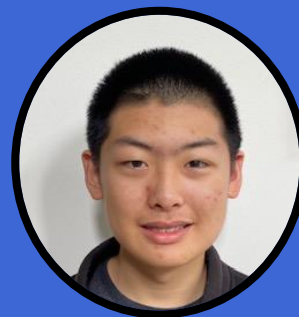
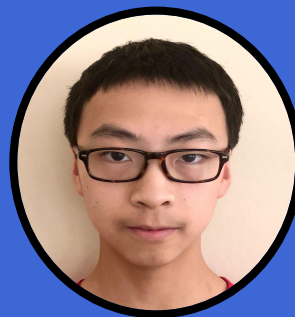
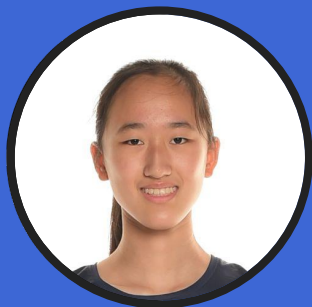


ECOCOMPOST

Felicia Guo, Joshua Guo, Daniel Yu, William Chen

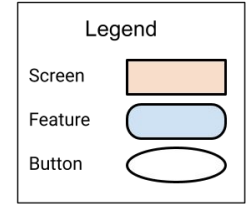
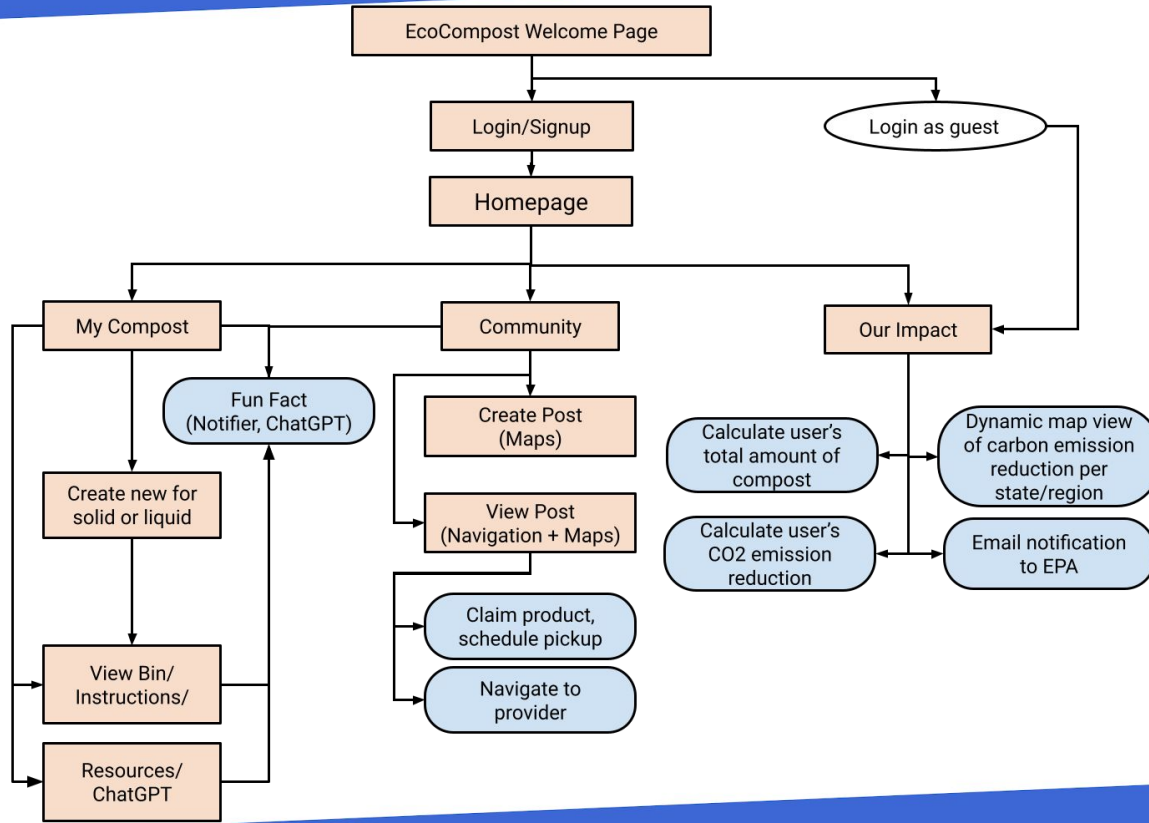


OVERVIEW

- **App Name:** EcoCompost
- **App Description:** Our app assists users in building and managing compost to recycle food waste and improve the environment. It promotes sharing of compost products and collaboration in the community and enhances friendship. Along with the interactive app experience, the app can also track the amount of carbon dioxide emissions the compost of each individual reduces throughout the state, region, or country.
- **Track:** Youth Team
- **Category:** Climate & Sustainability



DESIGN CHART

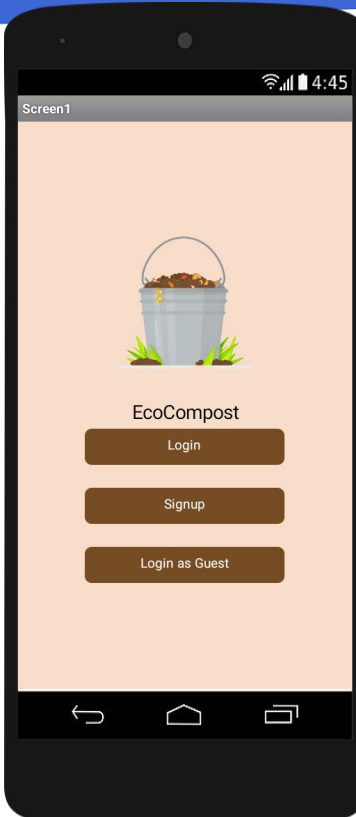


WHY COMPOST?

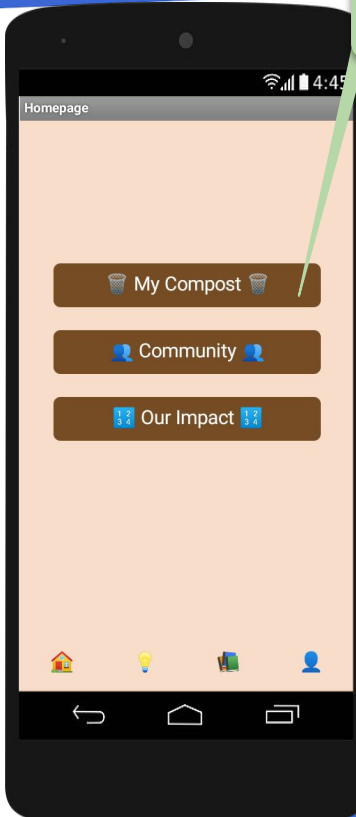
In the United States, approximately 30% of all food waste is compostable. However, only about 5% of food waste is actually composted, meaning that about 25% of all food waste in the United States instead ends up in landfills, where it can release methane and pollute the surrounding environment. In contrast, compost releases CO₂, which is over 25x less effective at trapping heat than methane. As a group that utilizes compost to grow plants, we wanted to increase the amount of repurposed food waste by creating a personalized app with a niche community to make composting easier and more accessible.



INSTRUCTIONS - MY COMPOST

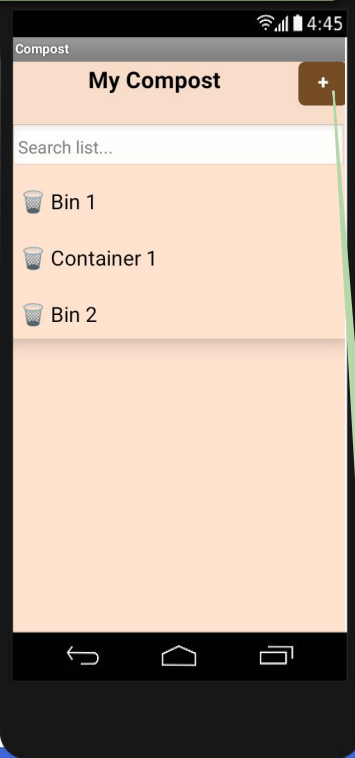


Main starter screen



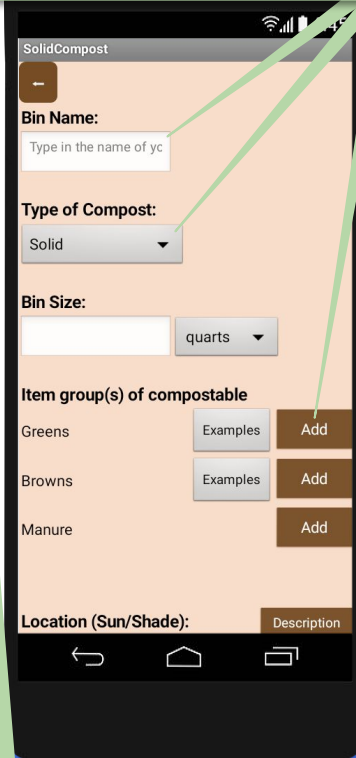
Homepage

View compost

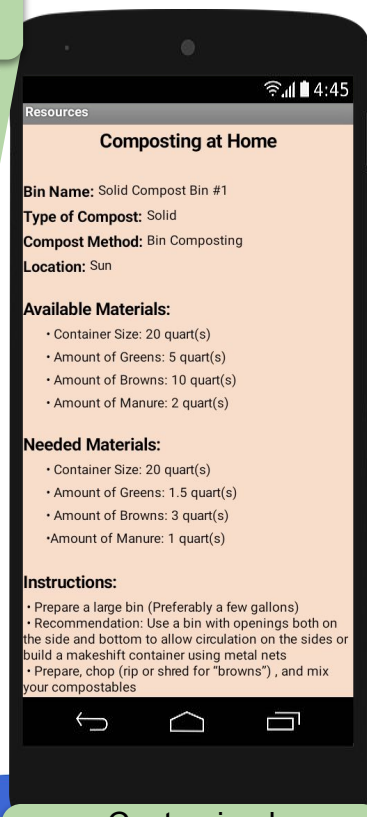


Create compost bin

Enter all points

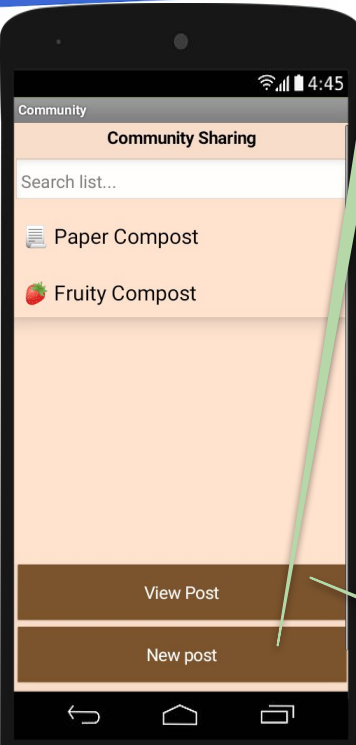


Customized instructions based on inputted data



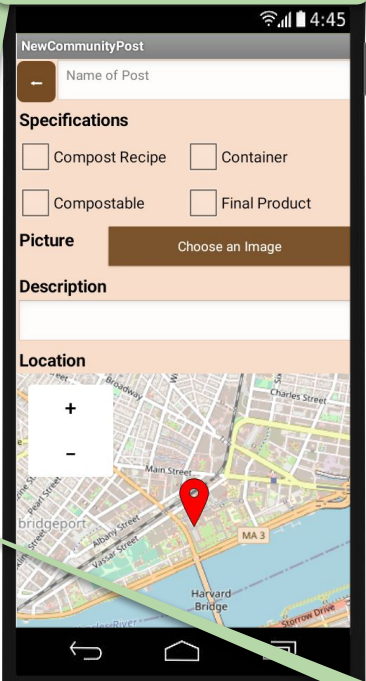
Customized instructions based on inputted data

INSTRUCTIONS - COMMUNITY SHARING

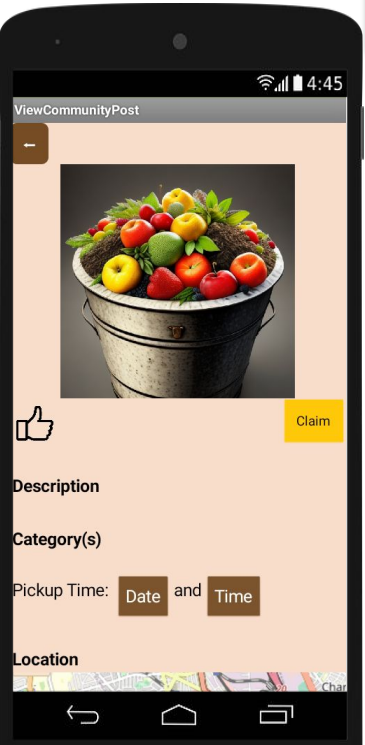


Community page

Create new post and fill in info

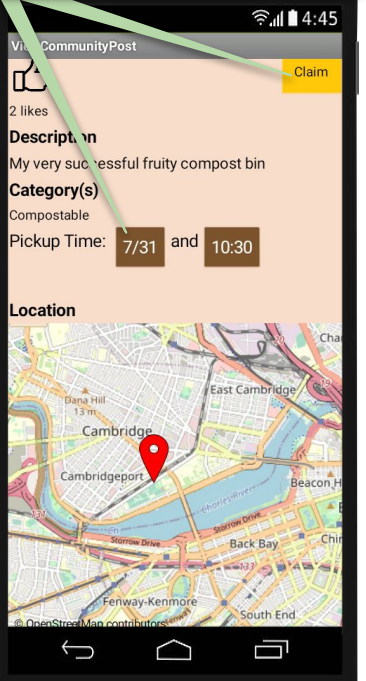


Create new post and fill in info

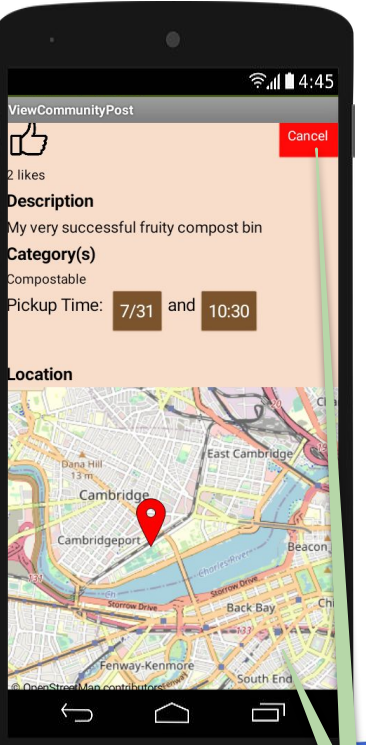


View a post and claim to pick up at date and time

Claim and set up pickup time

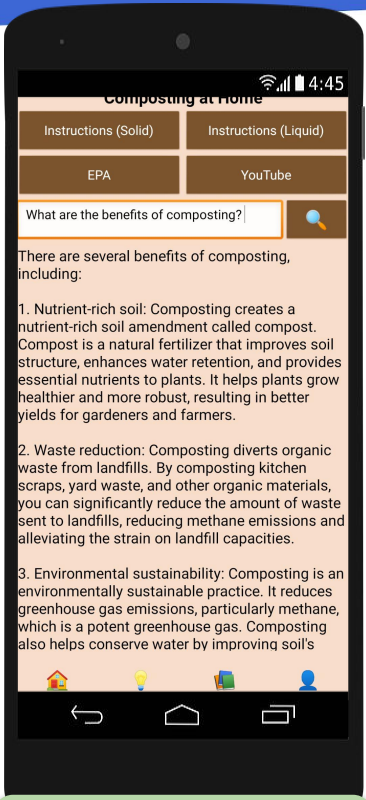


Claim and set up pickup time

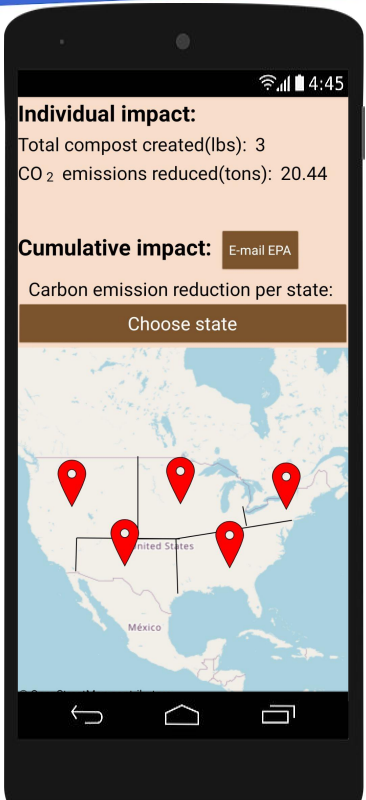


Navigate to the location, cancel if needed

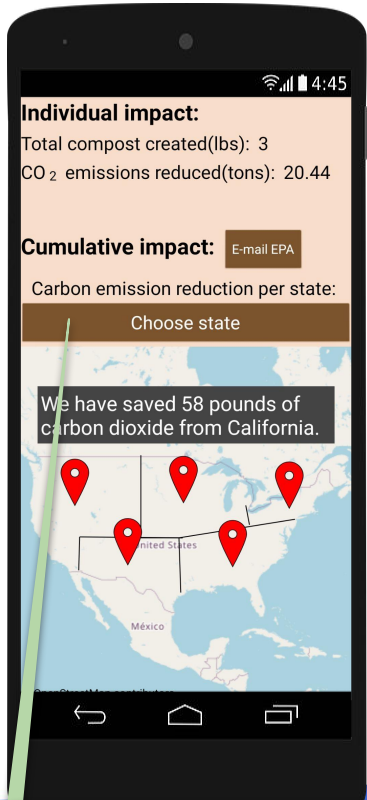
INSTRUCTIONS - OUR IMPACT



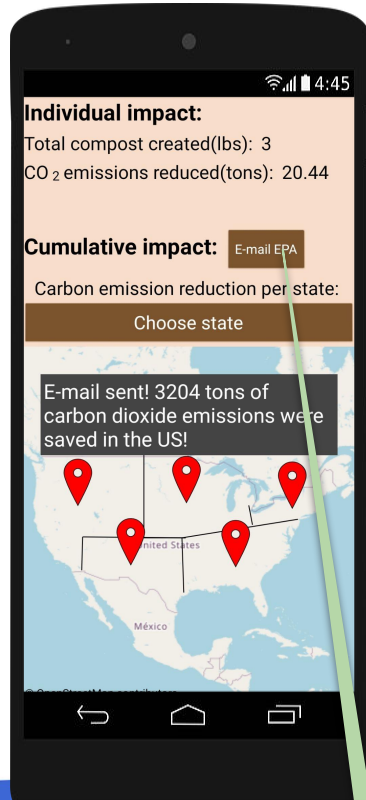
Resource page using ChatGPT



Individual impact



Choose state to view the accumulated amount saved



Email data to EPA officials

TECHNOLOGIES USED

- MIT App Inventor 2.67
- Android 11
- Open Street Maps
- Open Route Service Navigation
- TinyDB
- CloudDB
- ChatGPT



**openroute
service**



FEATURES

- **My Compost:**
 - Create and track your current compost bins and fertilizers (solid & liquid)
 - Provide customized instructions to allow users to choose their preferred method
 - Inform users how to manage their compost
- **Community:**
 - Display a community of other users around you on a map
 - Sell/donate your homemade results (E.g. fertilizer, compost, fruits, etc.) to other users
 - View others' posts and interact with them
- **Impact**
 - Calculate your own impact on climate change
 - View the app's total impact
 - Send email to EPA
- **Fun facts**
 - Generated by ChatGPT to raise awareness about climate change
 - Promote the benefits of composting
- Save your data in your own account, which you can access from any device, anywhere, and anytime



LIMITATIONS

- Map
 - Can do 50 markers for each state but not enough space
- Image
 - Size cannot exceed 300 kb
- Calculation
 - Carbon dioxide emission reduction is not calculated based on strictly approved formula



ACKNOWLEDGEMENTS

- Dr. Yu Meng (Mentor, Brainstorming, App advice)
- Whitney Huang (Parent, Organizing meetings, Brainstorming)
- Christine Chen (Parent, Brainstorming)
- Grace Fei (Parent, Brainstorming)

