

BDD with Cucumber.js Course

Implementing Behavior Driven Development on the modern JavaScript platform

COURSE DESCRIPTION

The 2-day Cucumber.js course shows how to apply BDD in practice: discover and formulate requirements using Given/When/Then, how to make your JavaScript app better by automating scenarios using Cucumber.js. It is all the same if you develop back-end (node.js) or front-end (eg. React) apps, through the series of course exercises you will acquire the necessary skills to become a BDD and Cucumber.js practitioner. The attendees shall receive a certificate upon the successful completion of the course.

LEARNING OBJECTIVES

Learn how to:

- work with Behavior Driven Development using Cucumber.js
- write and maintain executable specification using the Gherkin (Given/When/Then) feature file format
- drive the implementation of the application by BDD scenarios
- design and implement a test automation layer that is easy to maintain even for larger number of tests
- automate application through the domain layer or using browser automation
- use Cucumber.js for ensuring the quality on the back-end (node.js)
- use Cucumber.js for verifying the front-end code running in the browser (e.g. single-page apps with React or Angular.js) with WebdriverIO
- use all important features of Cucumber.js
- integrate these into the existing development process
- become a strong member of a BDD team

TARGET AUDIENCE & STRUCTURE

The course is for developers and testers, who are involved in automating BDD scenarios. As the course exercises are based on pair-programming, product owners or business analysts with basic coding knowledge are also welcome.

A custom training agenda can also be provided on request.

MODULE 1: CAPTURING REQUIREMENTS WITH GIVEN/WHEN/THEN

- *Quick intro/refresh on Behavior Driven Development*
- *Specification by Example – The role of examples in specification:* Discovering rules and examples using structured conversations and Example Mapping
- *Given/When/Then through examples – Good and bad scenario writing patterns:* Checklist for good scenarios; The Gherkin syntax
- *Ubiquitous Language – A language that everyone understands:* Focusing on the domain language; Separation of problem domain and solution domain; Domain model vs. scenarios

MODULE 2: AUTOMATION WITH CUCUMBER.JS

- *Introduction to Cucumber.js:* Setting up Cucumber.js; Cucumber.js automation concept; Naming conventions
- *Introduction to the scenario automation workflow:* Test-first thinking; Outside-in development
- *Working with DataTables:* Working with the Table object; Table assertions
- *Sharing state (data) between steps:* Different state sharing options; Global nature of step definitions; World object
- *Organizing step definitions:* Finding the right structure for the binding code;
- *Automating web applications with WebDriverIO:* Building up automation infrastructure. Using cucumber integration of WebDriverIO. Synchronous and asynchronous step definitions.
- *Structuring the automation layer:* Separation of automation and testing concerns; Layering the automation infrastructure; The Driver pattern; The Page Object Pattern; Nested page objects; Automating UI concepts; Assertions in the automation layer

Note: The modules include UI automation exercises with Web UI automation using WebDriverIO. This is used to demonstrate general UI automation challenges and solutions with Cucumber.js. The UI automation topics can be excluded, extended or replaced by other UI automation technology (e.g. Appium) on request.

PREREQUISITES

A training workstation is required with node.js and an IDE (e.g. Atom or Visual Studio Code) installed.

CERTIFICATION

Participants of the course get a certification issued by Spec Solutions and signed by Gaspar Nagy.

TESTIMONIALS

I had the privilege of being part of Gaspar's BDD training with Javascript and can't recommend enough. As the creator of Specflow, Gaspar transmits information about how BDD is implemented effectively & where the gaps are. His book Discovery focuses on the Requirement exploration part and describes techniques like Example Mapping. Highly recommend Gaspar and his training to organizations.

Biswajit Nanda, Test Automation and Management Expert (UK)

Gaspar delivered SpecFlow training to around 70 staff at three of our sites. The course was very well received and has helped us spread BDD as a practice throughout the business unit. Our staff appreciated that this was a practice-led course and that Gaspar was happy to base the agenda on individual user needs. Q&A sessions were also excellent - he's a very experienced guy.

Chris Stephens, Principal Software Evaluation Architect at Waters Corp. (UK)

ABOUT THE TRAINER

Gáspár Nagy is the creator and main contributor of SpecFlow, regular conference speaker, blogger (<http://gasparnagy.com>), editor of the “BDD Addict” monthly newsletter (<http://bddaddict.com>), and co-author of the “Discovery – Explore behaviour using examples (BDD Books 1)” book (<http://bddbooks.com>).

Gáspár is an independent coach, trainer and test automation expert focusing on helping teams implementing BDD and SpecFlow. He has more than 15 years of experience in enterprise software development as he worked as an architect and agile developer coach.

He is an approved trainer in the Certified Scrum Developer programme of Scrum Alliance and Microsoft Certified Professional for Visual Studio Team Foundation Server.