* **What is Next.js? What are its features, pros, and cons? How can we optimize the performance of a Next.js application?**

Nextjs is a react based framework developed by vercel for building server-side rendered and static with enhanced SEO web applications. It allows developers to create dynamic, fast, and optimized web applications with minimal configuration.

Server side rendering

Static site generation

Hybrid rendering

Automatic code splitting

Api routes

SEO Friendly

Image Optimization

Dynamic routing

Typescript support

Middleware support

Incremental Support

Fast Refresh

Internationalization

* **What is the difference between Next.js and React.js?**

|  |  |
| --- | --- |
| **Nextjs** | **Reactjs** |
| Nextjs Is a framework for react which built upon react | React js is a javascript library |
| Using nextjs we can create server side rendered and static site generation without any additional configuration. | React js is don’t a built in support for server-side rendering. |
| With nextjs, we can build entire web application | React helps in building the UI of a web application. |
| Nextjs application exhibit exceptional speed due to static sites and server side rendering. They are inherently efficient, benefiting from out of the box performance enhancements such as image optimization | In the context of react certain factor make it less suitable for consideration. It inherently supports only client side rendering by default, a limitation that falls short in constructing a high performance application. |
| Nextjs support inbuilt routing mechanism here we just name the folder inside that “page” name of file will include inside the routing | For reactjs routing need to be configure using a library called react-router-dom. |
| It uses turbo bundler for module bundling | It uses webpack as a module bundler |
| It provides better SEO. | It has less SEO friendly as it is client side rendered application. |

* **How is Next.js different from other JavaScript frameworks?**
* **What is the process for installing Next.js?**

Node js should be in system

Create next js app using command

**npx create-next-app app-name**

* **What is data fetching in Next.js, and what are its types?**
* **How does Next.js handle client-side navigation?**
* **What is styled JSX in Next.js?**
* **Is Next.js a backend, frontend, or full-stack framework?**
* **What are the differences between the pre-rendering types available in Next.js?**
* **How can we pass data between pages in a Next.js application?**
* **What is the difference between the getServerSideProps and getStaticProps functions in Next.js?**
* **What is the purpose of the getStaticPaths function in Next.js?**
* **What is code splitting in Next.js, and how does it work?**