Updated on 05/02/2024

Sign up

Webpack 5 training

1 day (7 hours)

Presentation

Webpack is a set of JavaScript modules. Created in March 2012, its main purpose is to bundle JavaScript files for use in a browser, but it is also capable of transforming, bundling or packaging any resource or asset.

Webpack is an open source bundler that has stood out from its competitors for some years now, thanks to its rich ecosystem of loaders and plug-ins, and its event-oriented architecture familiar to JavaScript developers. What's more, it's easy to install, since you can get started with it without needing a configuration file: we'll take a look at the conventions to follow to benefit from "zero configuration".

In this training course, you'll learn how to use Webpack, from installation to production, using all its features. You'll be able to load files in the right order, avoid calls to unavailable functions and work on web projects more easily and quickly using ECMAScript, all using the right methods.

During this course, you'll learn about the bundler concept, Webpack's scope of action and Webpack's overall operation. After our training, you'll be able to create a minimal configuration, understand the elements required in a minimal configuration, instantiate a first configuration from scratch, add and manage the different environments (production and development).

In addition, in our Webpack training, you'll find out how to customize the configuration for your project's needs, understand and set up Babel for ES5, configure Webpack to use CSS, set up an HMR server, reduce file sizes with minification, secure files with offuscation.

As in all our training courses, we'll be using the latest version of the WebPack 5.9 bundler module, released in April 2023.

Objectives

- Understanding and mastering Webpack architecture
- Discover what's new in Webpack version 5
- Integrate resources of any type into builds
- Learn to use loaders & plugins
- Putting Webpack into production

Target audience

Developer, Tech Lead, Technical Architect

Prerequisites

- A solid grounding in Javascript
- Significant programming experience (intermediate to advanced)
- Experience on large projects with challenges solved with Webpack is a significant advantage

Further information

Webpack is used as a complement to the main JavaScript libraries and frameworks:

- Our Node.JS training
- Our training on Angular 13 & Advanced
- Our training on React & React Advanced

WebPack 5 training program

Introduction

- What is a bundle? What are bundles used for? When should they be used?
- Competing solutions, advantages and disadvantages: the state of the art
    - Parcel
    - Browserify
- Why do you need Webpack?
- Implementation in our application
- Install Webpack and integrate it with NPM
- Integrating Webpack into our JavaScript application

Loaders

- What is Webpack Loader?
- Image management with Webpack

- Use publicPath
- CSS manipulation with Webpack
- Handling the SASS
- Using the latest JavaScript features in Webpack

Plugins

- What is Webpack Plugin?
- Minification Webpack Bundle
- CSS extraction
  - Mini-css-extract-plugin
  - In a separate set
- Browser caching
- How to clean the Dist Folder

Advanced configuration

- Hot Module Replacement
- Lazy Loading
- Tree Shaking

Webpack integration in Node and Express

- Integrate Express into our application
- HTML page server via Express
- Handling JavaScript and CSS via Express

Production and Deployment

- Webpack configuration management
- Using Webpack development server

Companies concerned

This training 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 learning difficulties.

in-company security (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 is used to check that skills have been correctly acquired.

Sanction

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