REST Assured Java API Testing Framework Architecture

Test Layer:

JUnit/TestNG test classes that define test cases and scenarios.

Step Definitions:

Cucumber step definitions for BDD-style tests.

Request/Response Specifications:

Reusable request and response specifications using RestAssured.

Configuration Layer:

Handles environment-specific configurations and base URIs.

Data Factory:

Generates test data dynamically using libraries like Java Faker.

Models (POJOs):

Plain Old Java Objects for request/response serialization.

Utilities:

Helper classes for logging, assertions, and common operations.

JSON Schemas:

Used for validating API responses against expected schema.

Reporting (Allure):

Generates test execution reports with Allure.

CI/CD Integration:

Automated test execution using Maven, Jenkins, GitHub Actions.