AMBIENT-IT

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Sign up

Adonis training

2 days (14 hours)

Presentation

AdonisJS is a modern web framework based on Node.js and TypeScript. Designed to create REST APIs, modular back-ends and secure applications, it becomes a gas pedal for building reliable and productive services.

Our AdonisJS training course will help you master project structure, route management, Lucid ORM and authentication. You'll learn how to model data, validate user input, secure your endpoints and prepare for production deployment.

At the end of the course, you'll know how to design, test and deploy applications with AdonisJS, set up a complete API, integrate middleware and industrialize your projects with security and performance best practices.

Like all our training courses, this one is based on the latest stable release and adopts a resolutely practical and operational approach.

Objectives

- Understand the AdonisJS architecture and ecosystem
- Model and manage data with Lucid ORM
- Implement application authentication and security
- Design and document REST APIs
- Deploy and optimize an AdonisJS project in production

Target audience

- Node.js and JavaScript developers
- Backend and full-stack teams looking for a structured framework

Prerequisites

- Basic knowledge of JavaScript/Node.js and REST APIs
- Basic knowledge of SQL and relational databases
- General knowledge of backend development

AdonisJS training program

[Day 1 - Morning]

AdonisJS fundamentals and getting started

- Overview of the AdonisJS framework and the Node.js ecosystem
- Initializing a project via the CLI and understanding the structure (routes, controllers, providers)
- Define middleware for managing HTTP requests and responses
- Create simple REST routes and controllers
- Managing configuration and environment variables
- Practical workshop: starting up a Hello API with routing, controllers and middleware

[Day 1 - Afternoon] Persistence

with the Lucid ORM

- Discover Lucid: templates, migrations and Query Builder
- Creating relationships (hasOne, hasMany, manyToMany) and navigating graphs
- Using seeders and factories for datasets
- Validating server-side input with the Validator
- Errors, transactions and pagination of results
- Practical workshop: model a simple domain and expose CRUD endpoints

Authentication and application security

- Set up authentication (sessions, tokens) and protect routes
- Manage roles/authorizations and access middleware

- Securing with CSRF, CORS, HTTPS/TLS configuration
- Password management and OWASP best practices
- Structuring error responses and logging
- Practical workshop: implementing registration/log-in and protecting a private space

[Day 2 - Morning]

Designing robust REST APIs

- Designing a versioned REST API (paths, verbs, status)
- Advanced validation, serialization and consistent error handling
- Filters, sorting, pagination and response conventions
- Endpoint testing with Postman / automatic scripts
- API documentation (OpenAPI Swagger) - principles and options
- Practical workshop: building a complete business resource (CRUD + filters + pagination)

[Day 2 - Afternoon]

Advanced services and asynchronism

- Service organization and injection via the IoC container
- Asynchronous tasks, jobs/queues and events/listeners
- File management and e-mailing (overview of providers)
- Observability: logs, metrics and best practices
- Preparing for production: variables, secrets, configuration
- Practical workshop: triggering an asynchronous job and tracing its execution

Testing, performance and deployment

- Writing unit and functional tests (routes, services, models)
- Optimizing performance: cache, N+1, index, paging strategy
- Multi-environment configuration strategies
- Security best practices and review checklist
- Deployment scenarios (PaaS/IaaS, containers)
- Practical workshop: test pipeline and deployment of an AdonisJS API

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT 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 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 training: 60% hands-on, 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.

Certification

A certificate will be awarded to each trainee who has completed the entire course.