

Updated 05/06/2024

Sign up

Zod training

2 days (14 hours)

Presentation

Maintain the validity of your data by specifying rules and preventing errors. Our Zod training will help you keep your applications running smoothly.

Indeed, this TypeScript framework is an ideal technology if you can't guarantee the accuracy of your data. It perfectly complements TypeScript's typing capabilities.

Our training begins with an introduction to the different validation libraries and the Zod API. We'll introduce you to the creation of schemas of all types: primitives, objects, arrays, etc.

We'll then focus on various integrations, such as implementing Zod in an existing project using TypeScript, React or Node.js. Finally, you'll learn about the associated best development practices.

As always, this course is based on the latest version of the technology, [Zod 3.23](#).

Objectives

- Creating schematics with Zod
- Integrating Zod into a TypeScript project
- Good development practices with Zod

Target audience

- Front-end developers
- Technical architects

- Web developers

Prerequisites

Master TypeScript or have taken our [TypeScript training course](#).

OUR ZOD TRAINING PROGRAM

INTRODUCTION TO ZOD

- The market for validation libraries
- Introducing Zod and its benefits
- Installation and configuration
- Use cases
- Zod API overview

SCHEMATIC CREATION

- Defining primitive type schemas
 - String
 - Number
 - Boolean
- Object diagrams
- Table diagrams
- Complex diagrams
 - Unions
 - Intersections
 - Enums
- Conditional and asynchronous validation
- Customize error messages

INTEGRATION WITH TYPESCRIPT

- Why use Zod with TypeScript?
- Automatic type inference
- Generating TypeScript types from Zod schemas
- Strict type verification
- Integrating Zod into existing TypeScript projects

CLIENT-SIDE DATA VALIDATION WITH REACT

- Integrating Zod with React
- Form validation
- Using Zod with React Hook Form

- Handling validation errors in the user interface
- Case study: validating complex forms

SERVER-SIDE DATA VALIDATION WITH NODE.JS AND EXPRESS

- Using Zod with Express.js
- Query validation middleware
- Securing API endpoints
- Error management and feedback to customer
- Case study: creating a secure API with Zod

BEST PRACTICES

- Structuring and organizing diagrams
- Reusing schematics
- Optimizing validation performance
- Writing unit tests for schemas
- Troubleshooting
- Managing schematic migrations

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.