# **Next.js 14 - 100 Interview Questions & Answers**

### 1. Next.js kya hai?

Next.js ek React-based framework hai jo server-side rendering (SSR), static site generation (SSG) aur API routes provide karta hai. Yeh performance aur SEO ke liye best hai.

### 2. Next.js aur React mein kya farq hai?

React ek library hai jo sirf UI components banane ke liye use hoti hai, jabke Next.js ek framework hai jo routing, SSR, SSG, aur API routes jese features provide karta hai.

### 3. Next.js mein pages ka structure kaisa hota hai?

Next.js mein har folder ek route banata hai aur uske andar `page.tsx` us route ka default page hota hai. Yeh file-based routing ka use karta hai.

### 4. Next.js mein routing kaise kaam karti hai?

Next.js file-based routing use karta hai. `app/` folder ke andar har folder ek route banata hai aur usme `page.tsx` default component hota hai.

### 5. Next.js mein client component aur server component ka kya farq hai?

Server Components backend par render hotay hain aur fast hote hain, jabke Client Components browser mein render hote hain aur interactive hote hain.

#### 6. Server Components aur Client Components ko kaise identify karein?

Agar component me `'use client';` likha ho to woh Client Component hota hai, agar nahi likha to woh Server Component hota hai.

### 7. Next.js mein API Routes kaise kaam karte hain?

Next.js ke `app/api/` folder mein `route.ts` likh kar aap API routes create kar sakte hain jo server-side logic handle karte hain.

#### 8. Next.js mein dynamic routing kaise kaam karti hai?

Dynamic routing ke liye `[slug]` ya `[id]` jese dynamic folder names use kiye jate hain jo run-time par data fetch karte hain.

#### 9. Next.js mein `getServerSideProps` ka kya use hai?

Yeh function SSR (server-side rendering) ke liye use hota hai. Yeh page ko request hone par server par run hota hai aur updated data fetch karta hai.

#### 10. ISR (Incremental Static Regeneration) kya hai?

ISR static pages ko regenerate karta hai bina puri site ko rebuild kiye, isse performance improve hoti hai aur new content bhi quickly update ho jata hai.

### 11. `getStaticProps` aur `getServerSideProps` mein kya farq hai?

getStaticProps static content ke liye hota hai jo build time par generate hota hai, jabke getServerSideProps har request par data fetch karta hai.

#### 12. Next.js mein `useEffect` hook ka kya use hai?

`useEffect` hook side effects ko handle karta hai jaise data fetching ya event listeners ko add karna, aur component render hone ke baad trigger hota hai.

#### 13. Next.js mein Image component ka kya role hai?

Next.js ka `<Image>` component images ko optimize karta hai jisme automatic image resizing, lazy loading aur modern formats jese WebP ka support hota hai.

### 14. Next.js mein layout ko kaise implement kiya jata hai?

Layouts ko `app/layout.tsx` mein define karke, har page ko wrap kiya jata hai. Yeh har page par common structure provide karta hai.

#### 15. Next.js mein custom server kaise configure kiya jata hai?

Custom server ke liye, `next` aur `express` ka use karke apna custom server setup kiya jata hai jisme apne specific routing aur logic ko handle kar sakte hain.

#### 16. Next.js mein Environment Variables kaise use kiye jate hain?

Environment variables ko`.env` file mein define karke, `process.env` ke through access kiya jata hai. Yeh sensitive information ko securely handle karta hai.

### 17. Next.js mein React Query ka use kaise karte hain?

React Query ko data fetching aur caching ke liye use kiya jata hai, yeh performance ko optimize karta hai aur easy state management provide karta hai.

#### 18. Next.js mein middleware ka kya use hai?

Middleware ko request ke flow mein intercept karne ke liye use kiya jata hai. Yeh authentication, logging, ya headers ko modify karne ke liye useful hota hai.

### 19. Next.js mein TypeScript ka use kaise hota hai?

TypeScript ko type safety aur better development experience ke liye use kiya jata hai. Next.js mein TypeScript ko `.ts` aur `.tsx` file extensions ke through implement kiya jata hai.

#### 20. Next.js mein Dynamic Imports ka kya use hai?

Dynamic imports ka use lazy loading ke liye hota hai. Yeh un components ko load karta hai jo immediately required nahi hote.

### 21. Next.js mein SEO ko kaise optimize karte hain?

SEO ko optimize karne ke liye, Next.js automatic server-side rendering provide karta hai. Meta tags, titles, aur structured data ko `next/head` component se add kiya jata hai.

### 22. Next.js mein Static Site Generation (SSG) ka kya use hai?

SSG ka use static pages ko build time par generate karne ke liye hota hai. Yeh fast aur optimized hota hai.

### 23. Next.js mein Progressive Web App (PWA) kaise banate hain?

Next.js mein PWA banane ke liye `next-pwa` plugin ka use kiya jata hai, jo offline functionality aur caching provide karta hai.

#### 24. Next.js mein Client-side Navigation kaise kaam karti hai?

Client-side navigation ko `next/link` aur `next/router` ka use karke implement kiya jata hai. Yeh page ko reload kiye bina navigation karta hai.

### 25. Next.js mein Global Styles kaise add karte hain?

Global styles ko `\_app.tsx` file mein import kiya jata hai. Yeh poore app mein common styles apply karne ke liye use hota hai.

#### 26. How can you handle 404 errors in Next.js?

Custom 404 error pages can be created by creating a `404.js` file in the `pages` directory.

#### 27. How do you handle authentication in Next.js?

Authentication can be handled using NextAuth.js or custom server-side logic using cookies or JWT tokens.

#### 28. What are the benefits of using Next.js for SEO?

Next.js supports server-side rendering and static site generation, making it highly SEO-friendly by allowing search engines to crawl content easily.

# 29. How does Next.js handle server-side rendering (SSR)?

SSR in Next.js is achieved using `getServerSideProps`, which runs on the server and generates the page on each request.

# 30. What is the purpose of `next/head`?

The `next/head` component is used to manage the head section of the HTML document, including meta tags, titles, and links for better SEO.