

3 Create a New React App

These docs are old and won't be updated. Go to react.dev for the new React docs.
See Start a New React Project for the recommended ways to create an app.

Use an integrated toolchain for the best user and developer experience.

This page describes a few popular React toolchains which help with tasks like:

- Scaling to many files and components.
- Using third-party libraries from npm.
- Detecting common mistakes early.
- Live-editing CSS and JS in development.
- Optimizing the output for production.

The toolchains recommended on this page **don't require configuration to get started**.

You Might Not Need a Toolchain

If you don't experience the problems described above or don't feel comfortable using JavaScript tools yet, consider adding React as a plain `<script>` tag on an HTML page, optionally with JSX.

This is also **the easiest way to integrate React into an existing website**. You can always add a larger toolchain if you find it helpful!

Recommended Toolchains

The React team primarily recommends these solutions:

- If you're **learning React** or **creating a new single-page app**, use Create React App.
- If you're building a **server-rendered website with Node.js**, try Next.js.
- If you're building a **static content-oriented website**, try Gatsby.
- If you're building a **component library** or **integrating with an existing codebase**, try More Flexible Toolchains.

Create React App

Create React App is a comfortable environment for **learning React**, and is the best way to start building **a new single-page application** in React.

It sets up your development environment so that you can use the latest JavaScript features, provides a nice developer experience, and optimizes your app for production. You'll need to have Node `>= 14.0.0` and npm `>= 5.6` on your machine. To create a project, run:

```
npx create-react-app my-app  
cd my-app  
npm start
```

Note

npx on the first line is not a typo — it's a package runner tool that comes with npm 5.2+.

Create React App doesn't handle backend logic or databases; it just creates a frontend build pipeline, so you can use it with any backend you want. Under the hood, it uses Babel and webpack, but you don't need to know anything about them.

When you're ready to deploy to production, running `npm run build` will create an optimized build of your app in the `build` folder. You can learn more about Create React App from its README and the User Guide.

Next.js

Next.js is a popular and lightweight framework for **static and server-rendered applications** built with React. It includes **styling and routing solutions** out of the box, and assumes that you're using Node.js as the server environment.

Learn Next.js from its official guide.

Gatsby

Gatsby is the best way to create **static websites** with React. It lets you use React components, but outputs pre-rendered HTML and CSS to guarantee the fastest load time.

Learn Gatsby from its official guide and a gallery of starter kits.

More Flexible Toolchains

The following toolchains offer more flexibility and choice. We recommend them to more experienced users:

- **Neutrino** combines the power of webpack with the simplicity of presets, and includes a preset for React apps and React components.
- **Nx** is a toolkit for full-stack monorepo development, with built-in support for React, Next.js, Express, and more.
- **Parcel** is a fast, zero configuration web application bundler that works with React.
- **Razzle** is a server-rendering framework that doesn't require any configuration, but offers more flexibility than Next.js.

Creating a Toolchain from Scratch

A JavaScript build toolchain typically consists of:

- A **package manager**, such as Yarn or npm. It lets you take advantage of a vast ecosystem of third-party packages, and easily install or update them.
- A **bundler**, such as webpack or Parcel. It lets you write modular code and bundle it together into small packages to optimize load time.

- A **compiler** such as Babel. It lets you write modern JavaScript code that still works in older browsers.

If you prefer to set up your own JavaScript toolchain from scratch, check out this [guide](#) that re-creates some of the Create React App functionality.

Don't forget to ensure your custom toolchain is correctly set up for production.