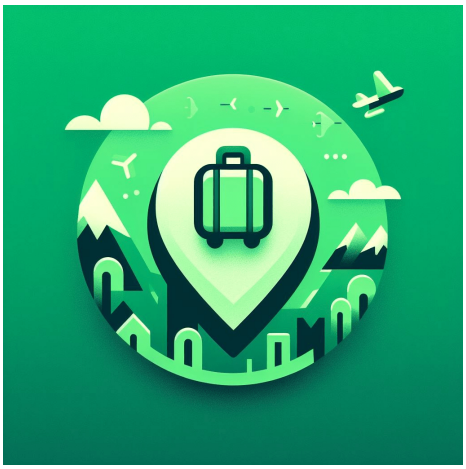

Green Travel Tracker

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1 Introduction

The Green Travel Tracker is a mobile application designed to promote environmentally friendly travel practices by helping users calculate their carbon footprint, plan eco-friendly routes, and access sustainability tips. The app aims to raise awareness about the impact of transportation on climate change and aligns with UN policies on sustainable development.

2 Functional Requirements

2.1 Carbon Footprint Calculator

Description: Users can input their mode of transportation and distance traveled.

Inputs: Mode of transportation (e.g., car, bus, train, walking, biking), distance traveled.

Outputs: Calculated carbon emissions based on UN-approved methods.

Validation: Ensure users input valid transportation modes and distances.

2.2 Eco-friendly Route Planner

Description: The app suggests the most sustainable travel routes using public transportation, walking, or biking options.

Inputs: Starting location, destination.

Outputs: Optimal travel routes prioritizing reduced emissions and resource usage.

Validation: Ensure suggested routes are feasible and compatible with user preferences.

2.3 Sustainability Tips

Description: Provide users with tips on reducing their environmental impact while traveling.

Inputs: User preferences (optional).

Outputs: Tips on packing light, choosing eco-friendly accommodations, supporting local businesses, etc.

Validation: Ensure tips are relevant, up-to-date, and aligned with sustainability goals.

3 Non-Functional Requirements

3.1 Usability

The app interface should be intuitive and user-friendly.

Users should be able to navigate between features seamlessly.

3.2 Performance

The app should respond to user inputs promptly.

Calculations for carbon footprint should be performed efficiently.

3.3 Security

User data should be stored securely and protected from unauthorized access.

The app should comply with relevant data protection regulations.

3.4 Compatibility

The app should be compatible with both Android and iOS platforms.

It should support a wide range of devices and screen sizes.

4 Constraints

- Development must adhere to UN-approved methods for calculating carbon emissions.
- Integration with third-party APIs may be required for accessing transportation data and sustainability tips.
- The app should be developed within a specified timeline and budget.

5 Glossary

- Carbon Footprint: The total amount of greenhouse gases emitted directly or indirectly by human activities.
- Sustainable Travel: Travel practices that minimize environmental impact and promote social and economic benefits.
- UN: United Nations, an international organization promoting global cooperation and sustainable development.

6 Conclusion

The Green Travel Tracker app aims to empower users to make sustainable travel choices by providing them with tools and information to reduce their carbon footprint. By promoting eco-friendly transportation options and offering sustainability tips, the app contributes to global efforts to combat climate change and support sustainable development goals.