Then** the website interface should reflect the selected language.

Scenario 5: Verify user can login to their account

- **Given** the user is on the AliExpress homepage <https://www.aliexpress.com/>
- **When** the user clicks the "Sign In" button.
- **And** enters valid login credentials.
- **And** clicks the "Sign In" or "Submit" button.
- **Then** the user should be redirected to their account/dashboard page.
- **And** a welcome message or user-specific menu should be visible.

Scenario 6: Verify user can change currency

- **Given** the user is on the AliExpress homepage <https://www.aliexpress.com/>
- **When** the user opens the currency selector in the top bar.
- **And** selects a different currency (e.g., USD instead of EGP).
- **Then** product prices across the site should update and display in the selected currency.

Bonus:-

Scenario 7: Verify product images can be zoomed

- **Given** the user is on a product page.
- **When** the user hovers over or clicks the product image.
- **Then** the image should zoom or open in a lightbox view with zoom options.

Scenario 8: Verify user can change shipping destination country

- **Given** the user is on the AliExpress homepage <https://www.aliexpress.com/>
- **When** the user clicks on the shipping location in the top bar.
- **And** selects a different country (e.g., United Arab Emirates instead of Egypt).
- **Then** shipping options and prices across the site should reflect the selected country.