

# **Cypress Test Automation**

# **Audience Course Cypress Test Automation**

The course Cypress Test Automation is intended for testers and developers who want to use Cypress for testing and test automation of Web Applications and REST APIs.

# **Prerequisites Course Cypress Test Automation**

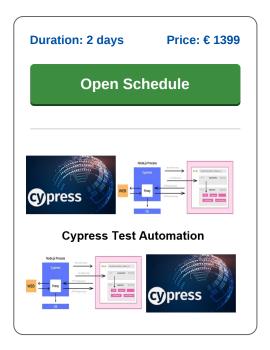
Experience with testing is required. Experience with basic programming is recommended, but not strictly necessary to participate in the course Cypress Test Automation.

### **Realization Training Cypress Test Automation**

Theory and concepts of Cypress are covered through demos and presentations. Exercises and theory are interchanged on a regular basis.

## **Certificate Cypress Test Automation**

After successful completion of the course Cypress Test Automation a certificate of participation will be issued.



# **Content Course Cypress Test Automation**

The course **Cypress** Test Automation is designed to give participants the essential skills and knowledge required to use the powerful JavaScript-based testing framework Cypress for efficient test automation. Cypress has emerged as a leading test automating framework supporting unit tests, component tests and end to end tests.

#### **Intro Cypress**

The course Cypress Test Automation starts with a discussion of Cypress's unique architecture. Tests in automation tools such as Selenium work outside the browser and send external commands via the network. Cypress, on the other hand, runs behind a NodeJS server process and tests in the browser itself.

# **Web Application Testing**

Next Web GUI testing, in which the DOM of a page is first accessed via Element and CSS Selectors, after which Cypress commands control the application, is treated. Then test validation through assertions is covered.

# **REST API Testing**

Attention is paid to REST API testing where HTTP Requests are fired using Cypress commands and HTTP Responses are validated with assertions. The creation of custom Cypress commands is also treated.

#### **Mocks and Stubs**

The use of mocks is discussed with cy.intercept, which isolates the application from external dependencies. Tests are then exclusively about the behavior of the application. The use of stubs in Cypress with cy.stub is also covered.

#### **Test Automation**

Part of the program of the Cypress Test Automation course is also how to automate tests and integrate with CI/CD tools such as GitLab. Attention is paid to cross browser testing and parallelization of tests as well.

# **Reporting in Cypress**

Finally the reporting options in Cypress are covered. The various reporting tools such as the Mocha and Spec reporter are discussed and attention is paid to JUnit reports and Cypress Dashboards.



# **Modules Course Cypress Test Automation**

Module 1 : Cypress Intro	Module 2 : Web GUI Testing	Module 3 : API Testing
What is Cypress?	Document Object Model	Cypress for API Testing
Cypress Architecture	DOM Structure	Writing API Tests
Installing Cypress	Element Selection	cy.request Command
Configure the IDE	CSS Selectors	GET and POST Requests
Creating Projects	Cypress Commands	Request Options
Cypress Configuration	Handling HTTP Requests	Handling Response Objects
CLI Runner	Handling Browser Events	Assertions API Testing
Writing Basic Tests	Interacting with Forms	Cypress.env Command
Types of Test	Navigating Between Pages	Authentication and Authorization
Component Tests	Using Assertions	Building Custom Commands
End tot End Tests	Test Validations	Documenting API Tests
Module 4 : Mocks and Stubs	Module 5 : Test Automation	Module 6 : Cypress Reporting
What are Mocks?	Automating Cypress Tests	Reporting in Cypress
Mocking in Unit Tests	Integration with CI	Mocha Reporter
Intercepting Methods	Create Independent Tests	Spec Reporter
cy.intercept Method	Favore Data Attributes	Configuration in cypress.json
Using Fixtures	Cross Browser Test	JUnit Reports
Mocking API Responses	Avoid cy.wait	Cypress Dashboards
What are Stub?	Avoid after Hooks	Sharing Dashboards
Stubbing in Unit Tests	API Tests in CI/CD	Smart Orchestration
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cy.stub Method	Parallel Testing	Faster CI Builds