



# CarbonTruth

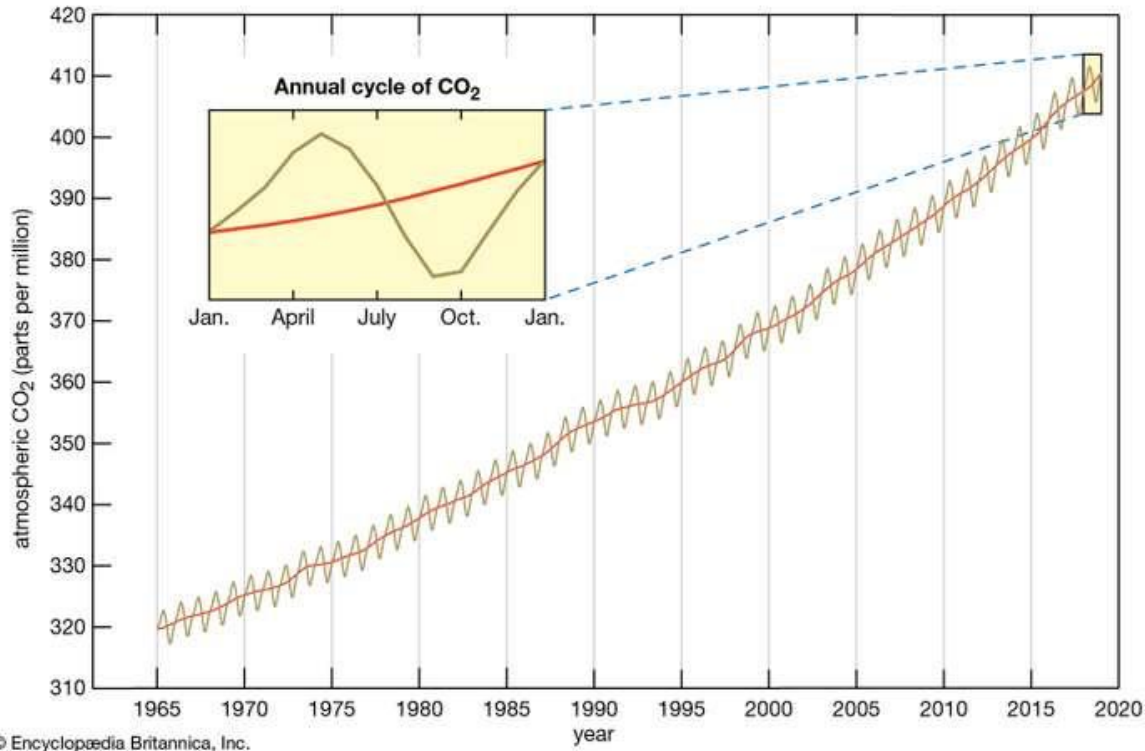
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# The Problem



The Keeling Curve



- ❖ Although 94.7% of surveyed individuals report knowing the dangers of high carbon emissions, over 70% still identify that their carbon footprint is likely higher than that of those around them.
- ❖ 94.7% of surveyed individuals would benefit from a program to track their carbon footprint.

# Audience

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- ❖ Targets individuals who wish to track their carbon usage in order to do their part in minimizing greenhouse effects
  - Individuals who are well-informed about the dangers of greenhouse gases and want to make a change would be most likely to download the application
- ❖ People with relatively consistent lifestyles would benefit the greatest

# Competitors



## Reduce



- ❖ Connects user's bank account to track purchases automatically such as groceries, plane ticket, bus pass etc.

## LiveGreen Daily Carbon Tracker



- ❖ Reward system for living a "green" lifestyle, sponsors/partners

## EcoCRED - Do Your Part



- ❖ Has an information tab telling users what steps they can take to reduce their emissions.

# App Description

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## Our Solution to the problem:

- ❖ The main idea behind our product is that the user will enter specific details of their daily life, including mileage and foods, that can be used to find their overall carbon output or carbon footprint.

## Features and Functionality:

- ❖ The app **has an algorithm** that calculates a user's carbon footprint based on their daily transportation and food consumption.
- ❖ The user can **compare their average carbon footprint** to that of the global average.
- ❖ (future) The app will have the ability for a user to **connect** or add friends within the app, allowing them to **compare and compete** in reducing their carbon footprint.



# Algorithm



The heart of our app is an algorithm we developed to calculate a user's carbon footprint based on certain input parameters. For now, we decided to only account for a few **major food groups**, and basic **transportation vehicles**.

Food: kg CO<sub>2</sub> from 1 kg of specified food

- Meat: 20.0
- Vegetables/Fruit: 2.0
- Dairy: 1.9
- Fat: 2.3
- Grain: 2.7

Transportation: mpg\*

- Car: 24
- Bus: 3.26
- Motorcycle: 44
- Van/Light Truck: 17.5

\* 20 lbs of CO<sub>2</sub> is released from 1 gallon of gasoline

# Algorithm (Continued)

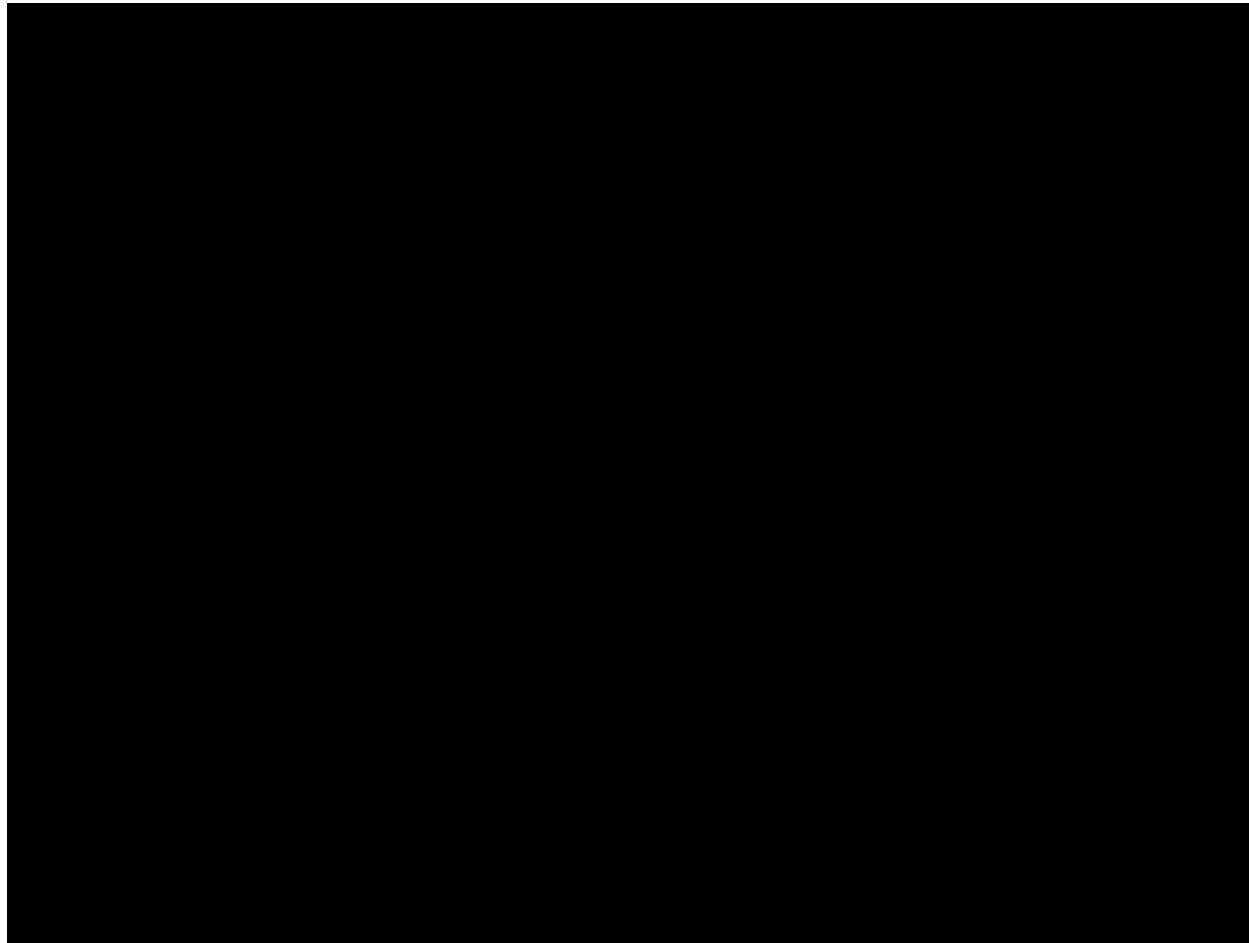
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- ❖ User inputs the amounts of food types they consumed + transportation methods used on a given day
- ❖ The CarbonTruth algorithm calculates the kilograms of carbon used on that day
- ❖ The CarbonTruth algorithm extrapolates data into tons of carbon a year (units of carbon footprint).
- ❖ Output shows the user how much carbon they are accounting for in a year based on the day's activities

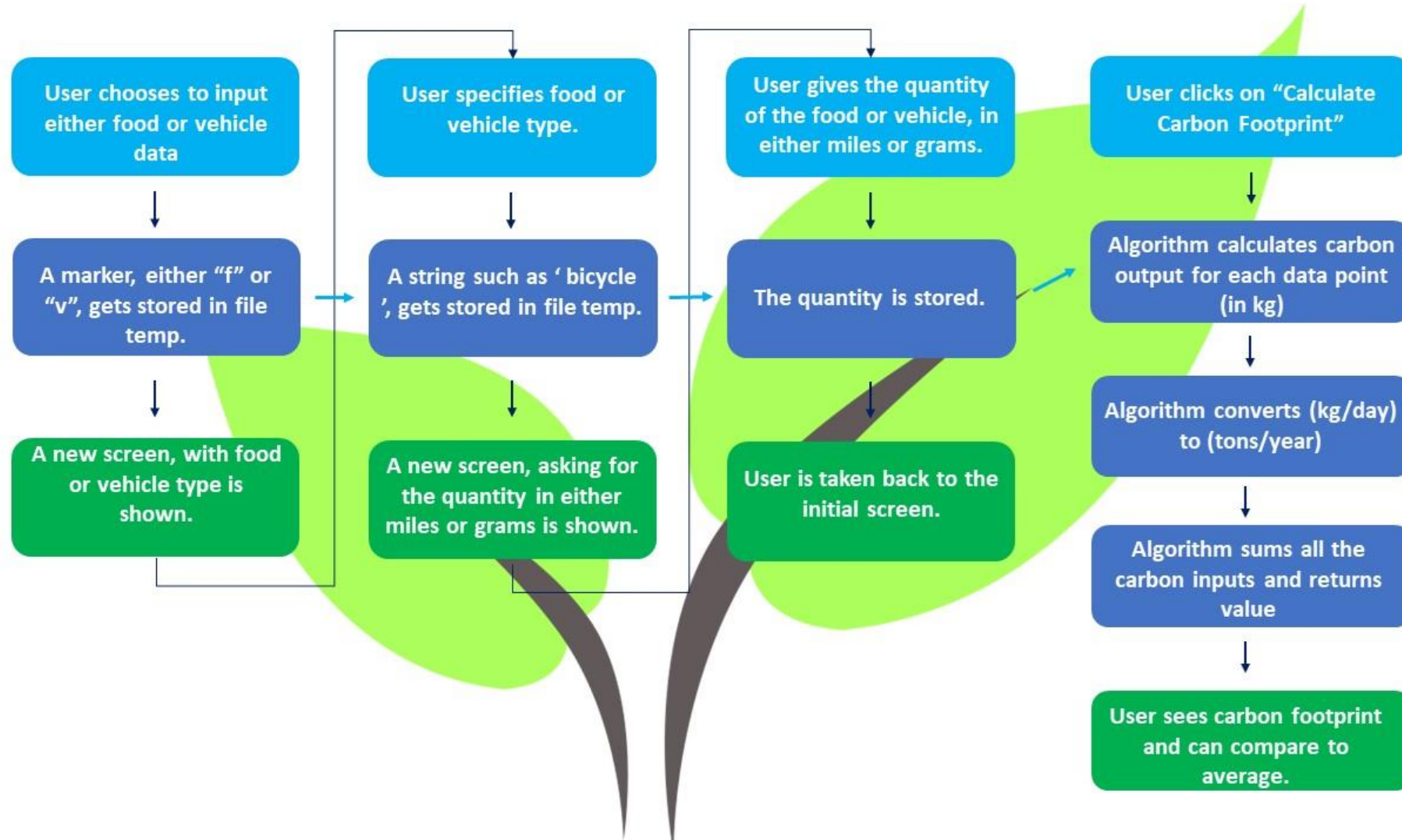
# Video Demonstration of App

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# Architecture Flow Chart



# Future Extensions

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- ★ Integrate Twitter API through Firebase
  - Will help us set up social media functionalities
- ★ Collect feedback from users
- ★ Compare user average with people in their country/state/county
- ★ Add more aesthetic features



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Any Questions?