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Sign up

Gatsby Jamstack CMS Training

3 days (21 hours)

Presentation

Gatsby is a Jamstack framework that combines static generation, GraphQL and a rich ecosystem of plugins to produce fast, secure and easy-to-edit sites via a headless CMS.

The "Gatsby Jamstack CMS" training course guides you from design to production: data model, pages/templates, MDX, optimized images, CMS integration, SSG/DSG/SSR modes, quality (Lighthouse, a11y), and CI/CD automation for deployment on CDN/edge.

At the end of the course, you'll have a Gatsby site that's maintainable, high-performance and ready to scale, with a fluid editorial flow (preview, publication, monitoring).

Like all our training courses, this one is based on the latest stable version v5.14.0 of Gatsby.

Objectives

- Architect a Jamstack site with Gatsby + CMS
- Master the GraphQL data layer, MDX and images
- Optimize Core Web Vitals, SEO and accessibility
- Industrialize testing, Lighthouse and CI/CD audits
- Deploy on CDN/edge with editorial preview

Target audience

- Front-end developers
- Web integrators
- Content engineers
- Tech leads
- Marketing teams

Prerequisites

- Good grounding in HTML/CSS/JS and React
- Knowledge of Git

Gatsby Jamstack CMS training program

Jamstack & Gatsby: concepts and ecosystem

- Jamstack principles: SSG, CDN, edge
- Positioning Gatsby vs. Next.js/Nuxt/Astro
- Architecture: GraphQL data layer, plugins, build
- Hosting: Netlify, Vercel, Cloudflare Pages
- SEO, perf and accessibility best practices
- Workshop: framing the project and defining objectives

Starting a modern Gatsby project

- Initialize with create-gatsby and configuration
- Structure: src/pages, src/templates, gatsby-config
- ESLint/Prettier, environments and secrets
- Images with gatsby-plugin-image
- Local data: Markdown/JSON
- Workshop: bootstrap and first build

Data Sourcing & GraphQL

- Discovering schema and GraphiQL
- Source plugins (filesystem, REST, GraphQL, CMS)
- Gatsby Node APIs: createPages, onCreateNode
- Page queries vs. static queries
- Optimizing queries, avoiding over-fetching
- Workshop: dynamic pages from a dataset

Pages, templates, routes & MDX

- Automatic pages vs. createPage
- Routing, slugs, 404s and redirects
- MDX and interactive components
- Layouts and partials
- Internationalization (i18n)
- Workshop: MDX blog with templates

Styling & Design System

- CSS Modules, CSS-in-JS, Tailwind
- Accessible and responsive components
- Design tokens, colors, typography
- Loading states, micro-interactions
- Optimizing LCP/CLS/INP
- Workshop: component library

Integrating a Headless CMS

- Overview: Contentful, Sanity, Strapi, etc.
- Content model: types, validations, relationships
- Webhooks and previews
- Images, rich text and modular blocks
- Editorial governance
- Workshop: plugging in a CMS and publishing

Rendering modes & advanced functionalities

- SSG, DSG and SSR
- Client-side data (CSR) and forms
- Advanced images (AVIF/WebP, placeholders)
- SEO: metas, sitemap, JSON-LD
- PWA: manifest, service worker
- Workshop: hybrid SSG page + customer data

Quality, testing & security

- Unit and e2e testing (Jest/Playwright)
- Audit a11y and Lighthouse
- Front-end observability: logs, metrics
- Security headers, CSP, secrets
- RGPD: consent, analytics
- Workshop: test pipeline + Lighthouse

Build, deployment & CI/CD

- Optimize build (cache, images)
- Deploy on CDN/edge
- Editorial and branch previews
- Production monitoring: errors, performance
- Update playbook
- Workshop: complete CI/CD (preview ? prod)

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 enabling 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 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 is used to check that skills have been correctly acquired.

Certification

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