

Test type	Description	Framework/Tools
Contract Testing	Testing of common agreements or contracts between two applications that interact with each other like consumer and APIs, for example.	This test can be done by inspecting specifications using Swagger interface. There are also interesting tools available like Pact.
Unit Testing	Testing individual units of the code, like functions, interfaces, etc. This is done during the development phase of the application	Depending on the programming language used to build the application, there are different frameworks and tools. Ex, for node.js there is Mocha. Chai. For Java, there is jUnit etc
Integration Testing	In this phase APIs are tested together with the dependent components like backend services, interfaces, etc. These dependencies maybe real or mocked depending on the test strategy. This phase also covers testing of scenarios where more than one APIs are orchestrated to fulfil a feature	Here are a couple of tools that can be used for automation of API integration testing. Postman together with its CLI tool Newman can be used to automate API testing and also to incorporate them in the CI pipeline. Another popular tool for REST API testing is Rest Assured. This is a java based tool.

UI Testing	Testing of APIs by triggering the requests from the front end application. It depends on test strategy based on risk analysis whether or not UI testing is part of API testing	There are many frameworks and tools that support UI test automation. Ex Selenium, Serenity, Cypress, Robot Framework, etc
Non functional testing	This includes many different types of testing like load test, security and authorization test, penetration test, etc	