Making Carbon Footprint Calculations *Easy, Efficient, and Fun With EcoPrint.*

A Mini Case Study Showcasing Core Competencies in My Design Process

EcoPrint
-Small Steps Big Change-

View the full detailed case study below

View Case Study ↗

The Problem

Globally, 86% of adults agree that they want the world to become more sustainable and equitable. However, many find it challenging to take the first step because they struggle to calculate their carbon footprint.

Source : World Economic Forum

So, if you are asking "Why is it very hard to know your carbon footprint?" I found out 3 primary reason's why

01 You have to answer 60+ Questions
"Current Practices are too technical"

02 Tools expect that you know all about your current emissions
"Tools assume that the user knows it all"

03 lack of Personalisation
"Tools lack personal recommendations"

After understanding the problem I have opened my toolkit to start solving the above problem and design a solution to make it usable and effective.

My Strategy

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To understand the challenges and limitations of reducing carbon footprints from an expert's perspective, **I interviewed…**

01 Environmental Scientist

02 Research Professors

01 Climate Activist

Sustainability **Enthusiasts**

From those conversations I understood that…

It is hard to calculate

" Individual's footprint unless we know their life style from when they wake up to the time they go back to bed"

It doesn't make huge impact

" However, the potential impact of individual actions is limited, as the majority of emissions stem from industrial sources"

Controlling emissions is achievable

" Controlling the emissions we produce is achievable; it simply requires proper education on the subject"

Experience should be Intuitive

" Reducing your carbon footprint should be an intuitive experience that encourages the formation of sustainable habits. "

The Solution

What if we design an application that can do the following:

01 Track individual's carbon footprint from day to day activities, from driving to eating habits **using wearable tech.**

02 **Gamify the experience** by bringing in daily, weekly and monthly activity streaks.

03 **Recommend ways to reduce the carbon footprint**, the best part is they would be personalized.

04 **Incentivize for maintaining their streaks** through which they can buy green products from the store.

The Design

Before looking at the design, let's look at what the user's want and need

Sam Ecoman

Age : 32 years   **Location** : United States   **Job** : Full time advocate

Goals

- Along with knowing their footprint, we wanna know ways to reduce it.
- Want to calculate carbon emissions with ease
- Gaining knowledge about climate change, its impact, and ways to contribute positively through everyday actions.
- Exploring options to offset unavoidable emissions, such as through tree planting or supporting renewable energy projects.

Introducing EcoPrint
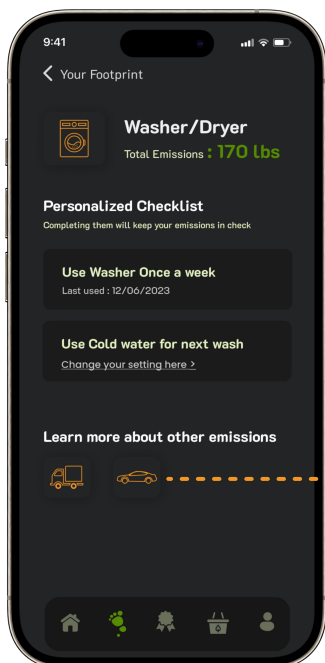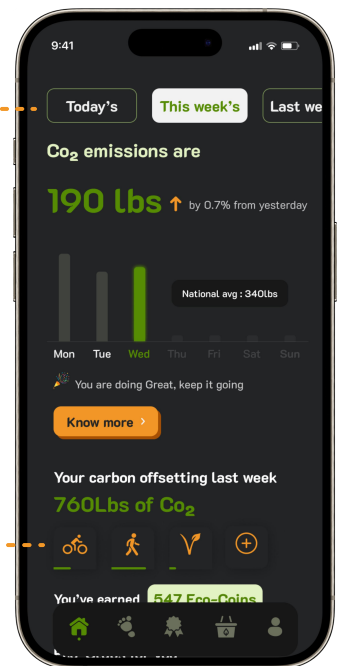
– Calculate your carbon footprint with ease –

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ECO

Introductory Screen

Overview Page

Ability to track footprint's with timelines.

Display of top off setter's

9:41

Today's | This week's | Last we

Co₂ emissions are

190 lbs ↑ by 0.7% from yesterday

National avg : 340lbs

Mon Tue Wed Thu Fri Sat Sun

🎉 You are doing Great, keep it going

Know more ›

Your carbon offsetting last week
760Lbs of Co₂

You've earned 547 Eco-Coins

Personalized Recommendations Page

9:41
‹ Your Footprint

Washer/Dryer
Total Emissions : **170 lbs**

Personalized Checklist
Completing them will keep your emissions in check

Use Washer Once a week
Last used : 12/06/2023

Use Cold water for next wash
Change your setting here ›

Learn more about other emissions

Recommendations on other emissions

This miniature case study **is designed to just give a glimpse** into my problem-solving approach.

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Let's end the case study with credits

A big shout out too

Proff. Zoltan Nagy
Assistant Professor

Dr. Kara M. Kockelman
Professor, Civil Engineer

Dr. Kenneth R. Young
Professor, Emeritus

Dr. Susan D Hovorka
Research Professor

These are the people who guided me on better understanding the problem and were welcoming when I said that I wanted to solve the problem.