

Question 1: What is React Router? How does it handle routing in single-page applications?

React Router is a library used for handling routing in React applications, enabling navigation between different views or pages in a **single-page application (SPA)** without reloading the entire page. It allows components to render based on the URL path, creating dynamic navigation and smooth user experiences.

In SPAs, React Router uses the browser's history API to update the URL without a full page reload, mapping specific URLs to specific components and keeping the application responsive.