

**Cypress for End-to-End Web Application Testing**

**Course Number:** SCRPT-188
**Duration:** 1 day

**Overview**

[Cypress](https://www.cypress.io/) is a popular front-end testing tool allowing developers to quickly and easily write, debug, and record tests.

This hands-on, live Cypress training course teaches experienced developers and testers how to automate testing of web application interfaces using Cypress.

**Prerequisites**

Participants must have prior testing and/or automation experience, as well as a strong command of the JavaScript language and HTML and DOM fundamentals.

**Materials**

All Cypress training attendees receive courseware covering the topics in this class.

**Software Needed on Each Student PC**

* Chrome Browser
* Node.js latest version
* WebStorm or IntelliJ IDE preferred; class can also be taught using Visual Studio Code or other JavaScript-aware IDE of your choice

**Objectives**

All students will learn how to:

* Create test scripts using Cypress selector playground
* Use the online documentation and the Cypress APIs
* Create, debug, and maintain Cypress test scripts
* Communicate the concepts necessary for testing with Cypress
* Interact and verify web elements using selectors

**Outline**

* Introduction
* Getting Started with Cypress
	+ Cypress Overview
	+ Create a new project with Cypress
	+ Create your first test
	+ Write assertions & run tests
	+ Generate tests with Cypress selector playground
	+ Running Tests
	+ Benefits of using Cypress vs Selenium or WebDriver
* CY Object
	+ How to interact with the browser and navigate between pages
	+ How to interact with page content to simulate user interaction (clicks, data entry)
	+ Using the element selector
* Network Stubbing and Mocks
	+ How to simulate different scenarios by mocking HTTP request
	+ Defining resource files to create mock scenarios
	+ Using HTTP request interceptors
* Cypress Test Runner
	+ Using the test runner to run and replay tests
	+ Recording tests results as a video with Cypress
	+ Time-traveling using test snapshots
* Debugging Tests
	+ Using the browser debugging tools with Cypress
	+ Cypress console outputs
* Cypress & Multiple Browsers
	+ Requirements for running tests in multiple browsers
	+ Creating test suites for multiple browsers
	+ Installing and maintaining Cypress for multiple browsers
* Validation of a Small Web Application with Cypress
	+ Check that expected behavior happens on click
	+ Wait for asynchronous data
	+ Check that the right text shows up on the screen
	+ Check that the right images show up on the screen
* Conclusion