





Next.js

Next.js is a popular React framework that enables server-side rendering (SSR) and static site generation (SSG) for React applications.

It provides an easy-to-use and powerful setup for building server-rendered React applications with great performance and SEO benefits.







Installation



You can create a new Next.js project by using the following command:

```
npx create-next-app my-next-app
cd my-next-app
```





Basic Structure

Next.js v12 follows a conventional folder structure:

```
my-next-app
— pages
| — index.js
| — about.js
| — public
| — images
| — components
| — Header.js
| — Footer.js
| — styles
| — global.css
```





Basic Structure II



- pages: Each file inside this folder becomes a route accessible in the application.
- public: Contains static assets like images, which can be used in pages.
- components: Reusable components used across multiple pages.
- styles: Global styles and CSS files.





Basic Page



To create a basic page, simply create a new file inside the pages directory:





Dynamic Routing



Next.js allows you to create dynamic routes using brackets []. For example, to create a dynamic post page:





Server-side Rendering (SSR)

Next.js supports server-side rendering, allowing you to fetch data and render pages on the server before sending them to the client:

```
. .
                                ssr.js
// pages/ssr.js
import React from 'react';
const SSRPage = ({ serverData }) ⇒ {
  return (
    <div>
      <h1>Server-Side Rendering</h1>
      Data fetched on the server: {serverData}
  );
};
export async function getServerSideProps() {
  const serverData = 'This data was fetched on the server-side.';
  return {
    props: {
      serverData,
  };
export default SSRPage;
```





API Routes



Next.js allows you to create API routes, providing a simple way to create custom serverless API endpoints:



