### A Sustainable Life Advisor

Helping users understand and reduce their carbon footprint

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## Overview



### **Project Status Overview**

#### • Completed:

- Database Schema
  - Emission factors & user input structure finalized
- MVP Input Form
  - Form fields for transport, distance, energy, gas, and fuel implemented
- Emission Calculation Logic
  - Developed in utils.py using rule-based CO₂ estimation
- Al Suggestion Integration
  - Live connection to Mistral API with dynamic prompt generation
  - Markdown converted to readable HTML for display



### **Project Status Overview**

- In Progress:
  - Front-End Polishing
     Improving layout consistency and result formatting.
  - Static Pages
     Info page is in progress; About Us will follow the Figma design.
  - User History / Session Tracking (Planned)
     We plan to store past results for future comparison.
  - Result Page Separation (Planned)
     Form and results will be shown on separate pages.
  - Color-coded Threshold System (Planned)
     Footprint results will use colors to show sustainability level.





# Live Demo





# Learnings



## Learnings from Project

#### What Went Well So Far

#### O Database and Calculation Setup

• Getting the emission factors right from the start made the calculations work smoothly

#### AI Integration Actually Worked

• Connecting to Mistral API live worked out smoothly and making prompts change based on what users enter gives way better suggestions than generic advice

#### Form Building Was Straightforward

•Covering transport, distance, energy, gas, and fuel in one form wasn't as complicated as we thought and users can fill it out without getting confused

#### Converting Al Output

Turning the AI's markdown into HTML that looks good took some work but was worth it and users can actually read and use the suggestions now



### Learnings from Project

#### • Where We Faced Problems:

- Formatting issue in Al answers
- When starting Django template, folders creation got messy
- Finding accurate formulas for the calculations of CO<sub>2</sub> emissions

#### How We Plan To Solve Them:

- Removed problematic syntax (like ###), and adjusted display logic in template
- Organized the structure by following Django's clear naming conventions and a consistent hierarchy
- Used AI for fair calculations



# Thanks!











