

# Exploring Static Site Generation (SSG)

: A Complete Overview



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# What is Static Site Generation (SSG)?

Static Site Generation (SSG) is a method of generating HTML pages during the build process, resulting in a set of static files that can be served to clients. Unlike server-side rendering (SSR), where pages are generated on each request, SSG generates pages at build time, providing faster loading speeds and better performance.

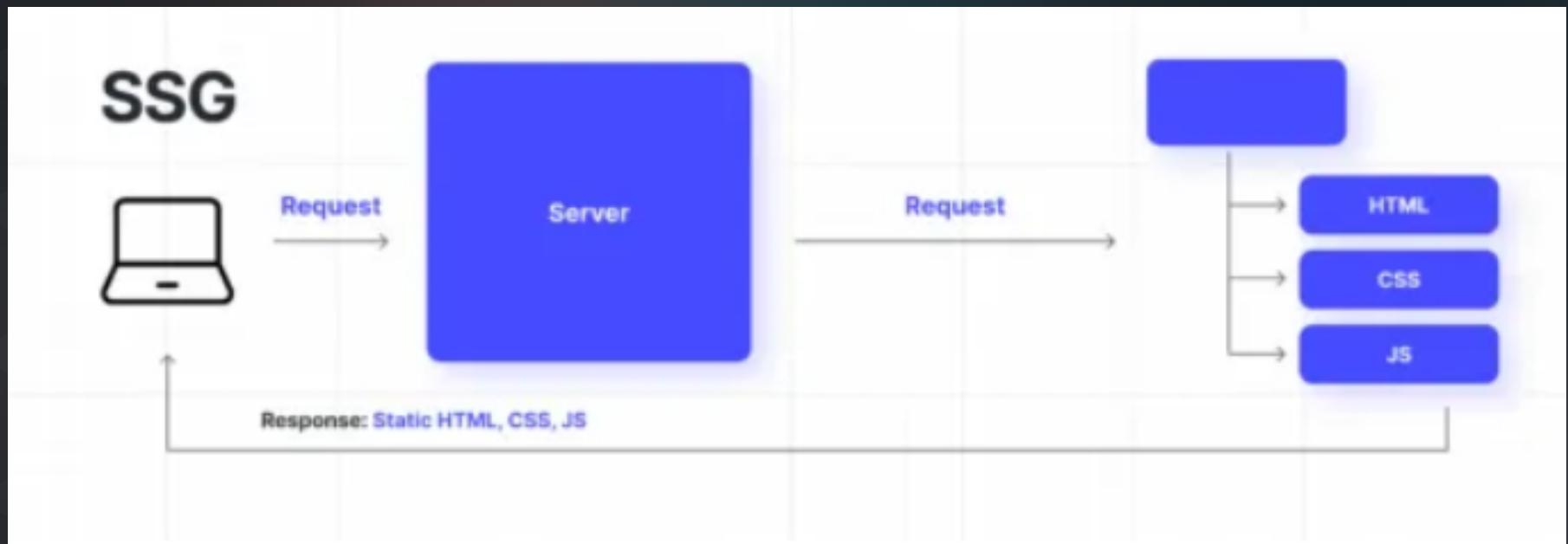


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# How does SSG work?

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# Example

- ● ● Let's create a simple example to illustrate SSG in Next.js.

```
1 // pages/index.js
2
3 import { getLatestPosts } from "../lib/posts";
4
5 export default function Home({ posts }) {
6   return (
7     <div>
8       <h1>Latest Posts</h1>
9       <ul>
10         {posts.map((post) => (
11           <li key={post.id}>
12             <a href={`/posts/${post.slug}`}>{post.title}</a>
13           </li>
14         )));
15       </ul>
16     </div>
17   );
18 }
19
20 export async function getStaticProps() {
21   const posts = await getLatestPosts();
22   return {
23     props: {
24       posts,
25     },
26   };
27 }
```

In this example, the `getStaticProps` function fetches the latest posts from the server and passes them as `props` to the `Home` component. These posts are pre-rendered at build time and served as static `HTML` files.



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# When to use SSG?

## ► Content-focused Websites:

SSG is well-suited for websites with relatively static content, such as blogs, documentation sites, or portfolios.

## ► SEO Optimization:

Static pages are easier for search engine crawlers to index, leading to better search engine optimization (SEO) rankings.

## ► Improved Performance:

SSG can significantly improve page load times and overall performance, especially for content-heavy websites with minimal dynamic content.



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# Real-life Use Cases :

- ▶ **Company Websites:**

Corporate websites often have static content such as company information, services, and contact details.

- ▶ **Blogs and Publishing Platforms:**

Blogs and publishing platforms benefit from SSG by delivering fast-loading pages with updated content.

- ▶ **Documentation Sites:**

Technical documentation sites can leverage SSG to generate static pages for various documentation sections.



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