React Native Technical Assessment Case Study
GreenRide Mobile App — Building the Eco-Friendly Ride Booking Experience

Scenario
GreenRide is entering the mobility market with a unique sustainability focus. Early adopters love the idea — but feedback shows users don't clearly see the environmental impact of each ride, the booking flow doesn't feel different from regular apps, and they want transparency, simplicity, and rewards for choosing eco options.

Overview
Your task is to build a functional React Native mobile application (iOS and Android) for GreenRide, a startup that promotes eco-friendly ride-hailing services using electric and hybrid vehicles. The goal is to create a seamless booking experience that's fast, intuitive, and environmentally conscious, while demonstrating your understanding of React Native fundamentals, component architecture, and performance optimisation.

Your Objective
Build a React Native app that lets users:

1. View available rides (Electric and Hybrid options)
2. Book a ride and view a summary including estimated CO_2 saved
3. Track their EcoPoints and total carbon savings in a profile screen Focus on clean code, modular structure, and performance.

Core Features to Implement
A. Home / Ride Booking Screen: Fetch mock ride data from a JSON file or mock API and display ride options.
B. Ride Confirmation Screen: Show summary details, estimated CO_2 saved, and a confirmation action.
C. Profile / Rewards Screen: Display total rides, CO_2 saved, and EcoPoints with light/dark mode.
D. Add a Map View using react-native-maps showing the user location and destinations.

Technical Requirements
Language: React Native with TypeScript
Navigation: @react-navigation/native
State Management: Context API, Zustand, Redux Toolkit, or Recoil
Styling: Styled Components, Tailwind RN, or StyleSheet
Data Handling: Mock API (JSON file or JSON server)
Dark Mode: System-based light/dark theme toggle
Testing: At least 2 unit tests using Jest / React Native Testing Library
Performance: Optimise rendering, memoise where necessary

Accessibility: Semantic labels, sufficient contrast
Build: Should run on both iOS (simulator) and Android (emulator)

Data Example (rides.json)

[{"id": 1, "vehicleType": "Electric", "eta": "3 mins", "price": 7.50, "co2Saved": 1.4},
{"id": 2, "vehicleType": "Hybrid", "eta": "4 mins", "price": 6.80, "co2Saved": 0.8}]

Deliverables

Submit the following:

- GitHub Repository with source code and README.md (setup, assumptions, screenshots)
- Key Screens: Splash/Welcome, Home/Ride Booking, Ride Confirmation, Profile/Rewards, Dark Mode
- Mandatory: app-release.apk or Expo public link

Submission

Email your GitHub or Expo link to: hr@netzence.com.ng
Include: Full name, contact information, and repository/demo link.