Gatsby themes are plugins that include a <code>gatsby-config.js</code> file and add pre-configured functionality, data sourcing, and/or UI code to Gatsby sites. You can think of Gatsby themes as separate Gatsby sites that can be put together and allow you to split up a larger Gatsby project!

Introduction

To introduce themes, let's walk through the journey that led to the creation of themes.

If you've ever created a Gatsby site completely from scratch, you know that there are a number of decisions to be made. Take, for example, creating a blog. You need to decide where your data will live, how it's accessed, how it's displayed and styled, etc.

Gatsby starters

One existing way to quickly create Gatsby sites with similar functionality is to use "Gatsby starters". Starters are essentially Gatsby sites with pre-configured functionality for a particular purpose. You download an entire Gatsby site, pre-built for a particular purpose (e.g. blogging, portfolio site, etc) and customize from there.

These traditional starters take a first step toward reducing the level of effort involved in creating a new Gatsby site. However, there are two main problems with traditional starters:

- Sites created from a traditional starter have basically been "ejected" from the starter -- They maintain no connection to the starter, and begin to diverge immediately. If the starter is updated later, there's no easy way to pull upstream changes into an existing project.
- If you created multiple sites using the same starter, and later wanted to make the same update to all of those sites, you'd have to do them individually, site-by-site.

Gatsby themes

Enter themes. Gatsby themes allow Gatsby site functionality to be packaged as a standalone product for others (and yourself!) to easily reuse. Using a traditional starter, all of your default configuration lives directly in your site. Using a theme, all of your default configuration lives in an npm package.

Themes solve the problems that traditional starters experience:

- Sites created using a Gatsby theme can adopt upstream changes to the theme -- themes are versioned packages that can be updated like any other package.
- You can create multiple sites that consume the same theme. To make updates across those sites, you can
 update the central theme and bump the version in the sites through package.json files (rather than
 spending the time to tediously update the functionality of each individual site).
- Themes are composable. You could install a blog theme alongside a notes theme, alongside an e-commerce theme (and so forth)

A Gatsby theme is effectively a composable Gatsby config. They provide a higher-level approach to working with Gatsby that abstracts away the complex or repetitive parts into a reusable package.

When should I use or build a theme?

Consider using a theme if:

- You already have an existing Gatsby site and can't start from a starter
- You want to be able to update to the latest version of a feature on your site
- You want multiple features on your site, but there is no starter with all the features -- you can use multiple themes, composed in one Gatsby site

Consider building a theme if:

- You plan on re-using similar functionality across multiple Gatsby sites
- You would like to share new Gatsby functionality to the community

What's next?

- <u>Using a Gatsby Theme</u>
- <u>Using Multiple Gatsby Themes</u>
- Shadowing
- <u>Building Themes</u>
- Converting a Starter
- Theme Composition
- Conventions

Related blog posts

For additional context, check out blog posts published during the development of themes:

- Why Themes?
- Themes Roadmap
- Getting Started with Gatsby Themes and MDX
- Watch Us Build a Theme Live
- Introducing Gatsby Themes by Chris Biscardi at Gatsby Days
- See all blog posts on themes