Updated 05/07/2024

Sign up

Cucumber training: BDD

3 days (21 hours)

Presentation

Behavior-driven development (BDD) is a set of practices designed to reduce communication gaps between team members, foster better understanding of the customer and promote ongoing communication with real-life examples.

Cucumber is a tool that supports **behavior-driven development**. Cucumber reads executable specifications written in plain text and validates that the software does what the specifications say. Each scenario is a list of steps for Cucumber to follow. It checks that the software conforms to the specification and generates a report indicating the success or failure of each scenario.For Cucumber to understand the scenarios, it must respect certain basic syntax rules, called Gherkin.

As with all our training courses, this one will introduce you to the latest stable version and its new features: Cucumber Gherkin v20.

Objectives

- Understanding BDD
- Understanding how Cucumber works
- Learn Gherkin syntax

Target audience

Developers, Javascript Developer, Testers

Prerequisites

Basic knowledge of Javascript.

Cucumber & Gherkin training program

Introduction

* The benefits of acceptance testing and automation
* Presentation of BDD (Behavior-Driven Development) concepts and comparison with TDD (Test-Driven Development)
* Importance of domain language
* What is "Gherkin" syntax and how does it work?

Cucumber installation (prerequisites)

* Install node.js LTS, Cucumber in project operational conditions
* Project creation and VSCode (or other) import
* Understanding the package.json file and its dependencies for this execution context

First steps with Cucumber

* How Cucumber works
* Understanding the use of Cucumber scenarios
* Feature files and the importance of StepDefinition in Cucumber
* Understanding the concept of "glue code" for a Feature file
* The importance of Clean Code for good test maintenance
* Run tests with different runners (IDE, command line, etc.).

Advanced Cucumber features

* Importance of regular expressions in Feature files
* How to reuse functions with different data
* "Data-Driven Testing with Tables
* Tags for greater control over test execution
* Optimizing and securing tests with Hooks
* More complex test scenarios with the help of Background
* Cucumber performance reports
* Cucumber scenario report generation
* Configuration and options for generating Cucumber reports

Integration with Jenkins

- Introduction to the concepts of Continuous Integration and Continuous Delivery
- Importance of automated testing in the CI/CD approach
- Configuring GitHub or Gitlab for a build with Cucumber tests
- Running tests in GitHub or Gitlab
- View test reports from GitHub or Gitlab

Additional English module on request (+2 days)

- Training language: English
- Course level : Beginner to intermediate

Target Audience

- Product Owners, Business Analysts
- Architects, Sr. Programmers, Testers
- Technical Managers, Technical Writers, User Experience Designers

Training methodology

- Frontal, Interactive discussions, working on audience's or predefined examples, group workshops, coaching

Day 1

1st Session Teaching

- Explaining the principles of the Behavior Driven Development approach, scenarios, roles, personas, user journey, ... by example of a website application with user and API interaction.
- Identifying company's real examples.
- Self-organized forming of interdisciplinary groups of 3-4 people
- Groups select 2-3 topics they would like to work on

2nd Session Workshop

- Short presentation of the topics the group have chosen, to ensure all work on different topics covering most important aspects
- Individual group work with coaching Allowing the right time needed to solve the tasks
- Presentation and discussion in the plenum
- Informal exchange of thoughts

3rd Session Workshop

- Repeat 2 nd session or continue work from 1 st session

Q&A

- Answering individual questions
- Feedback
- Requests for 2nd day

"Homework (~1 week)

- Participants apply learnings in their projects
- Identify learning contents and open questions
- In order to prepare please send special requests 3 days before day 2

Day 2 (after Homework ~1 week)

1st Session Teaching

- Deepen knowledge based on "homework
- Answering individual questions
- Addressing special topics
- Informal discussions

2-3 Workshops

- Like day 1 with new mix of groups and topics

Q&A

- Answering individual questions
- Feedback

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.