

Testing tools and frameworks

JUnit

A java test framework that focuses on unit testing.

Pros:

- 1- It is supported by many IDEs.
- 2- It can create self-verifying tests.

TestNG

It is inspired from JUnit, and It has more functionalities such as multithread safety testing.

Pros:

- 1- Test that the code is multithread safe.
- 2- Support for data-driven testing.

Mockito

A Java mocking framework used in unit testing to isolate the tested unit from external behavior.

Pros:

- 1- Better void method handling.
- 2- Annotation report for mock generation.

Cucumber

A behavior-driven development (BDD) testing tool that follows (Given/When/Then) format and it is written in plain English which improves collaboration between different teams.

Kotest

A Kotlin unit testing framework that uses Kotlin features such as infix call and lambda expression.

Pros:

- 1- Built in coroutine support at every level.
- 2- Fluent DSL to make the test more readable.

MockK

A Kotlin-based mocking framework that can handle the specific features of Kotlin classes.

Pros:

- 1- Kotlin-based so it's better for Kotlin projects.
- 2- Mocking final classes.
- 3- Coroutine support.