

**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