



Problem Track : Preserving The Environment

Let's Be Sustainable

Empowering Sustainable
Lifestyles with Technology

Presented by Aviral Kaintura & Rupam Barui



The Team who made it possible



Aviral Kaintura



Rupam Barui

Why “TheGreenFoot” Matters Now more than ever

- **Rising Environmental Footprint:** The increasing ecological footprint of individuals and organizations and its impact on the planet.
- **Sustainability Knowledge Gap:** The lack of accessibility to information on sustainable practices and the complexity of adopting them.
- **Inefficient Resource Use:** Inefficient energy consumption and waste management contribute to environmental degradation.



What we do ?

"TheGreenFootPrint" is more than an app; it's a movement towards environmental consciousness. By returning to the grassroots level, we're placing the power of change directly into the hands of the people. With our **suite of innovative tools**, we empower users to understand the environmental impact of their daily choices and to take positive action



Our Suite Includes :

[HTTPS://THEGREENFOOTPRINT.VERCEL.APP/](https://thegreenfootprint.vercel.app/)



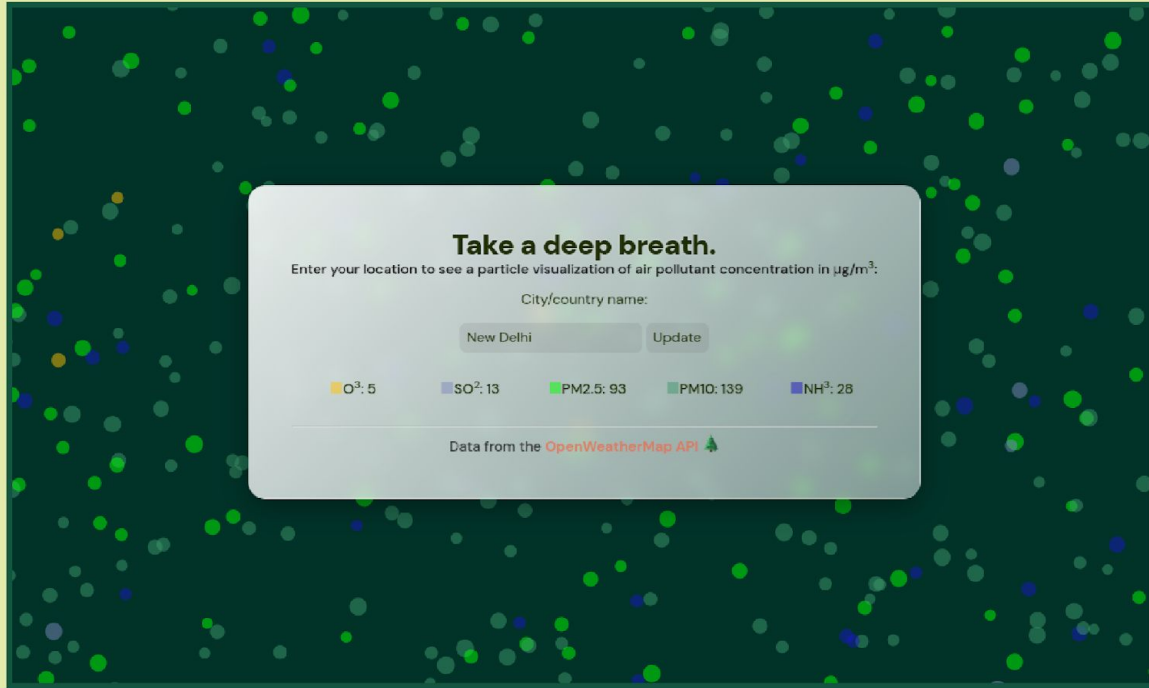
- **Energy Consumption Analysis (Data Analytics):** A personalized dashboard that utilizes big data analysis techniques to reveal patterns, spotlight inefficiencies, and prompt energy-wise habits.
- **Amazon Product Sustainability Score (NLP+LLM, BERT Model):** A smart AI-driven scoring system that processes product information and assesses sustainability using natural language processing and the BERT model for in-depth analysis.
- **Brand Sustainability Profiles (LLM, Web Scraping):** Harnessing the Gemini Pro's language understanding to synthesize brand data collected via web scraping, providing an ethical snapshot of corporate practices.
- **Waste Classification Guide (Computer Vision, CNN, TensorflowJs):** An interactive tool employing a custom-trained convolutional neural network to recognize and categorize waste, guiding users towards sustainable disposal solutions.

Website Flow



Main Page

Website Flow



Air Pollution Particle Visualization

Website Flow

Product Score Analyzer

Enter the Amazon product URL:

<https://www.amazon.ca/WNEEDU-Embroidery-Sleeveless-Spaghetti-Camisoles/dp/B0CLDJ366W>

Analyze Sustainability Score

Sustainability Score:

70

Pros:

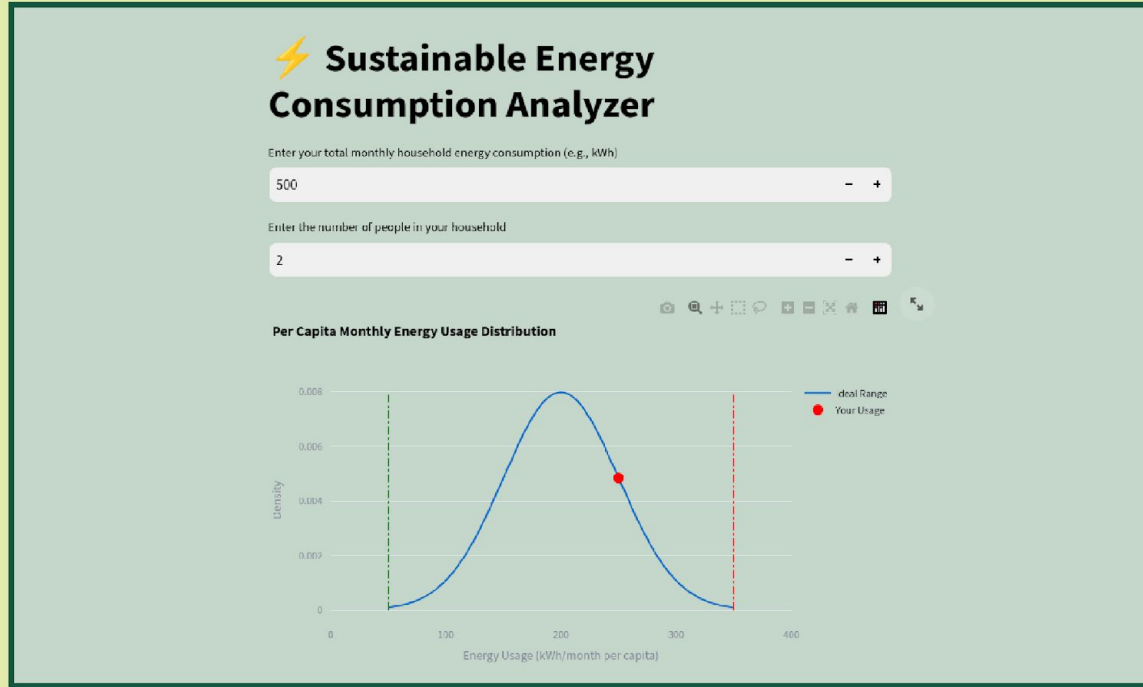
- Made of 90% polyester and 10% spandex, which is a durable and stretchy material
- Light texture and high-quality fabric
- Super skin-friendly, breathable, and slim fitting to wear
- Flowy hem and embroidery spaghetti strap add a unique and charming touch
- Suitable for various occasions such as beach, vacation, parties, work, and casual daily wear

Cons:

- Not suitable for microwave or oven use
- May not be as durable as traditional silverware

Product Score Analyzer

Website Flow



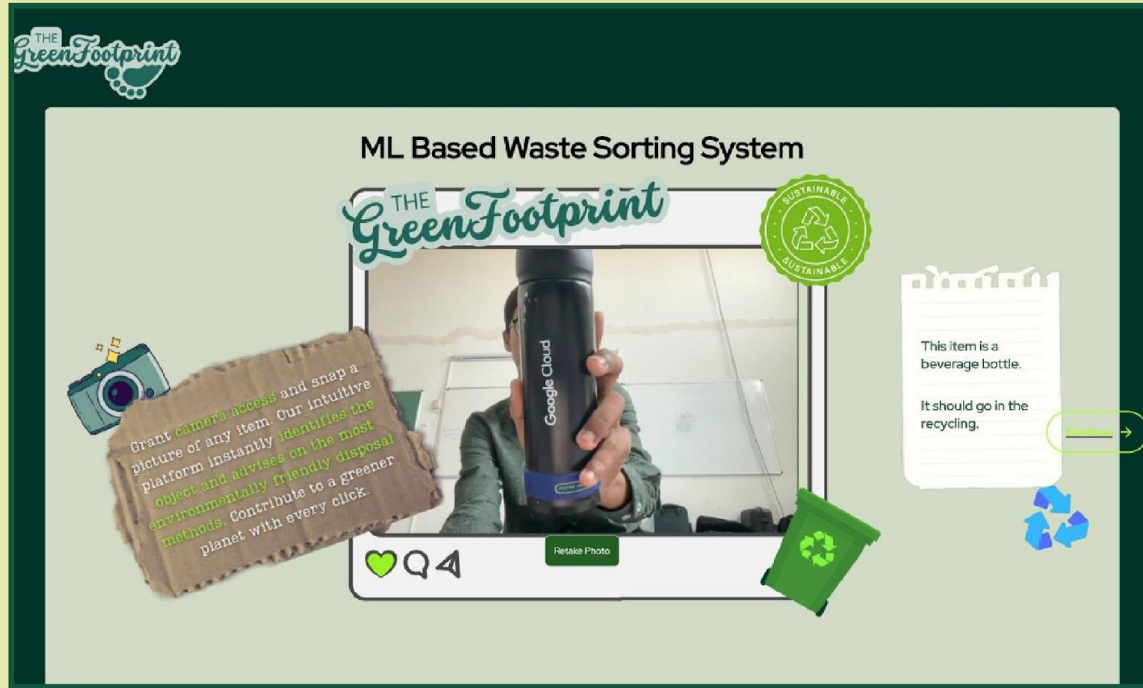
Sustainable Energy Consumption Analyzer

Website Flow



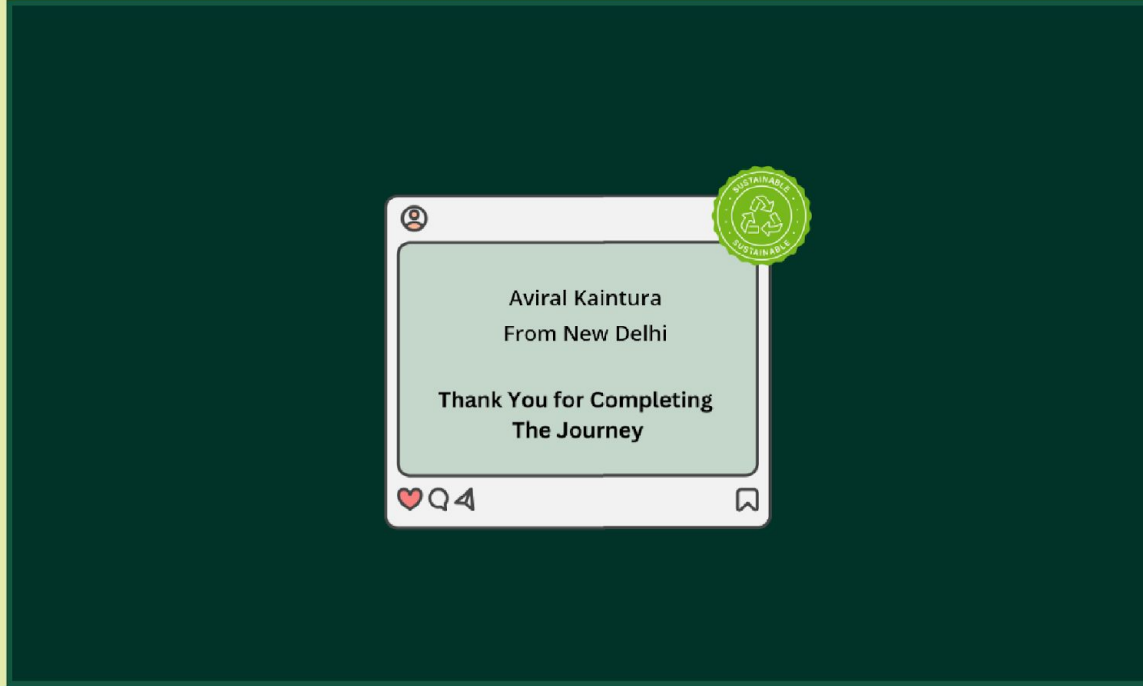
LLM Brand Sustainably Analyzer

Website Flow



ML based Waste Sorting

Website Flow



Final Certificate Page :)

Website Demo Video



All Important Links

Website : <https://thegreenfootprint.vercel.app/>

GitHub Main Code : <https://github.com/Trident09/SDG-SuatainX>

Image Detection Custom Model Google Colab:

<https://colab.research.google.com/drive/1KRX8xM92F412yThksh9jnngM6zE1b5eY?usp=sharing>

NLP Sustainability Model (BERT) Google Colab:

https://colab.research.google.com/drive/1J5_52NrQbPbcmKfUlwg_c3E_pYPALSbr?usp=sharing

FIGMA:

<https://www.figma.com/file/WduXzz193l8TaQQAB4aAIW/SustainX?type=design&node-id=0%3A1&mode=design&t=WTRNaGJ3w485pFru-1>

