# Automated testing of JS applications using the Jest library

## Course code: JS\_TEST\_JEST

This course is designed for intermediate JavaScript programmers who want to learn how to write automated tests using the Jest library. We will teach you not only how to design and implement tests, but also how to think economically and rationally about your testing efforts. To successfully complete the course, you need to know both functional and OOP approaches to JavaScript and a basic understanding of how to work with Promises at the [JS\_PROG2] course level.

## For whom the course is intended

This course is designed for intermediate JavaScript programmers who want to learn how to write automated tests using

the Jest library.

## What we will teach you

- Define and categorize tests
- Design and implement automated tests
- Test functions and classes
- Test asynchronous code
- Apply testing strategies to different situations

## Required Entry Level Knowledge

- JavaScript programming at the course level [JS\_PROG2]

#### **Course outline**

Introduction

- Testing and Automation
- Test Categorization
- Test Anatomy
- Is Basic tests
- Test Registration
- Assertion (matchers)
- expect() function
- the truth of the expression
- numbers
- text strings
- arrays and objects
- exceptions Asynchronous code
- Promise
- async / await
- callback
- resolves() and rejects() matcher Initialization and cleanup
- One-time
- Repeatedly
- Order of execution Mocking
- Mock-up function
- Mocking timers and async functions
- module mocking
- partial object mocking
- mock assertion Snapshots

#### GOPAS Praha

Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz GOPAS Brno Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz

#### GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved