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Developing a Modular UI Toolkit in React: Components and Hooks for Scalable Applications

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Abstract: ReactForge is a modular UI-toolkit designed to streamline and accelerate front end development in React based apps. It provides a comprehensive-suite of reusable, accessible, and customizable components such as Accordion, Clipboard, Paginator, Password Input, Rating, Sidebar, Theme Toggle, and Toast. Aligned with the needs of modern scalable apps, ReactForge is developed using TypeScript for type safety and bundled with Rollup to ensure performance and minimal bundle size.

This paper, titled "Developing a Modular UI Toolkit in React: Components and Hooks for Scalable Applications," outlines the architecture, development methodology, and real-world applicability of ReactForge. The library is publicly available via NPM and comes with live documentation to ease integration. With a focus on simplicity, consistency, and performance, ReactForge aims to improve developer productivity and UI uniformity across scalable React projects.

Keywords: ReactJS, Component-Library, Reusable-UI-Elements, Custom-Hooks, TypeScript, Front-End-Development



