

O C T O B E R   2 0 2 3



Kampus  
Merdeka  
INDONESIA JAYA

alterra  
academy

# MINI PROJECT

Mia Aprilia Satya - Quality Engineer (QE)

Alterra Academy

MSIB BATCH 5



# TABLE OF CONTENT

**01. Background Project**

**02. MVP (Minimum Viable Product)**

**03. Tools Used**

**04. Program Structure**

**05. Product Success**

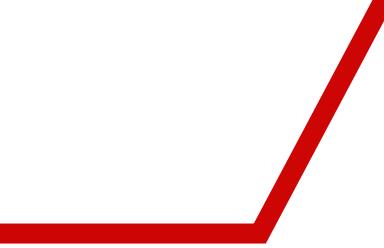
**06. AI Implementation**

**07. Pipeline CI Implementation**

**08. Executive Summary**

# **BACKGROUND PROJECT**

Alta Shop merupakan *platform e-commerce* yang meliputi *API*, *website* dan *mobile*. Alta Shop ini perlu dilakukan pengujian untuk memastikan dan menjaga kualitas bahwa semua fungsionalitas pada aplikasi Alta Shop berjalan dengan baik dan layak digunakan oleh *user*. Pada mini project kali ini mahasiswa kelas QE diberikan tugas sesuai *requirements* yang berlaku, dalam hal tersebut adalah menguji kualitas dari aplikasi Alta Shop yang dikembangkan oleh **Alterra Academy** guna mengukur pemahaman dan memenuhi tugas mini project.



# **MVP**

## **(MINIMUM VIABLE PRODUCT)**

# Test Case & Test Scenario Formatting

**01. Key Features**

**02. Test Case ID**

**03. Scenario Name**

**04. Scenario Type**

**05. Test Priority**

**06. Test Case Description**

**07. Pre-Condition**

**08. Test Steps**

**09. Test Data**

**10. Expected Result**

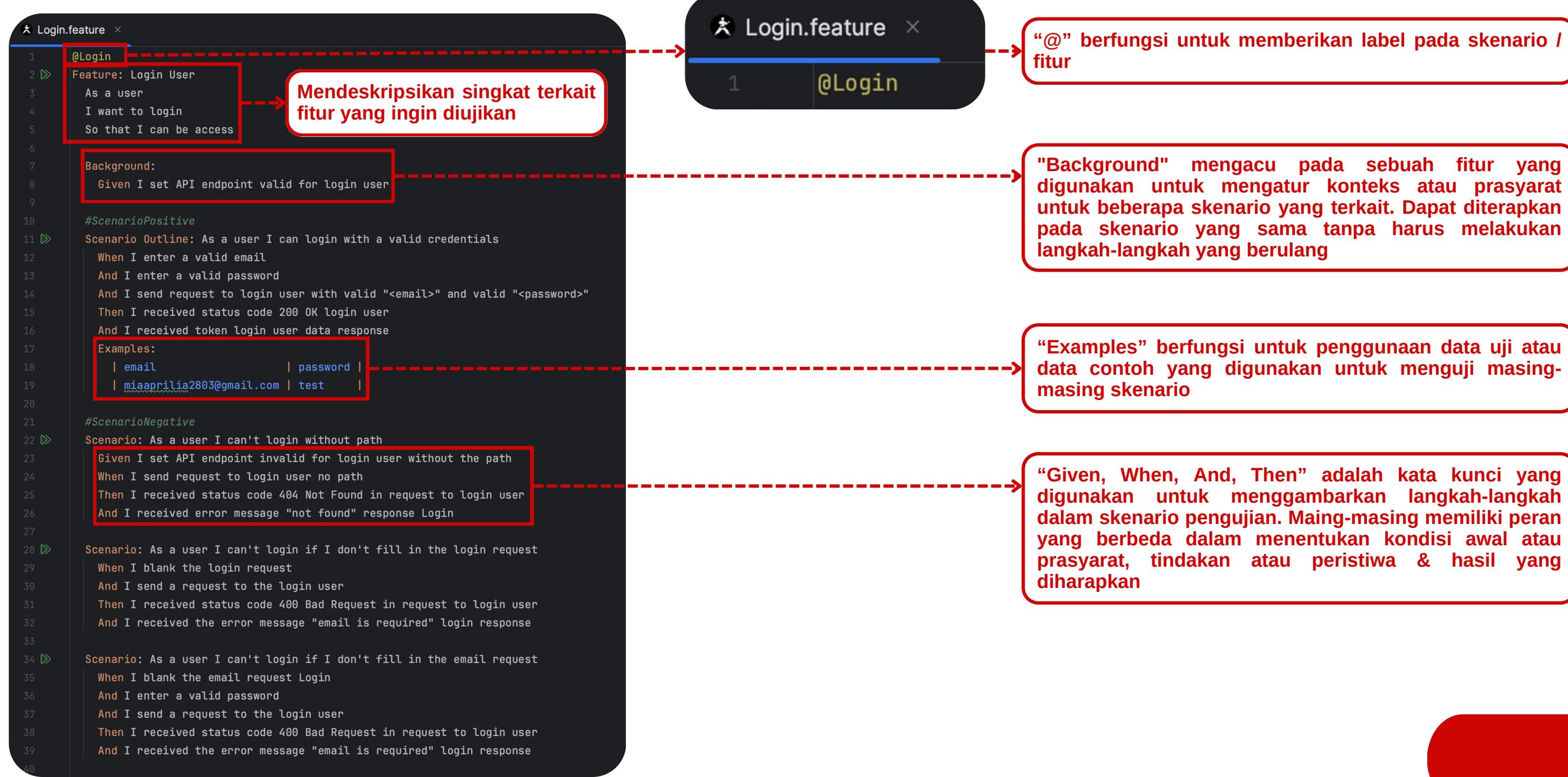
**12. Actual Result**

**13. Result**

#	Key Features	Test Case ID	Scenario Name	Scenario Type	Test Priority	Test Case Description	Pre-Condition	Test Steps	Test Data	Expected Result	Actual Result	Result
1	Login Feature	ASAI-1	As a user I can login with a valid credentials	Positive	Medium	Verify if the user can login using valid credentials	I set the endpoint on the login page	1. I enter valid email 2. I enter valid password 3. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>  Email: miaaprilia2803@gmail.com  Password: test	1. User redirect to home page	1. User redirect to home page	Passed
2	Login Feature	ASAI-2	As a user I can't login if I don't fill in the login request	Negative	Medium	Verify if the user can't login using a blank fill login request	I set the endpoint on the login page	1. I blank form login 2. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>	1. I see error message appear "email is required"	1. I see error message appear "email is required"	Passed
3	Login Feature	ASAI-3	As a user I can't login if I don't fill in the email request	Negative	Medium	Verify if the user can't login using a blank fill email request	I set the endpoint on the login page	1. I blank email 2. I enter valid password 3. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>	1. I see error message appear "email is required"	1. I see error message appear "email is required"	Passed
4	Login Feature	ASAI-4	As a user I can't login if I don't fill in the password request	Negative	Medium	Verify if the user can't login using a blank fill password request	I set the endpoint on the login page	1. I enter valid email 2. I blank password 3. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>	1. I see error message appear "password is required"	1. I see error message appear "password is required"	Passed
5	Login Feature	ASAI-5	As a user I can't login with an invalid email	Negative	Medium	Verify if the user can't login using invalid email	I set the endpoint on the login page	1. I enter invalid email 2. I enter valid password 3. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>  Email: miaaprilia28@gmail.com  Password: test	1. I see error message appear "record not found"	1. I see error message appear "record not found"	Passed
6	Login Feature	ASAI-6	As a user I can't login with an invalid password	Negative	Medium	Verify if the user can't login using invalid password	I set the endpoint on the login page	1. I enter valid email 2. I enter invalid password 3. I tap login button	Environment: <a href="https://alta-shop.vercel.app/auth/login">https://alta-shop.vercel.app/auth/login</a>  Email: miaaprilia2803@gmail.com  Password: 123	1. I see error message appear "email or password is invalid"  1. I see error message appear "email or password is invalid"	1. I see error message appear "email or password is invalid"	Passed

**ASA-NN  
ASW-NN  
ASM-NN**

# Test Case & Test Scenario Formatting



# Test Case & Test Scenario Formating

## API PLATFORM

```

1 package starter.stepdefinitions.authentication;
2
3 > import ...
4
5 public class LoginSteps {
6     @Steps
7     Login login;
8
9     @Given("I set API endpoint valid for login user")
10    public void setAPIEndpointValidLoginUser() { login.setAPIEndpointValidLoginUser(); }
11
12    @When("I enter a valid email")
13    public void enterValidEmail() { }
14
15    @And("I enter a valid password")
16    public void enterValidPassword() { login.enterValidPassword(); }
17
18    @And("I send request to login user with valid {string} and valid {string}")
19    public void sendRequestValidLoginUser(String email, String password) { login.sendRequestValidLoginUser(email, password); }
20
21    @Then("I received status code 200 OK login user")
22    public void receivedStatusCode200OKLoginUser() { login.receivedStatusCode200OKLoginUser(); }
23
24    @And("I received token login user data response")
25    public void receivedTokenLoginUserDataResponse() { login.receivedTokenLoginUserDataResponse(); }
26
27    @Given("I set API endpoint invalid for login user without the path")
28    public void setAPIEndpointInvalidLoginUser() { login.setAPIEndpointInvalidLoginUser(); }
29
30    @When("I send request to login user no path")
31    public void sendRequestLoginUserNoPath() { login.sendRequestLoginUserNoPath(); }
32
33    @Then("I received status code 404 Not Found in request to login user")
34    public void receivedStatusCode404NotFoundInRequestLoginUser() { login.receivedStatusCode404NotFoundInRequestLoginUser(); }
35
36    @And("I received error message \"not found\" response Login")
37    public void receivedErrorMessageNotFoundLogin() { login.receivedErrorMessageNotFoundLogin(); }
38
39
40
41
42
43
44
45
46
47
48
49
50
51

```

Class Name

Inisialisasi class name

Memanggil class name pada package lain

Inisialisasi step

Memanggil method lain pada login class

Variable string

## WEB PLATFORM

```

11
12 public class LoginSteps {
13     16 usages
14     @Steps
15     LoginPage loginPage;
16
17     1 usage
18     @Steps
19     ProductPage productPage;
20
21     @Given("I set the endpoint on the login page")
22     public void setEndpointOnTheLoginPage() {
23         loginPage.openUrl( absoluteUrl: "https://alta-shop.vercel.app/auth/login");
24         loginPage.validateOnLoginPage();
25     }
26
27     // Scenario Positive
28     @When("I enter valid email")
29     public void enterValidEmail() { loginPage.inputEmail("miaaprilia2803@gmail.com"); }
30
31     @And("I enter valid password")
32     public void enterValidPassword() { loginPage.inputPassword("test"); }
33
34     @And("I tap login button")
35     public void tapLoginButton() { loginPage.tapLoginButton(); }
36
37     @Then("User redirect to home page")
38     public void userRedirectHomepage() {
39         Assertions.assertTrue(productPage.validateOnLoginPage());
40     }
41
42     // Scenario Negative
43     @When("I blank form login")
44     public void blankFormLogin() { loginPage.inputEmail(""); }
45
46     @Then("I see error message appear 'email is required'")
47     public void seeErrorMessageAppearEmailIsRequired() {
48         Assertions.assertTrue(loginPage.validateOnLoginPage());
49     }
50
51     @When("I blank email in login page")
52     public void blankEmailInLoginPage() { loginPage.inputEmail(""); }
53
54     @When("I blank password in login")
55     public void blankPasswordInLoginPage() { loginPage.inputPassword(""); }
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
79
80
81
82
83
84
85
86
87
88
89
89
90
91
92
93
94
95
96
97
98
99

```

“openUrl” digunakan untuk membuka (mengakses) suatu URL (Uniform Resource Locator) di dalam sebuah program.

Nilai Parameter

Pernyataan  
“Assertions.assertTrue()“ sebuah pernyataan assertion yang digunakan untuk memeriksa apakah ekspresi di dalamnya menghasilkan nilai true atau false

# Test Case & Test Scenario Formating

## API PLATFORM

The screenshot shows a Java code editor with a file named `Login.java`. The code is annotated with several callouts:

- Class Name**: Points to the class definition `public class Login {`.
- Deklarasi variable url**: Points to the declaration of a static final string `private static final String url = "https://altashop-api.fly.dev/api";`.
- A large red box highlights the main body of the class, containing steps like `@Step("I set API endpoint valid for login user")` and `public String setAPIEndpointValidLoginUser() { return url + "/auth/login"; }`.
- Another red box highlights the `sendRequestValidLoginUser` method, which uses SerenityRest to send a POST request with JSON body parameters.
- Red boxes also highlight assertions like `restAssuredThat(response -> response.statusCode(200))` and schema validation using `JsonSchemaHelper`.

## WEB PLATFORM

The screenshot shows a Java code editor with a file named `LoginPage.java`. The code is annotated with several callouts:

- "XPath" berguna untuk memberikan alamat lengkap dari elemen tersebut dalam struktur dokumen HTML.**: Points to the `emailField` method, which returns a By object found via XPath.
- "Public Boolean"**: Points to the `validateOnLoginPage` method, which returns a boolean value indicating if the login button is displayed.
- "isDisplayed()"**: Points to the `isDisplayed` method used in the validate method.
- "Public Void"**: Points to the `inputForm` method, which takes email and password as parameters and does not return a value.
- Red boxes highlight other methods like `inputEmail` and `inputPassword`, and annotations like `@Step` and `@Given`.



### Test Management Tools



Google Sheets

### Tracking Management Tools



### Tools For Web UI Testing



### Tools For RESTful API Testing



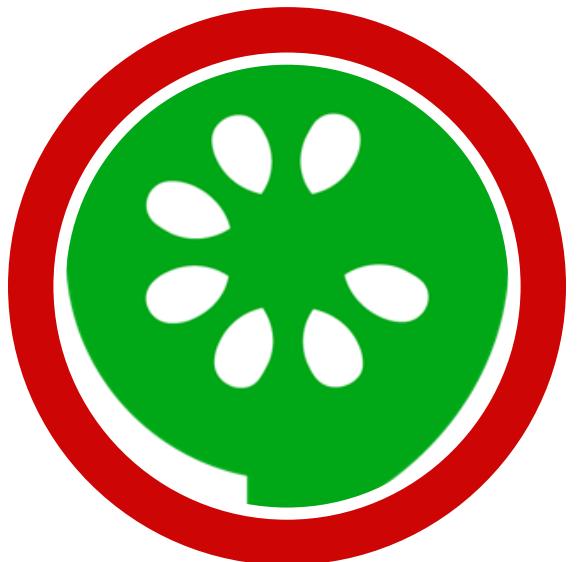
REST-Assured  
GET, POST, PUT, PATCH, DELETE

### Tools For Mobile Testing

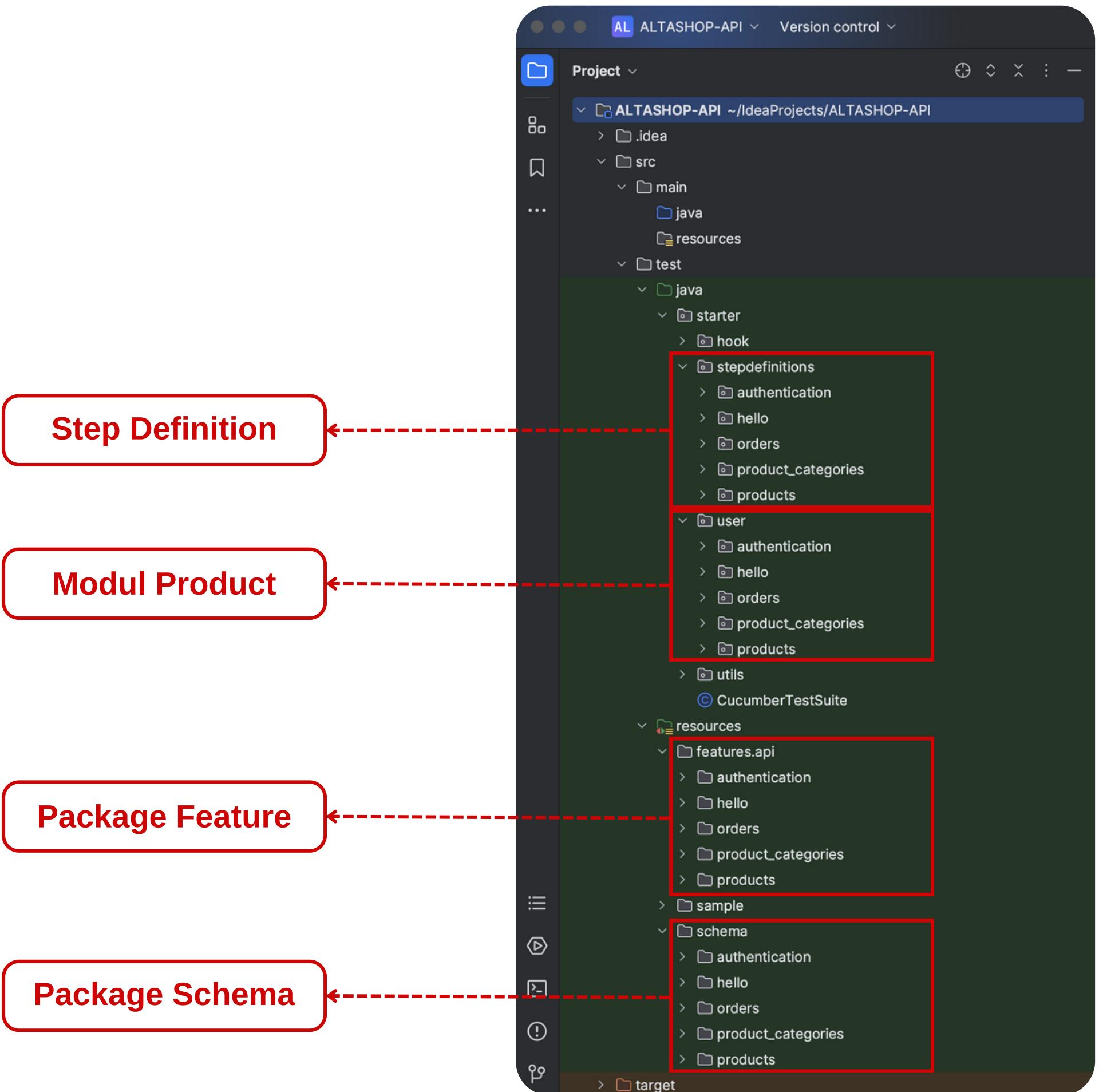


# TOOLS USED

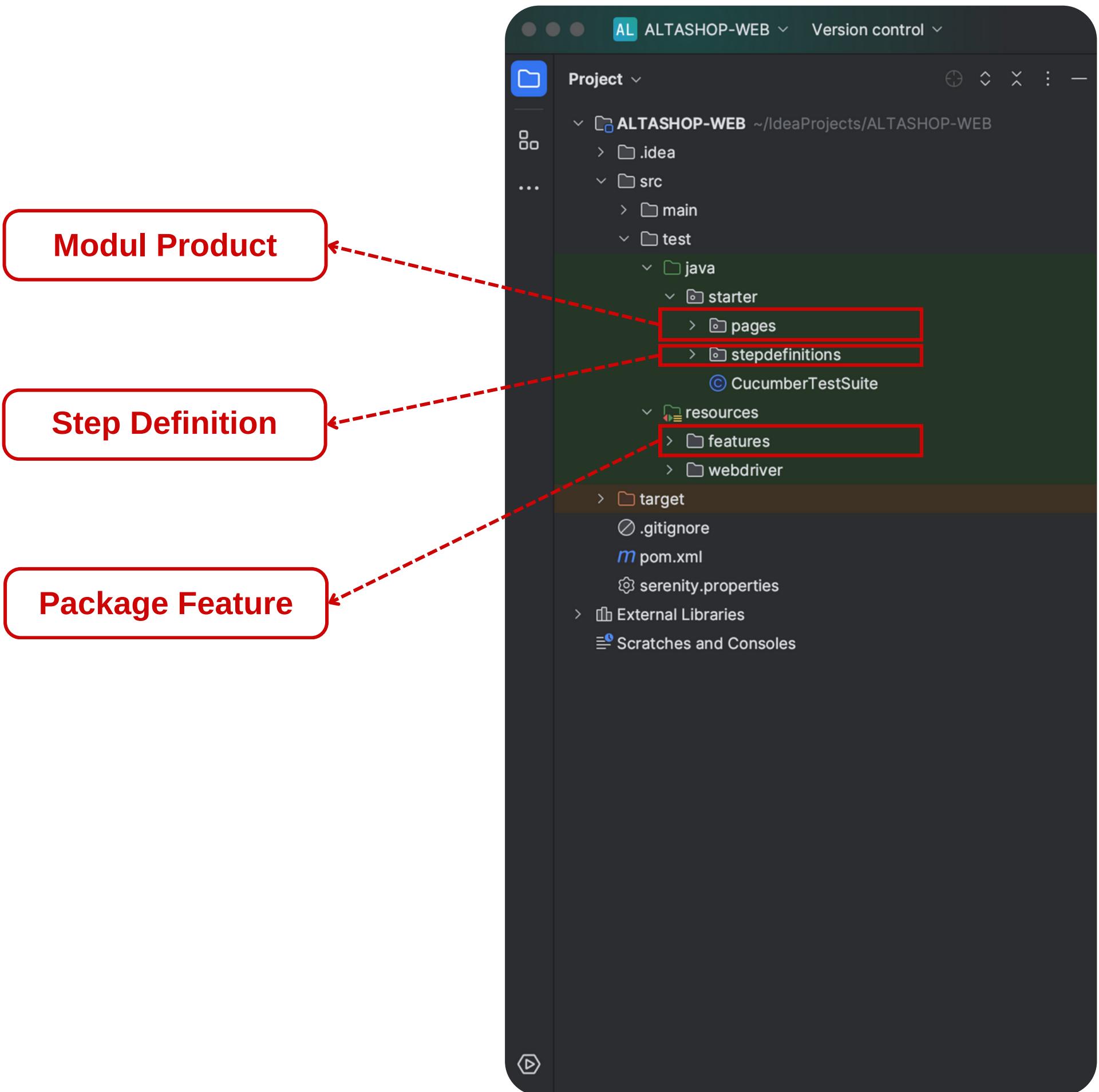
## OTHER TOOLS USED



# **PROGRAM STRUCTURE**

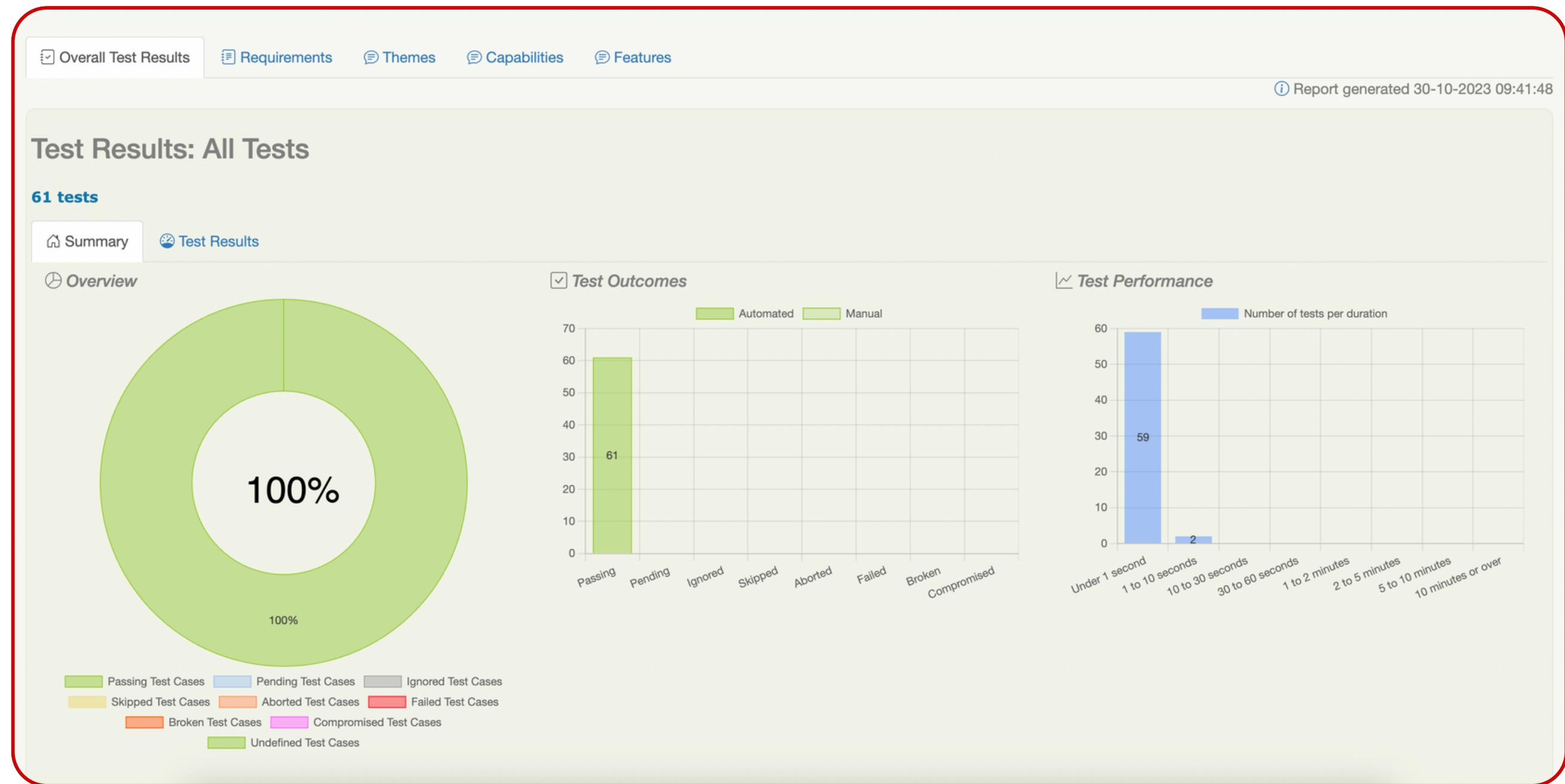


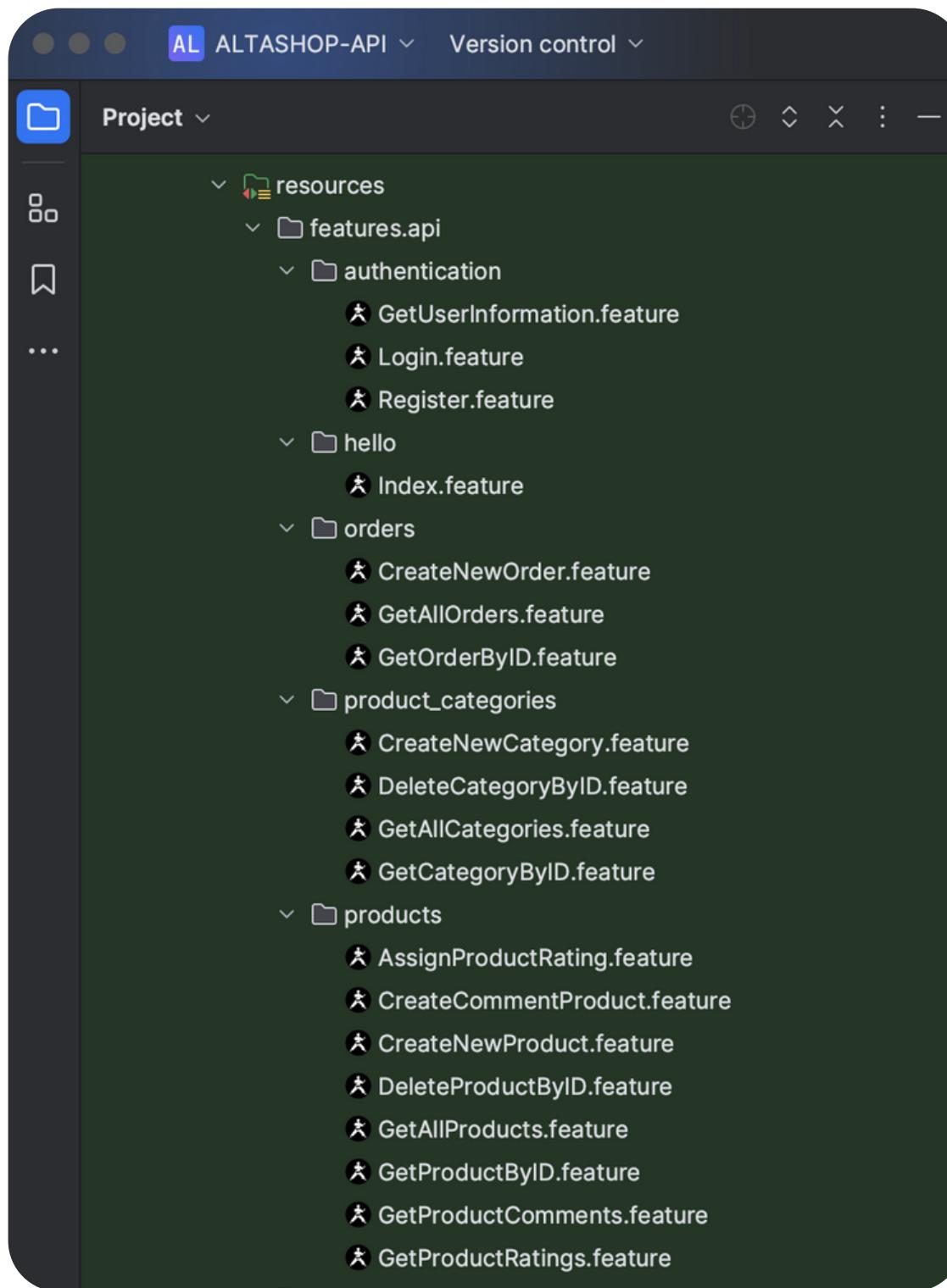
# API AUTOMATION TESTING



# WEB AUTOMATION TESTING

# **PRODUCT SUCCESS**





## AUTHENTICATION FEATURE

GET - Get User Information  
POST - Register  
POST - Login

## HELLO FEATURE

GET - Index

## ORDERS FEATURE

GET - Get All Orders  
GET - Get Orders By ID  
POST - Create New Order

## PRODUCT CATEGORIES FEATURE

GET - Get Category By ID  
GET - Get All Categories  
POST - Create New Category  
DEL - Delete Category By ID

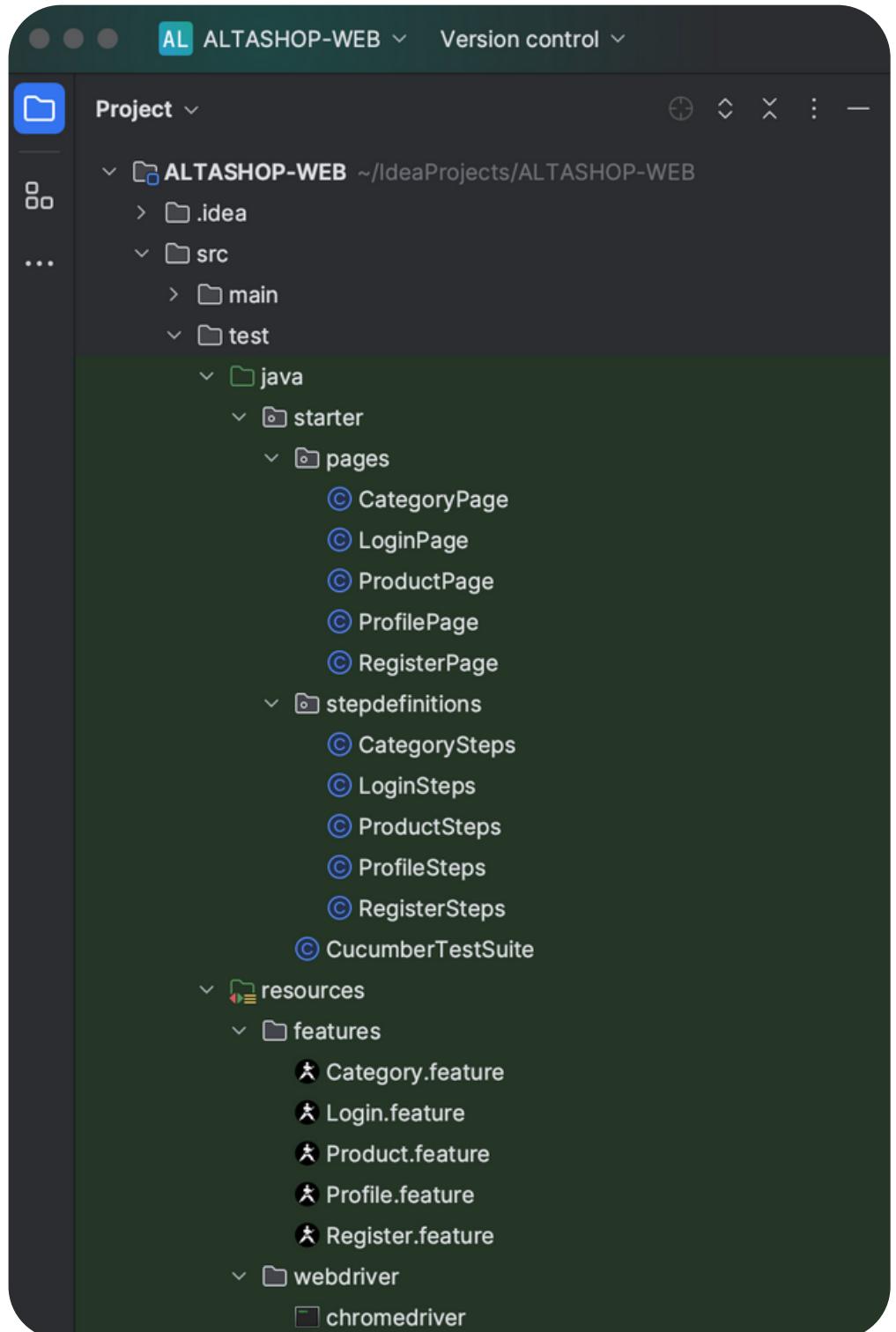
## PRODUCT FEATURE

GET - Get Product By ID  
GET - Get All Products  
GET - Get Product Ratings  
GET - Get Product Comments  
POST - Create New Product  
POST - Assign Product Rating  
POST - Create Comment Product  
DEL - Delete Product By ID

## TESTING FEATURE







## REGISTER FEATURE

Success Register  
Failed Register

## LOGIN FEATURE

Success Login  
Failed Login

## PRODUCT FEATURE

See Detail Product  
Create Rating Product  
Add Product to Cart

## CATEGORY FEATURE

Success Select Category  
Failed Select Category

## PROFILE FEATURE

See Transactions  
Logout



Projects   Workspace   Dashboards   Queries   Apps

**ALTA SHOP MOBILE**

**Test runs**

Start new test run   Search for test runs   + Add filter

TITLE	AUTHOR	ENVIRONMENT	TIME	STATUS
✓ Test Run for Remove Item Features Started 4 days ago	Mia Aprilia Satya	Production	⌚ 1s 418ms	<div style="width: 100%;">1</div> ...
✓ Test Run for Add New Item Features Started 4 days ago	Mia Aprilia Satya	Production	⌚ 6s 280ms	<div style="width: 100%;">5</div> ...

**TESTS** ▾

- Repository
- Shared Steps
- Review

**EXECUTION** ▾

- Test Plans
- Test Runs
- Configurations
- Environments

**ISSUES** ▾

- Defects
- Requirements
- Milestones

⚙️ Settings   ⏪ Collapse submenu

# TESTING FEATURE

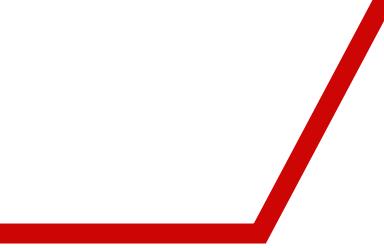
The screenshot shows the ALTA SHOP MOBILE testing interface. The top navigation bar includes 'Projects', 'Workspace', 'Dashboards', 'Queries', 'Apps', a notification bell (with 5 notifications), a message icon, and a user profile. The main title is 'ASM repository' with '6 cases (6) | 2 suites (2)'. On the left sidebar, under 'TESTS', there are sections for 'Repository', 'Shared Steps', and 'Review'. Under 'EXECUTION', there are 'Test Plans', 'Test Runs', 'Configurations', and 'Environments'. Under 'ISSUES', there are 'Defects', 'Requirements', and 'Milestones'. At the bottom of the sidebar are 'Settings' and a 'Collapse submenu' button. The main content area displays 'Add New Item Feature' and 'Remove Item Feature' suites. The 'Add New Item Feature' suite contains 5 items: ASM-1 (As a user I can add new item by inputting all field), ASM-2 (As a user I can't add new items if the name column is left blank), ASM-3 (As a user I want to make sure that I can't enter a name column longer than 50 characters), ASM-4 (As a user I can't add new items if the set quantity is 0), and ASM-5 (As a user I want to make sure that I can reset the input that I previously entered in the add item form). The 'Remove Item Feature' suite contains 1 item: ASM-6 (As a user I want to make sure that I can remove item that has been added).

## ADD NEW ITEM FEATURE

Success Add New Item  
Failed Add New item

## REMOVE ITEM FEATURE

Success Remove Item



# AI **IMPLEMENTATION**

# AI IMPLEMENTATION

**Get started**

Enter an instruction or select a preset, and watch the API respond with a completion that attempts to match the context or pattern you provided.

You can control which model completes your request by changing the model.

**KEEP IN MIND**

- Use good judgment when sharing outputs, and attribute them to your name or company. [Learn more](#).
- Requests submitted to our API and Playground will not be used to train or improve future models. [Learn more](#).
- Our default models' training data cuts off in 2021, so they may not have knowledge of current events.

**Playground**

**SYSTEM**

You are a software tester, create a test case for the login page on the following website <https://alta-shop.vercel.app/auth/login>. Make sure both positive and negative cases are included

**ASSISTANT** Test Case: Login Page - Positive Cases

1. Title: Successful login with valid credentials  
Steps:  
1. Open the website: <https://alta-shop.vercel.app/auth/login>  
2. Enter a valid username in the "Username" field  
3. Enter a valid password in the "Password" field  
4. Click on the "Login" button  
Expected Result: The user should be successfully logged in and redirected to the main dashboard page.

2. Title: Login with valid username and incorrect password  
Steps:  
1. Open the website: <https://alta-shop.vercel.app/auth/login>  
2. Enter a valid username in the "Username" field  
3. Enter an incorrect password in the "Password" field  
4. Click on the "Login" button  
Expected Result: The user should not be logged in and an error message should be displayed indicating incorrect password.

3. Title: Login with valid password and incorrect username  
Steps:  
1. Open the website: <https://alta-shop.vercel.app/auth/login>  
2. Enter an incorrect username in the "Username" field  
3. Enter a valid password in the

Submit

**OPENAI  
PLAYGROUND**

**Selenium IDE - ALTA SHOP - AI\***

**Project: ALTA SHOP - AI\***

Tests

Search tests...

https://alta-shop.vercel.app/auth/login

Command	Target	Value
✓ open		
✓ eyes set viewport size	1680x550	
✓ eyes check window		
✓ eyes check element	id=input-19	
✓ type	id=input-19	miaaprilia2803@gmail.com
✓ eyes check element	id=input-22	
✓ type	id=input-22	test
✓ eyes check element	css=.v-btn--is-elevated > .v-btn__content	
✓ click	css=.v-btn--is-elevated > .v-btn__content	

Command

Target

Value

Description

Log Reference

5. type on id=input-19 with value miaaprilia2803@gmail.com OK  
6. eyesCheckElement on id=input-22 OK  
7. type on id=input-22 with value test OK  
8. eyesCheckElement on css=.v-btn--is-elevated > .v-btn\_\_content OK  
9. click on css=.v-btn--is-elevated > .v-btn\_\_content OK

All visual tests have passed, results: <https://eyes.applitools.com/app/test-results/00000251703315942147/00000251703315942014?accountId=C7mvXvgD70egZvVY6txt6Q...>

Log Feature - Valid Credentials' completed successfully

**APPLITOOLS**  
**APPLITOOLS FOR**  
**SELENIUM IDE**

## TESTING FEATURE



**Project: ALTA SHOP - AI**

Tests ▾ +

Search tests...

- ✓ Login Feature - Blank Email
- ✓ Login Feature - Blank Password
- ✓ Login Feature - Credentials Not Registered in the Da
- ✓ Login Feature - Invalid Email
- ✓ Login Feature - Invalid Password
- ✓ Login Feature - Valid Credentials

- Login Feature - Credentials Not Registered in the Database  
3 Nov 2023 at 11:16 AM (1 passed)  
Passed
- Login Feature - Blank Password  
3 Nov 2023 at 11:15 AM (1 passed)  
Passed
- Login Feature - Blank Email  
3 Nov 2023 at 11:15 AM (1 passed)  
Passed
- Login Feature - Valid Credentials  
3 Nov 2023 at 11:14 AM (1 passed)  
Passed
- Login Feature - Invalid Password  
3 Nov 2023 at 11:13 AM (1 passed)  
Passed
- Login Feature - Invalid Email  
3 Nov 2023 at 11:12 AM (1 passed)  
Passed

### LOGIN FEATURE - WEB PLATFORM

Success Login  
Failed Login

# **Pipeline CI IMPLEMENTATION**

## PIPELINE CI IMPLEMENTATION



The screenshot shows the GitHub Actions interface for the repository `miaaprilia / ALTASHOP-API-CICD`. A red box highlights the main content area.

**Actions** tab is selected. A message at the top says "Workflow run deleted successfully.".

**All workflows** section shows "Showing runs from all workflows".

**2 workflow runs** listed:

- Adding test steps**: API Testing in CI Pipeline #3: Commit [a5f7b48](#) pushed by miaaprilia. Status: **main**. Event: 4 minutes ago. Duration: 2m 47s. Action: **...**
- Delete**: API Testing in CI Pipeline #2: Commit [ea4c9e4](#) pushed by miaaprilia. Status: **main**. Event: 22 minutes ago. Duration: 1m 46s. Action: **...**

Filter workflow runs search bar is present.

# **EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

Pengujian fungsionalitas dari web dan api ditemukan 4 bugs dengan *priority 1 high* & 3 *medium* dari 2 *platform* yang diuji, sedangkan pengujian pada *platform mobile* tidak ditemukan bugs saat proses pengujian.

### PLATFORM WEB TESTING

Test runs				
TITLE	AUTHOR	ENVIRONMENT	TIME	STATUS
Test Run for Profile Feature Started 1 hour ago	Mia Aprilia Satya	Profile Feature	5s 810ms	<div style="width: 400px;"><div style="width: 4px; background-color: green;"></div><div style="width: 396px; background-color: red;"></div></div> 4
Test Run for Category Feature Started 1 hour ago	Mia Aprilia Satya	Category Feature	12m 31s	<div style="width: 1200px;"><div style="width: 1px; background-color: green;"></div><div style="width: 1199px; background-color: red;"></div></div> 1
Test Run for Product Feature Started 2 hours ago	Mia Aprilia Satya	Product Feature	24s 523ms	<div style="width: 240px;"><div style="width: 5px; background-color: green;"></div><div style="width: 235px; background-color: red;"></div></div> 5
Test Run for Login Feature Started 2 hours ago	Mia Aprilia Satya	Login Feature	33s 58ms	<div style="width: 330px;"><div style="width: 7px; background-color: green;"></div><div style="width: 323px; background-color: red;"></div></div> 7
Test Run for Register Feature Started 2 hours ago	Mia Aprilia Satya	Register Feature	1m 3s	<div style="width: 60px;"><div style="width: 5px; background-color: green;"></div><div style="width: 55px; background-color: red;"></div></div> 5

Defects					
Defect		AUTHOR	ASSIGNEE	SEVERITY	MILESTONE
As a user I can select products based on the categories that contain product items D-3	- created 1 hour ago	Mia Aprilia Satya	Mia Aprilia Satya	Normal	Category
As a user I can be rating product in details page D-2	- created 2 hours ago	Mia Aprilia Satya	Mia Aprilia Satya	Major	Product
As a new user I can't register if the email request format is not appropriate (e.g.: missing @) D-1	- created 2 hours ago	Mia Aprilia Satya	Mia Aprilia Satya	Normal	Register

### PLATFORM API TESTING

Test runs				
TITLE	AUTHOR	ENVIRONMENT	TIME	STATUS
Test Run for Hello Features Started 5 days ago	Mia Aprilia Satya	Hello Features	2s 297ms	<div style="width: 20px;"><div style="width: 2px; background-color: green;"></div><div style="width: 18px; background-color: red;"></div></div> 2
Test Run for Order Features Started 5 days ago	Mia Aprilia Satya	Order Features	9s 456ms	<div style="width: 90px;"><div style="width: 8px; background-color: green;"></div><div style="width: 82px; background-color: red;"></div></div> 8
Test Run for Product Category Features Started 5 days ago	Mia Aprilia Satya	Product Category Feature	11s 638ms	<div style="width: 110px;"><div style="width: 10px; background-color: green;"></div><div style="width: 100px; background-color: red;"></div></div> 10
Test Run for Product Features Started 5 days ago	Mia Aprilia Satya	Product Features	26s 749ms	<div style="width: 260px;"><div style="width: 22px; background-color: green;"></div><div style="width: 238px; background-color: red;"></div></div> 22
Test Run for Authentication Features Started 5 days ago	Mia Aprilia Satya	Authentication Features	46s 707ms	<div style="width: 460px;"><div style="width: 18px; background-color: green;"></div><div style="width: 442px; background-color: red;"></div></div> 18

Defects					
Defect		AUTHOR	ASSIGNEE	SEVERITY	MILESTONE
As a new user I can't register if the email request format is not appropriate (e.g.: missing @) D-1	- created 5 days ago	Mia Aprilia Satya	Mia Aprilia Satya	Normal	Authentication

MIA APRILIA SATYA



**THANK YOU**