GatsbyJS: Getting Started

INTRODUCING GATSBYJS

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JAMStack

JavaScript

API's

Markup (HTML)

JAMStack

Modern web development architecture based on client-side JavaScript, reusable APIs, and prebuilt Markup.

HTML

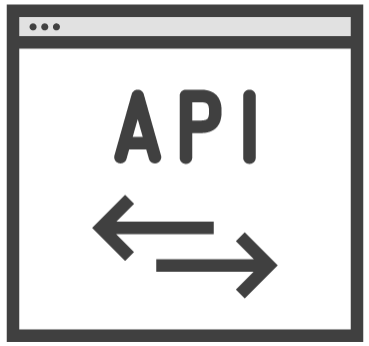
Images

CSS

JavaScript

Calls external APIs

External API's



Created by you (developer or company)

By an external organization

The Role of JavaScript and API's

JavaScript

Client and presentation logic

API's

Business logic

Site Rendering

Traditional applications

At runtime in the server side

JAMStack

At build time in the developer's computer or a build server

JAMStack Advantages

Better performance

- Hosting in a CDN is a plus

Better security

- Reduced attack surface

Less expensive to and easier to scale

- The cloud is your friend

Better discoverability

- SEO friendly

JAMStack Powered Sites

Build time instead of runtime

JavaScript makes it dynamic

- Angular, Vue, React, jQuery or plain JavaScript

Static content

Call external APIs when needed

Not Powered by JAMStack

Server-side render sites in general

- E.g.: CMS like WordPress

Server-side rendered web applications

- ASP.NET, Spring, Node, RoR, Django

Isomorphic SPA's

- Angular, Vue, React

GatsbyJS and JAMStack

GatsbyJS

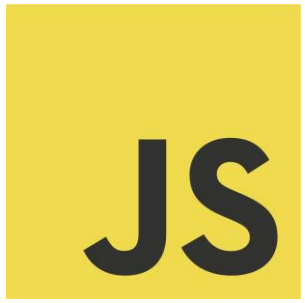
Blazing fast sites and apps

JAMStack

JavaScript, APIs and Markup

GatsbyJS

A modern front-end framework for creating static sites and applications.

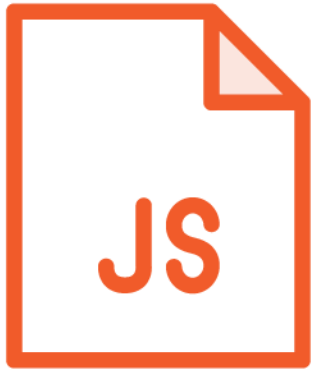


GatsbyJS

A modern front-end framework for creating static sites and applications.

ReactJS GraphQL WebPack JavaScript

ReactJS

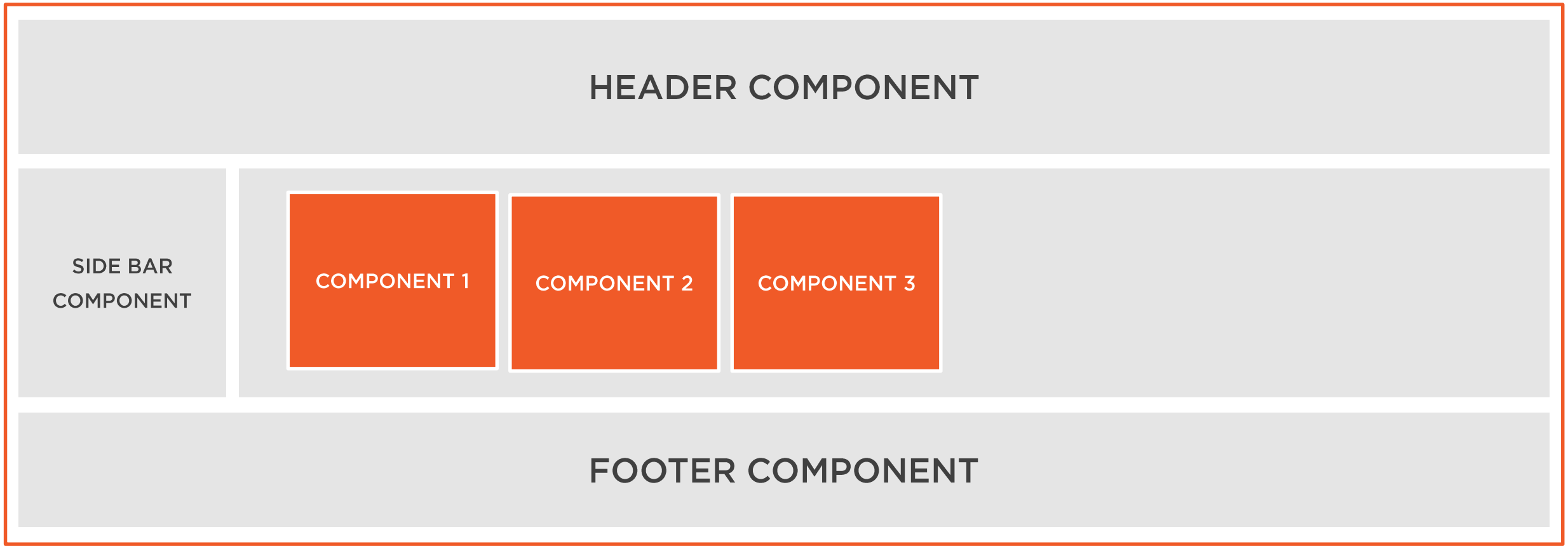


JavaScript library for building modern user interfaces

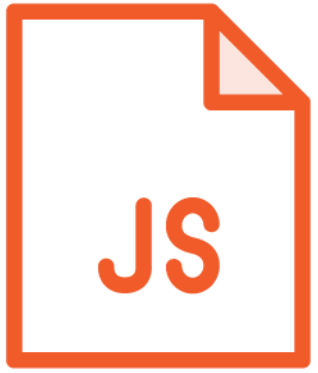
Built by Facebook

Industry standard

React Component Model



GraphQL



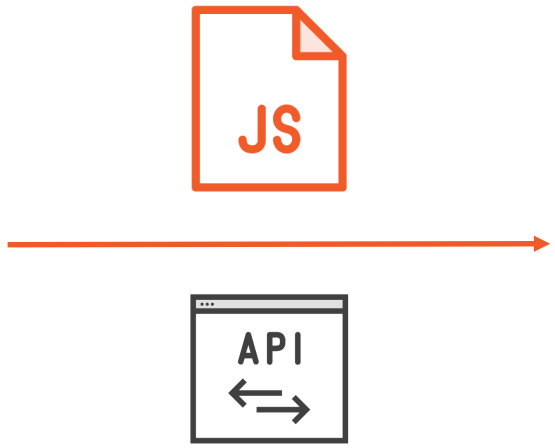
Also created by Facebook

Query language

GraphQL Query

GraphQL Query

```
{
  person {
    customerId
    name
    address
  }
}
```



Response

```
{
  "customerId": 123
  "name": "John",
  "address": "123 Main St."
}
```

ReactJS GraphQL WebPack JavaScript

Gatsby Creates Static Sites

HTML

CSS

JavaScript

Images and other static content

GraphQL in a Nutshell

GraphQL in a Nutshell

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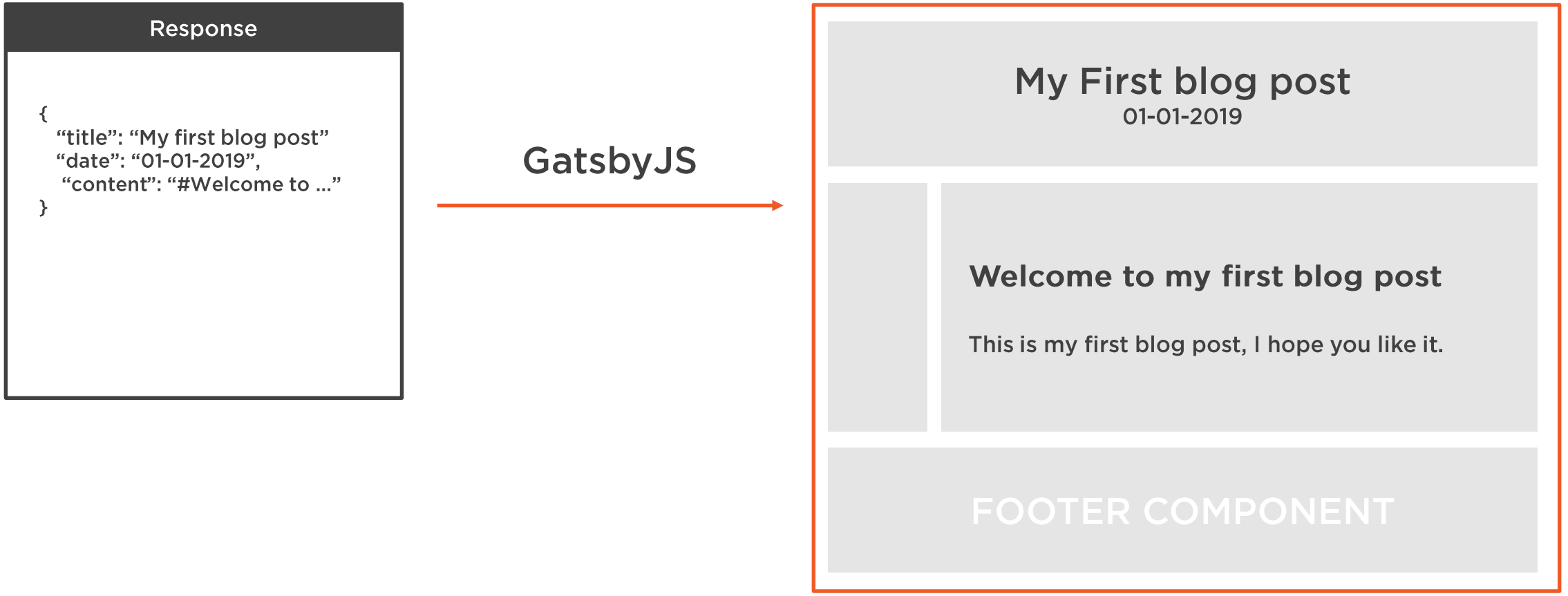

A Classic Server-side Rendered Example

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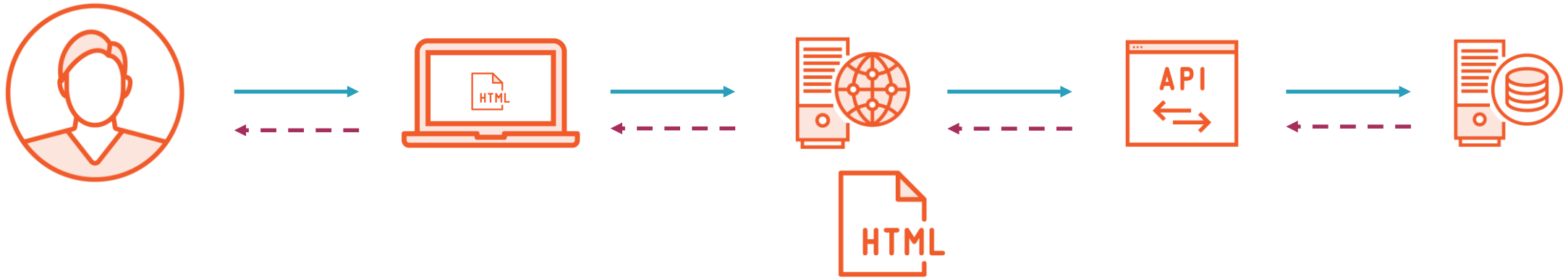
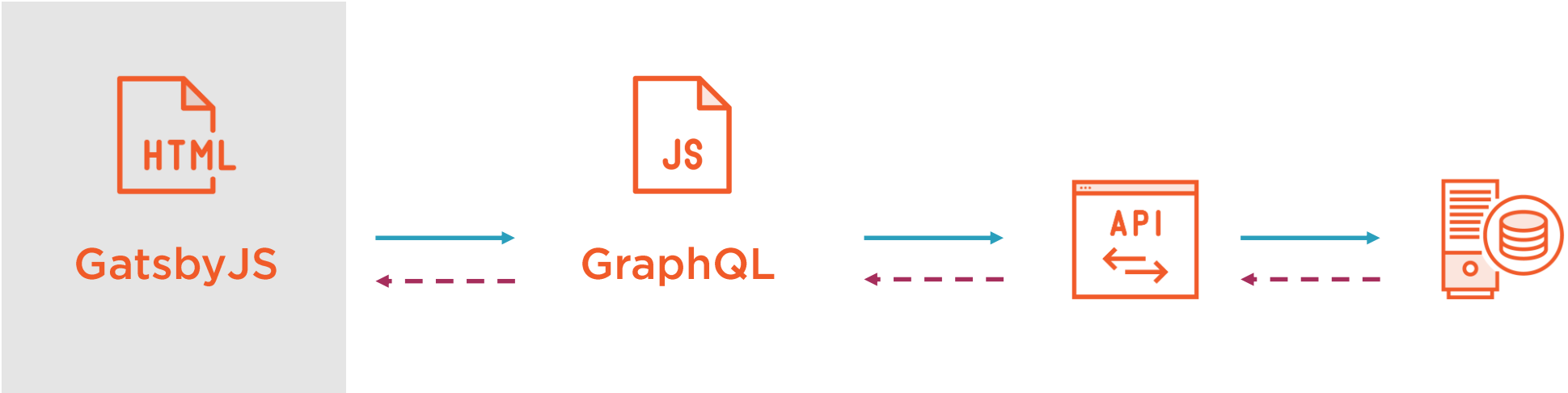
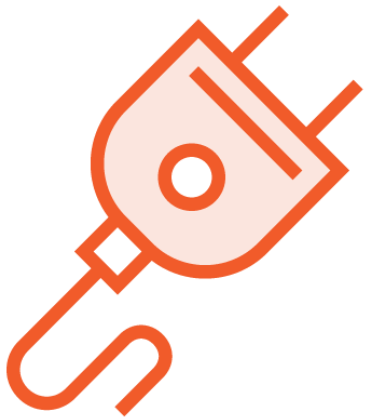


Gatsby's Build-time Rendering Example



Gatsby's Plugin Ecosystem



- Gatsby has a ton of plugins
- Images
- Offline access
- Sitemaps
- JSON
- TypeScript
- And many, many more

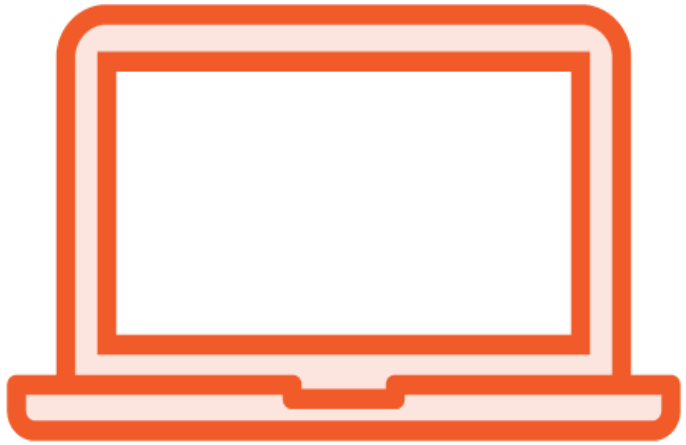
Gatsby It's Pretty Cool

- Great development experience
- Uses a modern workflow
- With future-proof technologies
- JAMstack-powered
- Fast and secure sites and applications
- Easy and inexpensive to host
- Great SEO results

Create Web Apps with the Power of ReactJS

Sites

All sorts of static sites



Apps

But also powerful front-end web applications

Browser Support

GatsbyJS

Internet explorer 9+

All ever-green browsers

Demo

Install NodeJS

Install Gatsby CLI

Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine.

Download for macOS (x64)

10.13.0 LTS
Recommended For Most Users

Other Downloads | Changelog | API Docs

11.1.0 Current
Latest Features

Other Downloads | Changelog | API Docs

Or have a look at the Long Term Support (LTS) schedule.

Sign up for Node.js Everywhere, the official Node.js Monthly Newsletter.

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Node.js Project Licensing Information

Homebrew

Homebrew is a free and open-source software package management system that simplifies the installation of software on Apple's macOS operating system

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Installing Homebrew for MAC

Type this code in the command line

Installing NodeJS

Type this code in the command line

NPM

npm is the package manager for JavaScript and the world's largest software registry.

Installing Gatsby CLI

Type this code in the command line

Starter Templates

Boilerplate Gatsby sites

Inherits styles, JavaScript, images and more

Demo

Create a new site based on a starter template

Gatsby Configuration Files

gatsby-browser.js

Gatsby settings affecting the browser

gatsby-config.js

Main configuration file for a Gatsby site

gatsby-node.js

Site build process configuration