

Green Bites

Empowering individuals to
make smart food choices for
the planet



Our Team



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Taking Action

Climate change has hit a point of no return. People need to feel empowered to begin making change from the ground up.



As an individual...

Taking action can feel like a lost cause.



Where to start?

When every choice counts, it's hard to pick just one to focus on.

Feeling powerless.

It's hard to internalize that small choices can make a significant impact.

Too many barriers.

Existing "eco-friendly" solutions often require time and money.



Our Vision

What if we give people the tools that they need to make sustainable choices?

Our target: Food

Food accounts for 10-30% of a household's carbon footprint.



Diet makes a difference

Diet composition has been identified as a key leverage point in reducing environmental impacts

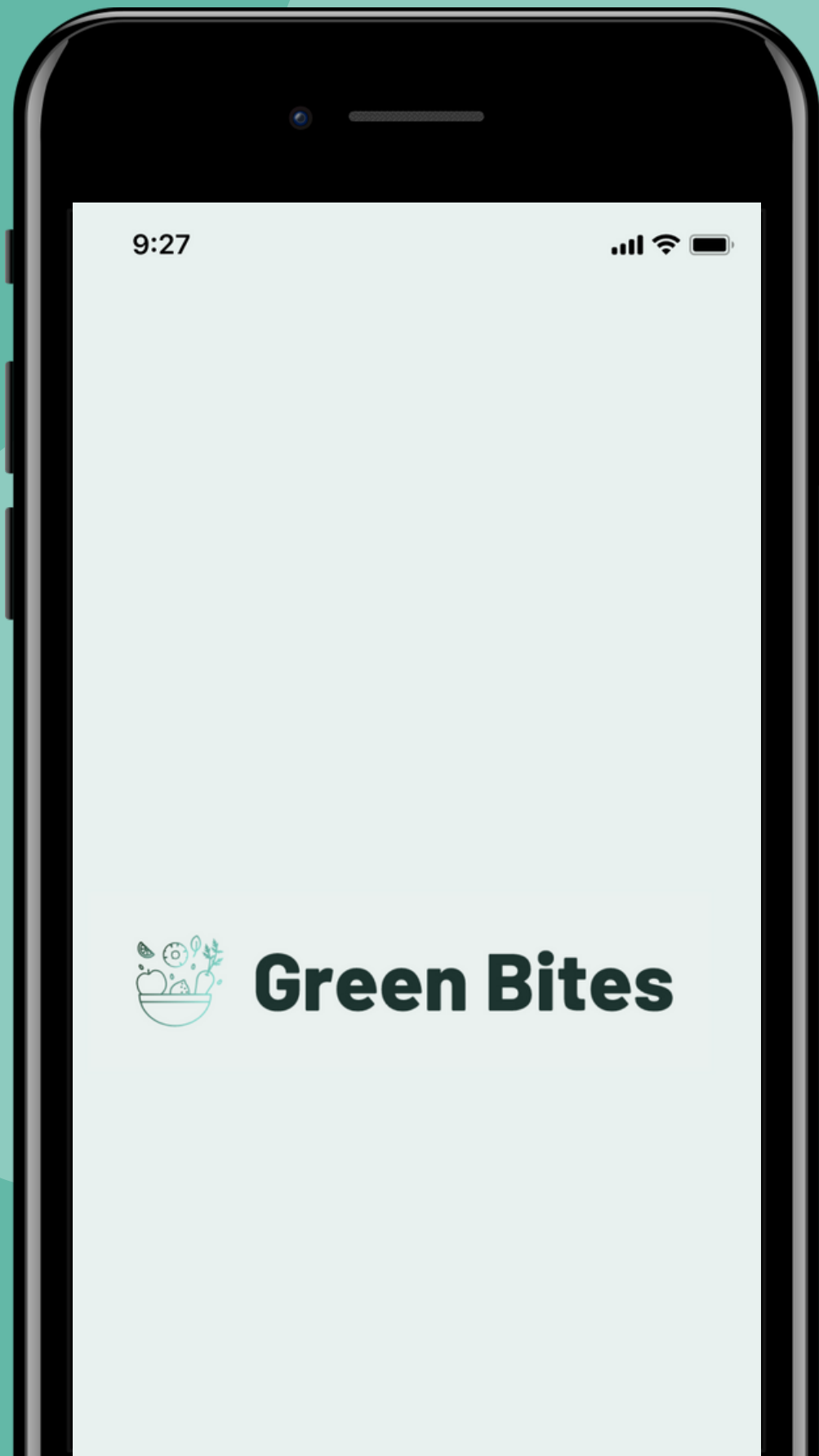
Everybody eats

People are already making lists and going to grocery stores

Vote with your dollar

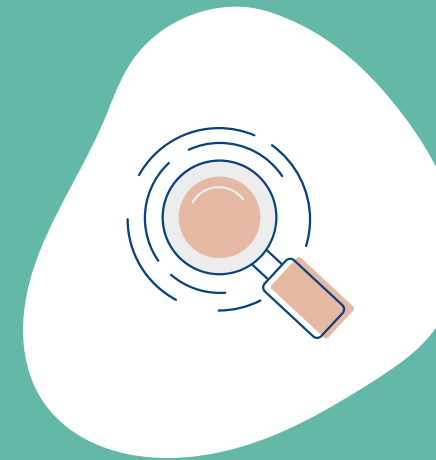
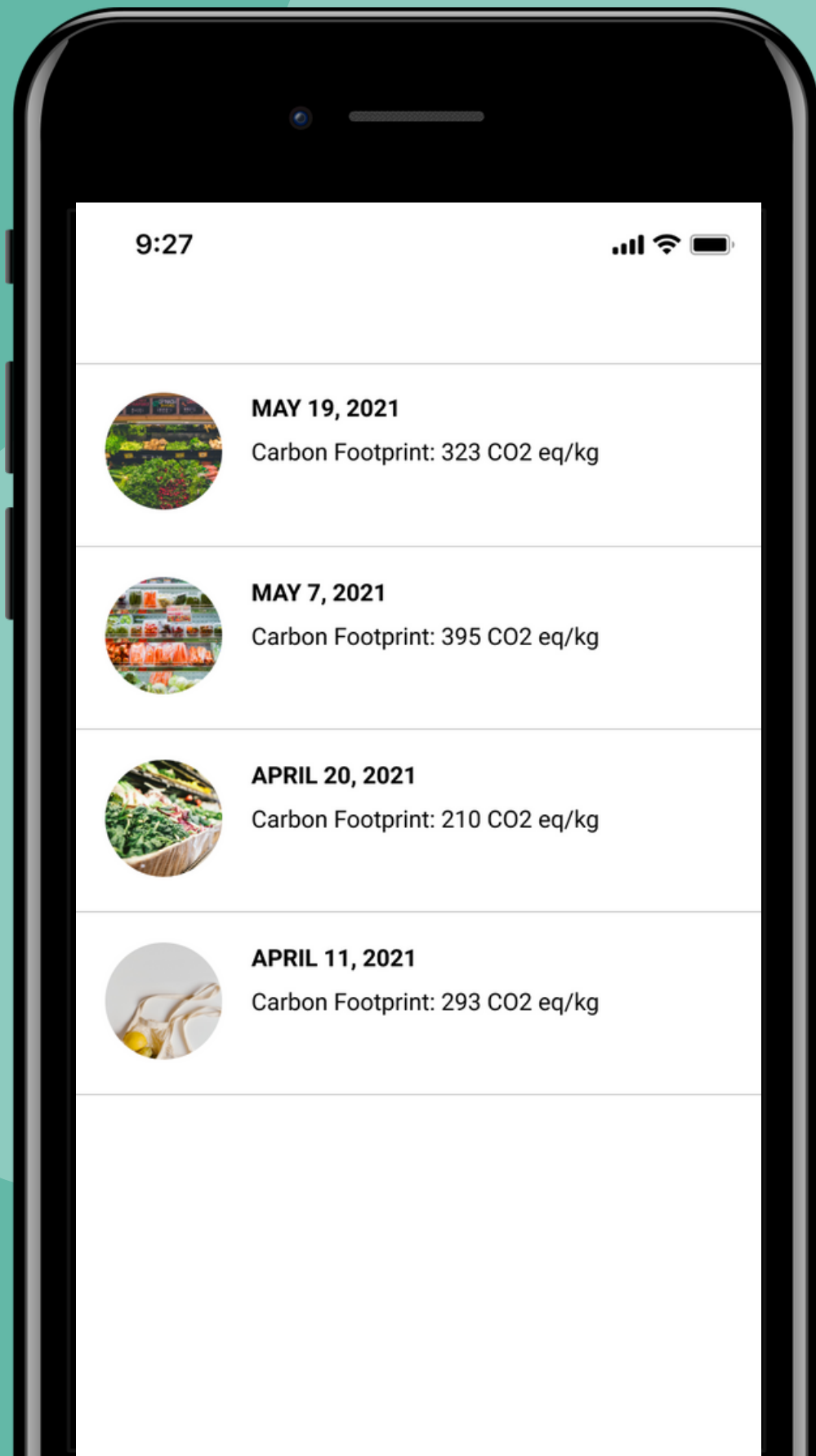
Increase popularity of products that are inherently greener





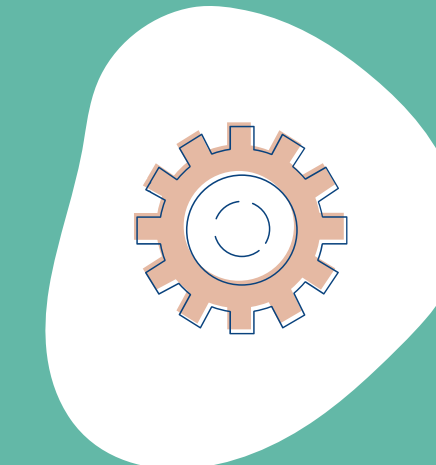
Green Bites

A smart grocery list that helps users to track their impact and make informed dietary decisions.



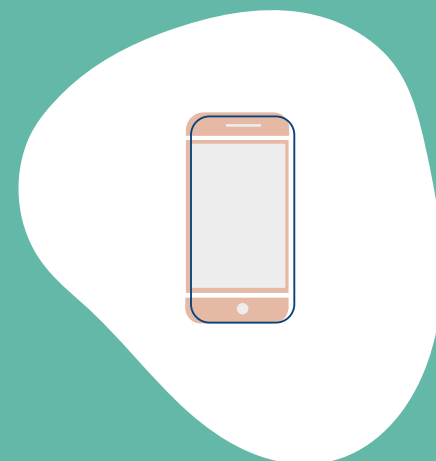
Identify

Identifies any grocery item based on a text or image input



Estimate

Provides an educated guess of the carbon footprint based on our datasets



Recommend

Recommends low-impact alternatives that are just as nutritious

Milestones

Idea definition

Brainstormed and carefully defined the scope and objective of our product

Research

Found important factors, considerations, and data

Dataset manipulation

Used NLP to combine existing datasets

Recommendation algorithm

Clustered the new dataset to get smart food groups based on nutritional information

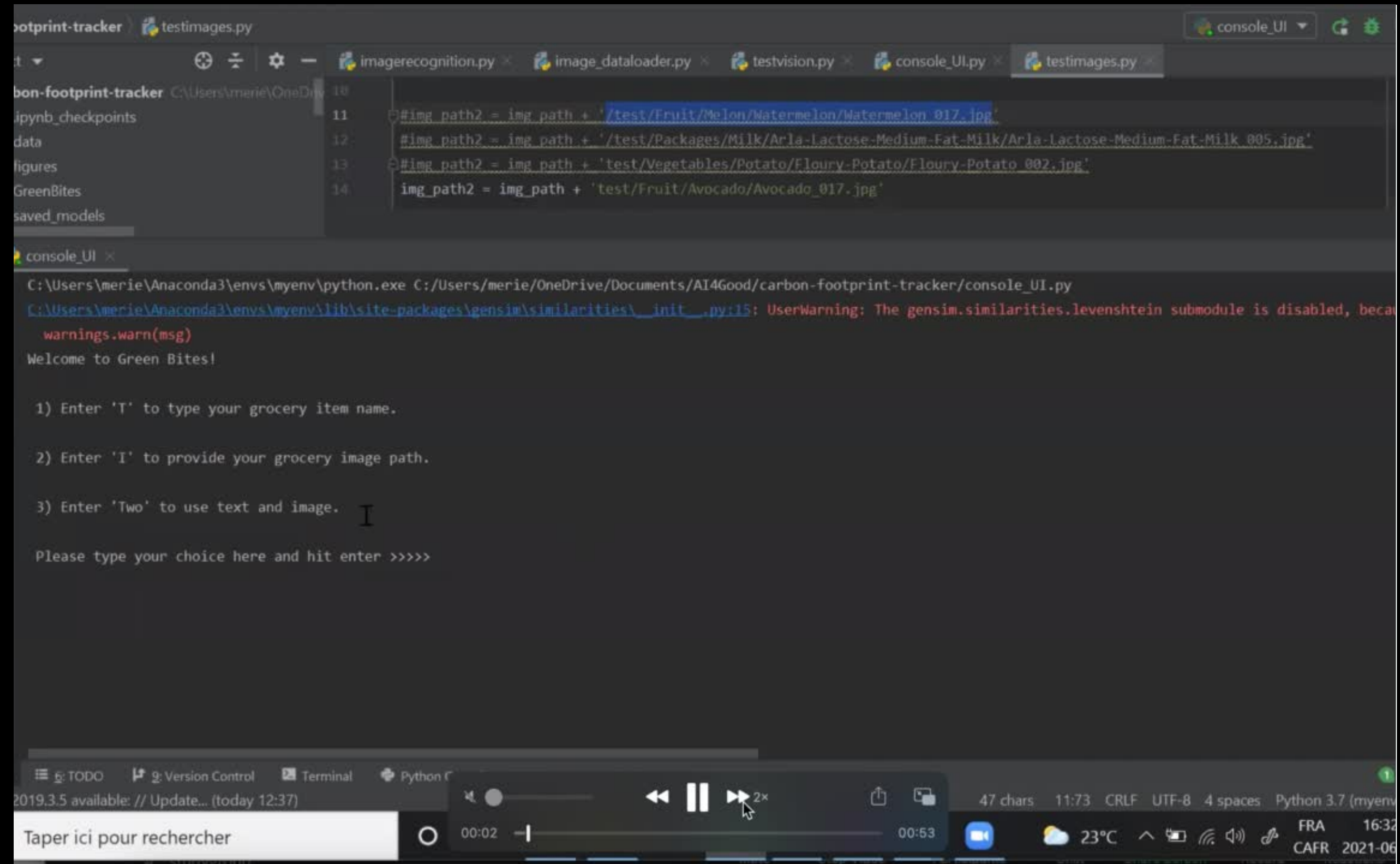
Interface development

Created a prototype interface for demonstration




Demonstration





Future Roadmap

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- Step 1**
Minimum Viable Product (MVP)
 - Step 2**
User interface improvements
 - Step 3**
Find or build larger datasets for improved precision and accuracy
 - Step 4**
Implement more robust ML frameworks
 - Step 5**
Develop individual carbon footprint profiles and predictions



Seamless

Green Bites assists with activities that are already part of individuals' routines.

Accessible

Users can easily input items by taking a photo or simply entering their grocery list.

Independent

Green Bites considers the inherent footprint of food items, regardless of the brand or where the item was purchased.

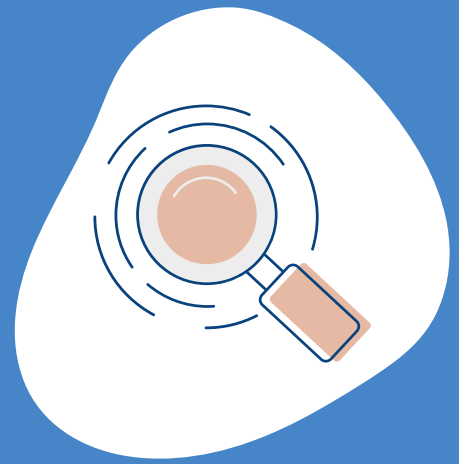
Empowering

The app provides positive incentive to make easy changes without adding extra stress!



Green Bites

<https://github.com/aiiches/green-bites>

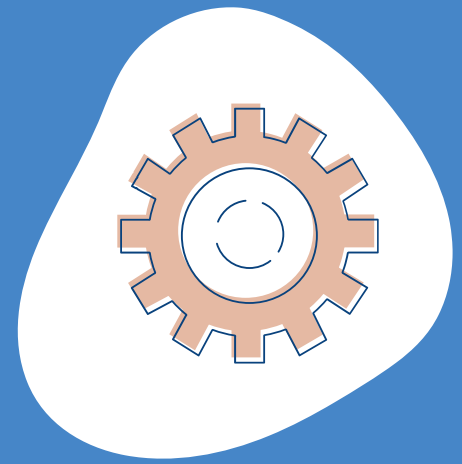


Identify

Word2Vec model trained on a dataset of recipes to

- identify food items and
- merge two datasets

CNN to identify images



Estimate

Estimate the carbon footprint of
user input using cosine
similarities



Recommend

Recommend a list of food items that have a similar nutritional value but lower carbon footprint using unsupervised K-means clustering.