**Unit Testing Tool (Mocha):**

Unit Testing is a basic and considerable practice step in the software testing process. It is concerned with testing individual units of source code. It’s important to understand what a testing framework is. A testing framework should provide you with at least,

* Rules or conventions for writing test cases and organizing them in test suites.
* Means to automatically execute and self-grade the tests.
* Results of the tests that are displayed and formatted.

And mocha provides all of these.

**Mocha**:

Mocha, sometimes also called MochaJS, is a test framework that runs both in Node.js and in the browser. It was launched back in 2011 and has been one of the JavaScript world's most common testing frameworks since then. It is still arguably the most used and known of the tools.

Mocha is one of the most flexible JavaScript testing libraries available. Mocha provides developers with a base test framework, allowing you to have options as to which assertion, mocking, and spy libraries you want to use. We can use Mocha for the back end as well as front end testing. For writing test cases, Mocha offers a clean foundation. This framework can mock objects to perform flexible tests. Mocha is a feature-rich JavaScript test framework running on Node.js and in the browser, making asynchronous testing simple and fun. Mocha tests run serially, allowing for flexible and accurate reporting, while mapping uncaught exceptions to the correct test cases. It allows you to pair it with the libraries you particularly need for functionalities such as assertions, mocking, and so on.

The downside of such flexibility is that Mocha requires more work for its initial setup. Also, while other frameworks already come with assertions and mocking functionalities, Mocha requires additional tools for that.

Official site: mochajs.org

Repository: github.com/mochajs/mocha