

Advanced Ruby on Rails training

3 days (21 hours)

Presentation

[Ruby on Rails](#) (RoR) is an open source framework written in Ruby in July 2004, and used in many well-known applications such as Github, Twitch, SoundCloud and Airbnb. Ruby on Rails follows the [MVC](#) architecture and is designed to facilitate web development, notably thanks to functionalities with default behavior, minimizing configuration at the start of a project.

This framework favors convention over configuration, so it can be used without the need to spend hours configuring. This does not make it any less powerful, as it can be fully customized during the development cycle. This approach also reduces the number of lines of code and makes the code more readable. The course will introduce you to the latest stable release and its new features, [Rails 7.1](#).

Take our training course and discover one of the most popular frameworks the world of web development!

Objectives

- Integrating Ruby on Rails into a project
- Adopting good practices
- Learn about the advanced features and concepts of Ruby on Rails

Target audience

- Web Developer

Prerequisites

- Notions in Web development (HTML5/CSS3/JS) and Ruby (or another high-level language)
- [Test My Knowledge](#)

Technical requirements

- One computer with Ruby and Docker installed per participant

Training in best development practices with Ruby on Rails

Rails&Ruby improvements

- Notable improvements from Ruby 2.0 to Ruby 3.5
- Notable improvements from Rails 4.0 to Rails 7.1

Project management and maximizing the use of git

- Overview of a classic git workflow
- Branch organization
- The hidden powers of git

Testing in Rails

- Overview of the different types of test
- The benefits of Test-Driven Development
- Coverage and balance between different tests
- The different Ruby&Rails test libraries

Continuous integration - Intégration continue

- The importance of continuous integration
- Rails tool horizons
- Common problems and solutions
- Possible increase in Continuous Delivery

Minimalist controllers

- Push towards lightweight controllers
- ActiveRecord API powers
- Get minimalist controllers

Well-managed models

- How models evolve
- The need to organize models
- Use of concerns or service classes

JavaScript and rails

- Rails can be used as an API Rest
- A tour of the different application frameworks: Angular, React, Vue
- JS package integration via NPM or Yarn
- Using AJAX with js.erb files

Rails application ecosystem

- The importance of controlling your stack
- How to choose your gems
- Training your Gemfile

Application deployment with Nginx reverse proxy

- Different choices of application server gems
- Using Apache or Nginx as a reverse proxy
- Proxy options vs. application options
- Rapid prototyping with Docker

Rails and safety

- Access policy and permissions management
- The underlying protection of Rails
- OWASP recommendations
- What remains to be protected
- Using vulnerability scanners
- How to stay informed and safe?

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 on entry to training complies with Qualiopi quality criteria. As soon as

On final registration, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, and his or her expectations and personal objectives for the forthcoming training course, 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, 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.