**Title**

Transportation App: UI Framework Date: 2023-10-14 William Black, Robert Carlson, Paul Sholter

**Status**

Approved, React Native UI Framework

**Context**

Our team has been tasked with creating a mobile app for a modern transportation company. The app's primary functions include ride booking, real-time tracking, driver details display, payment processing, and user authentication. This ADR outlines our decisions regarding the selection of a UI framework for building the app. UI frameworks are designed to streamline the development process, improve consistency in the user interface, and enhance the overall user experience. They often include pre-designed user interface components, styling options, and responsive design features to help developers create visually appealing and user-friendly interfaces more efficiently.

**Decision**

The choice of React Native as our UI framework for the mobile app is driven by several key factors. It excels in cross-platform compatibility, benefits from a robust community and ecosystem, allows seamless integration with mapping services, simplifies payment gateway integration, empowers secure authentication and database management, supports push notifications for user updates, and ensures robust security measures, aligning with the specific needs of our transportation app. React Native will allow our team to build a single codebase that works on both iOS and Android. This significantly reduces development time and effort while ensuring consistency across platforms, making it an efficient choice for a modern transportation app where users are likely to use both iOS and Android devices.

**Consequences**

By choosing React Native as our UI framework, we benefit from cross-platform compatibility, a strong community, and a wide range of libraries and modules that support the specific requirements of the transportation app. However, it's essential to maintain a consistent codebase, ensure proper testing, and stay updated with the latest React Native developments to maximize the advantages of this choice.