Introduction to Ellithium

A Unified Test Automation Framework

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What is Ellithium?

Ellithium is a unified, powerful, and scalable test automation framework designed to streamline and enhance the testing process.

It supports Web, Mobile, API, SQL, and NoSQL database testing, making it a one-stop solution for all your testing needs.

Built with tools like TestNG, Cucumber, Rest Assured, and Appium, Ellithium ensures faster, more reliable, and maintainable test automation.

Key Features of Ellithium

Unified Framework: Supports Web, Mobile, API, and Database testing.

BDD Support: Write tests in a behavior-driven development style with Cucumber.

Parallel Execution: Run tests in parallel for faster execution.

Allure Reporting: Generate rich, interactive test reports.

CI/CD Integration: Seamless integration with Jenkins, GitHub Actions, and GitLab.

Test Data Generation: Dynamically generate test data using Java Faker.

Supported Testing Platforms

Ellithium supports the following testing platforms:

Web: Automate web applications using Selenium WebDriver.

Mobile: Test native, hybrid, and mobile apps on Android and iOS with Appium.

API: Full support for RESTful services with Rest Assured.

Database: Test SQL and NoSQL databases, including MySQL, PostgreSQL, MongoDB, and more.

Ellithium vs. Selenium

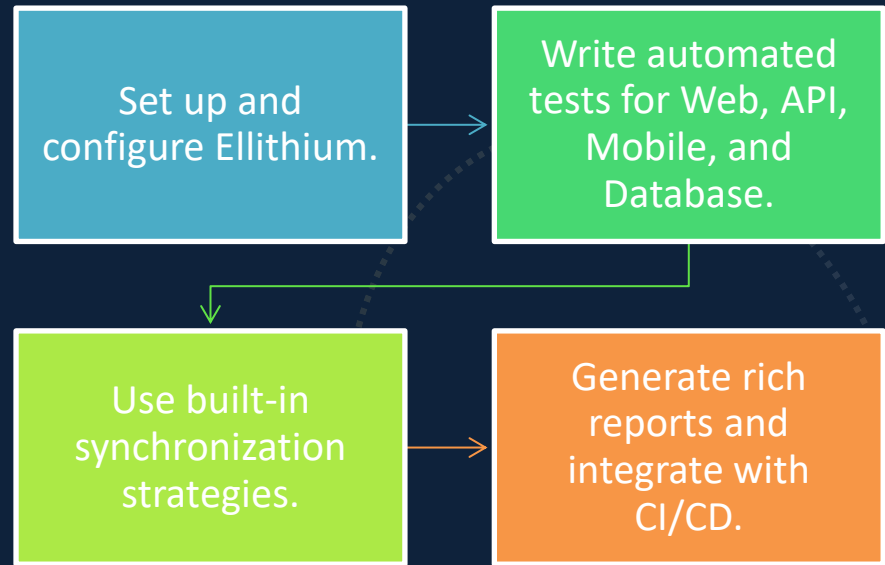| Feature	Selenium	Ellithium
Type	Library (Browser Automation)	Full Framework
Assertions	Requires additional framework (e.g., TestNG, JUnit)	Built-in assertion support
Synchronization	Manual (custom code for FluentWait, ExpectedConditions)	Built-in (FluentWait, ExpectedConditions)
Reporting	Requires integration (e.g., ExtentReports, Allure)	Integrated Allure Reports
Scope	Web only	Web, API, Mobile, Database

Why Choose Ellithium?

Easy to use and beginner-friendly.

Flexible for various testing needs.

Reliable with built-in synchronization.

Scalable for growing projects.

Course Objectives

Set up and configure Ellithium.

Write automated tests for Web, API, Mobile, and Database.

Use built-in synchronization strategies.

Generate rich reports and integrate with CI/CD.

Prerequisites

Basic knowledge of Java.

Familiarity with Maven for dependency management.

An IDE like IntelliJ for coding.

What's Next?

- Setting up Ellithium: Prerequisites and installation.
- Creating your first project with Ellithium.
- Writing and running your first test.

Questions?

- Feel free to ask questions.
- Let's get started with Ellithium!