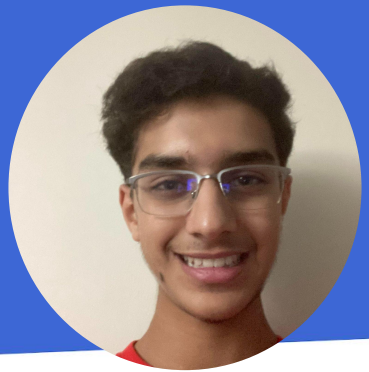
MIT APP INVENTOR

ECOEMISSION

Svar Pandya



SUMMER APPATHON

OVERVIEW

- **App Name:** EcoEmission
- **App Description:** EcoEmission is an app which helps bring awareness to climate change by highlighting the impacts of individual drivers and helping them reduce their footprint. This app calculates the emissions the driver releases and shows them how to offset that amount by calculating the number of trees they need to plant and providing eco-friendly alternatives to common car products.
- **Track:** Youth Individual
- **Category:** Climate & Sustainability

THEME

In 100 words or less, describe the problem that you chose to address, and why you were interested in solving it. Please note that this portion of your submission will be published if you are selected as a finalist or winner.

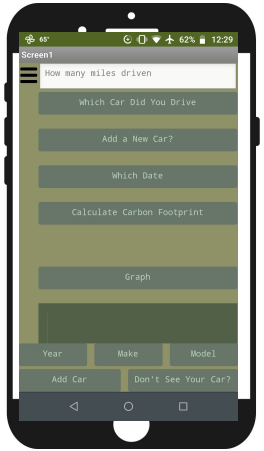
Climate change is an ever-growing problem and has already affected billions of people around the world, with many scientists estimating that we only have nine years until we hit a tipping point from which we cannot return. Many of our daily tasks, such as driving and eating, contribute heavily to this issue as they release high amounts of carbon dioxide and other greenhouse gases. Thus, I created EcoEmission, an app that helps bring awareness to drivers and their personal impacts by measuring their emissions and providing ways to reduce them, to take a stand and help preserve our planet.

INSTRUCTIONS

Please provide step-by-step instructions for using your app, along with high-quality screenshots of the app. Feel free to add as many slides as needed.

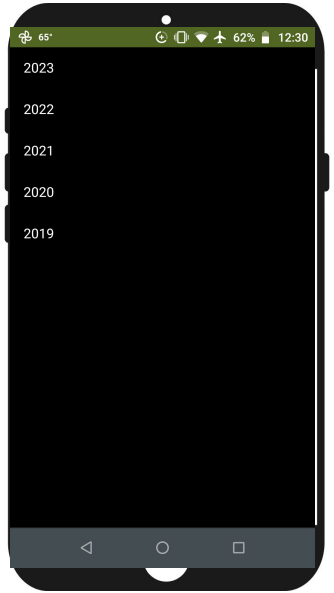
Step 1: First, the new user signs up with their name and password. They click Sign Up and then Login to go to the Home Page.

Step 2: Once the user clicks Login, they are brought to this home screen. From here, they click Calculate Emissions to reach the Calculations Page.

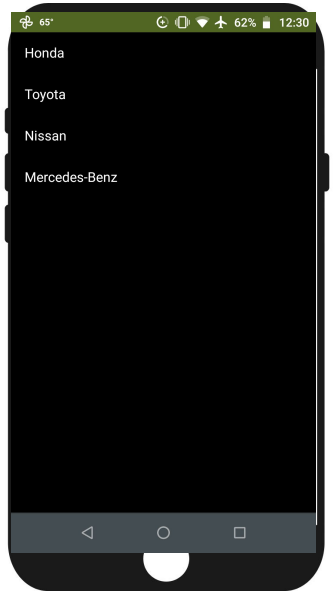


Step 3: Once the user clicks Calculate Emissions, they are brought to this page. To add their own car, they click "Add a New Car?".

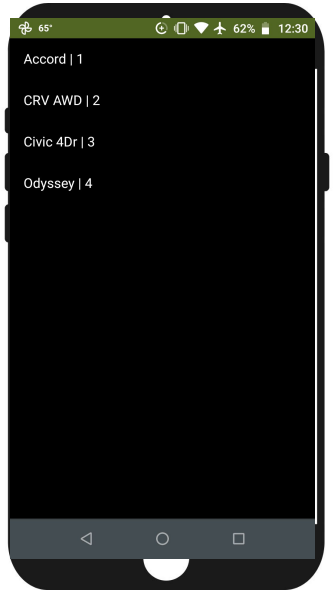
INSTRUCTIONS



Step 4: On that page, the user clicks Year at the bottom which opens up this selection. The user selects the model year of their car.



Step 5: After selecting the year, the user clicks on Make at the bottom which opens up this selection. Here, the user selects the make of their car.

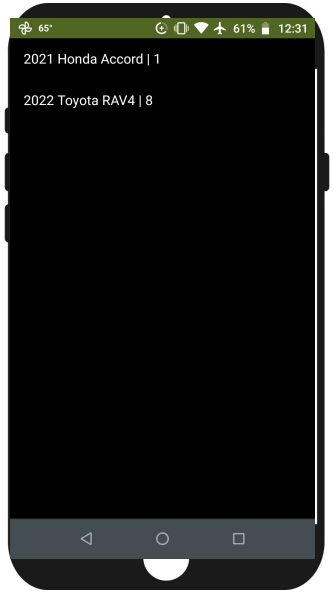


Step 6: After selecting the make, the user clicks on Model at the bottom which opens up this selection. The user selects the model of their car here.

INSTRUCTIONS

Step 7: Once the user selects their model, the screen looks like this. If the user didn't see their car model in the selection, they should click "Don't See Your Car?" to get help. But if they do, the user clicks "Add Car" to solidify that car as their own.

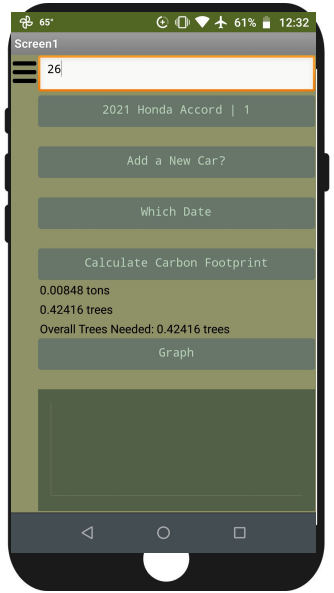
Step 8: After the user adds their car, they click "Add a New Car?" once again to hide the car selection menu. In the textbox, they enter how many miles they drove.



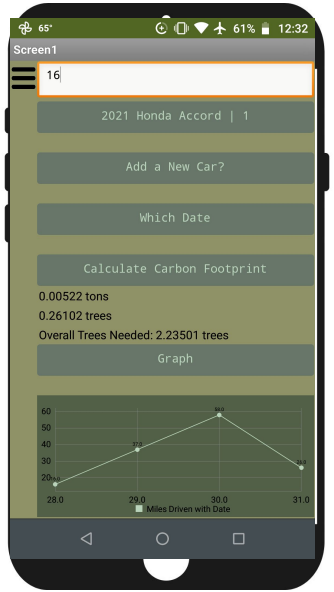
Step 9: The user clicks on "Which Car Did You Drive" which opens this menu with all of the cars the user owns. They should select which car they drove.

INSTRUCTIONS

Step 10: After the user selects which car they drove, they click on “Which Date” which opens up this date selector menu. They should select which date they drove their car on.

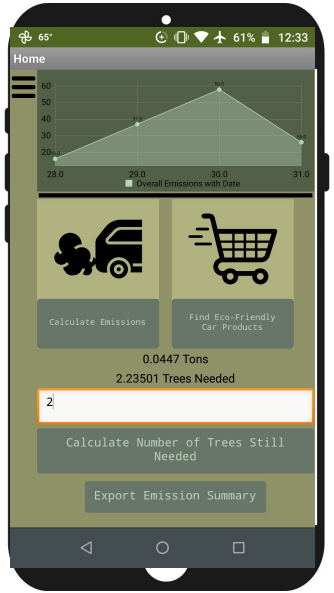


Step 11: Once the user has selected their date, they click on “Calculate Carbon Footprint” which sets the texts of 3 labels to the user’s emissions in tons of their recent drive, the number of trees needed to offset that amount, and the overall number of trees needed to plant to offset all of the user’s emissions respectively.

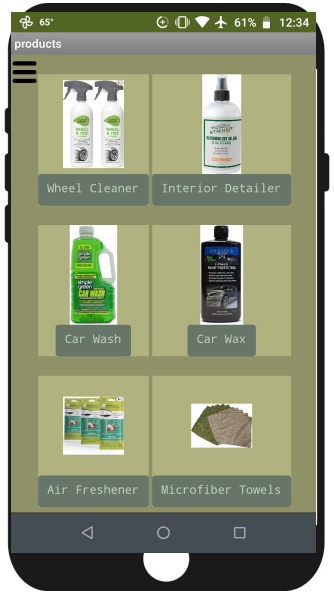


Step 12: The user can then click on “Graph” which graphs out the data the user inputted as a line graph. The X-values represent the date of the drive and the Y-values represent the number of miles driven that day. This provides the user with a convenient visual to easily show them their emissions and impact.

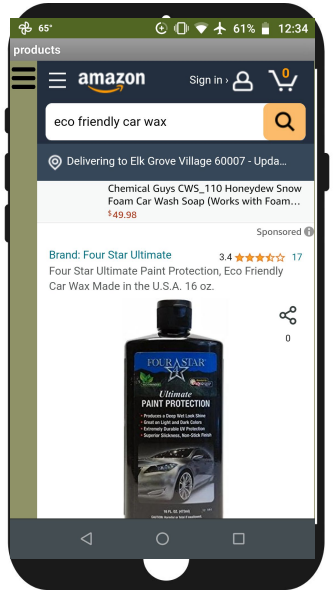
INSTRUCTIONS



Step 13: Then, the user can return to the home page through the menu which will show their emissions graph with the previously recorded data as well as the overall tons of emissions they released and number of trees needed to be planted to offset that amount. In the text box, the user can input the number of trees they planted to show an updated amount of their emissions and trees needed.

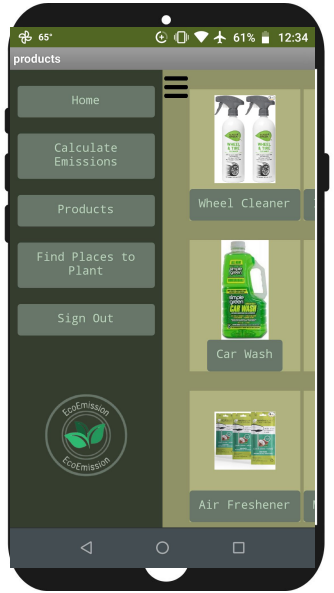


Step 14: From the home page, the user clicks on “Find Eco-Friendly Car Products” which brings them to the Products page.

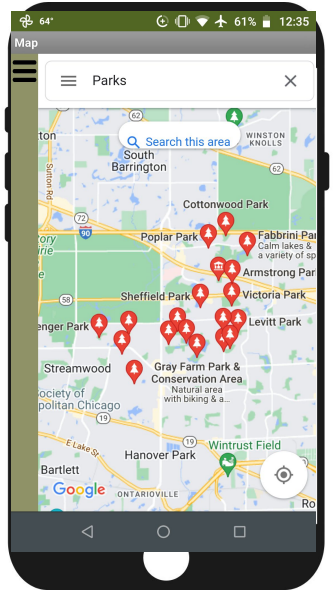


Step 15: Once the user clicks on a product they want to know more about or wish to buy, an Amazon link to that product opens. The user can view the site as normal and once they click the back button, all the other products reappear for a user-friendly shopping experience.

INSTRUCTIONS



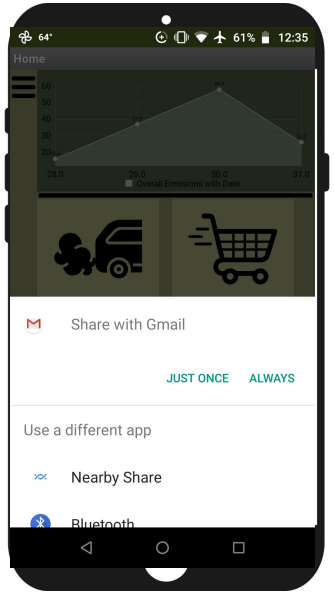
Step 16: Once the user is done browsing the eco-friendly products, they can click on the menu and select “Find Places to Plant”.



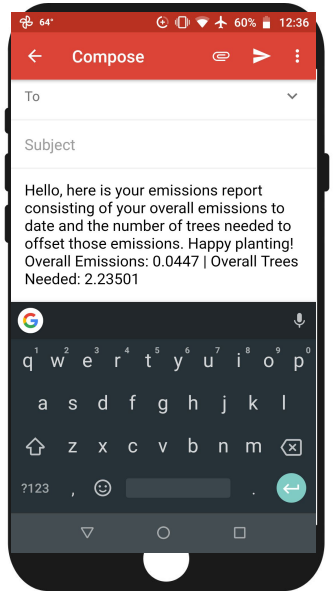
Step 17: Once the user selects this, they are brought to a screen with a map which shows parks near the user where they can go plant trees. This makes it extremely easy for the user to reduce their carbon footprint.

Step 18: The user can come back to the home screen through the menu and log the number of trees planted or share their emission summary by clicking “Export Emission Summary”.

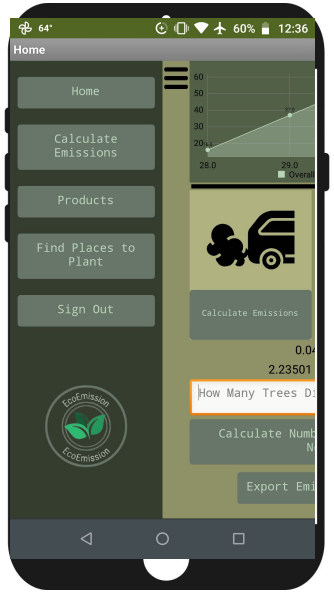
INSTRUCTIONS



Step 19: Once the user clicks “Export Emission Summary”, a share menu pops up which allows you to share your report via bluetooth or to other apps such as Gmail.

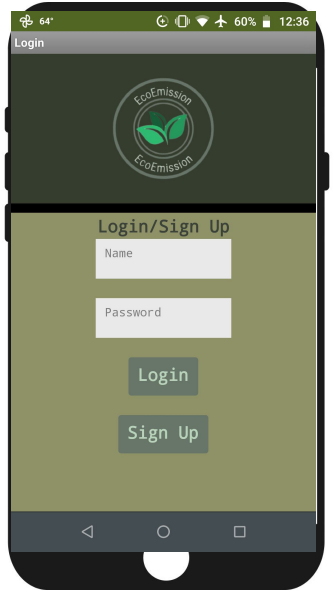


Step 20: After an app is selected to share the user’s summary to, that app opens with a preloaded message which shows the user’s overall net emissions at the time of the message and trees needed to offset that amount in a clear manner. This can then be shared or sent to anyone.



Step 21: The user can return to EcoEmission and click on the menu.

INSTRUCTIONS



Step 22: In the menu, the user can click “Sign Out” once they are done using the app. This will sign out the user and lead them back to the Login screen where the name and password must be entered to access the user’s data.

LIMITATIONS

In 100 words or less, describe the limitations of your app and what people should carefully consider when using it.

Currently, EcoEmission doesn't support all makes and models of vehicles, although new cars are in the process of being added. Also, while the app shows certain parks near the user where they can plant trees, it doesn't show areas which need more trees to be planted such as ones heavily affected by deforestation. In addition, this app only measures the user's carbon footprint in terms of driving. Users should consider that their overall footprint will be far higher due to other factors such as energy usage and food. This app reduces their footprint but does not completely remove it.

ACKNOWLEDGEMENTS

Please list the names of anyone who helped you with developing your app, and describe what type of help they provided.

- My Dad (Hitesh Pandya) provided me with the idea of the map feature which shows parks near the user so that they can easily and conveniently plant trees. He also helped me select colors for the user interface.