Project Proposal: CO_2 Footprint Calculator

Team Big Data

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Introduction:

Carbon dioxide pollution into the environment has skyrocketed in the last decade due to burning of fossil fuels, which is bad for the environment because it causes a greenhouse effect which leads to increased temperatures across the globe. Plants and animals are getting pushed out of their environments due to changing temperatures and polar ice caps are melting leading to rising sea levels. People are getting increasingly concerned about our effect on the environment and now realize our global carbon dioxide production has to be reduced; however many people don't know how much carbon dioxide they individually produce and what they can do to help the environment. We aim to provide a web app based on Google Chrome that calculates the carbon dioxide production of California residents, based on their at home appliances and energy consumption.

Objectives:

- Inform users of their energy consumption from the devices they're using.
- Record and keep track of energy consumption on a daily basis.
- Optimize users' carbon footprint for a better environment.
- Provide tips on how to reduce carbon footprint.

Value Proposition:

This application fills the need of users understanding their ecological footprint and track how harmful their activities impact their local environment. The lack of social awareness about carbon footprints will allow this tool to have a mainstay in the market. Earth is in a critical state with global warming and in order to prevent global warming's domino effect is for individual users to be informed and do their part by staying within an acceptable limit.

Application Features and Description:

Users will sign in on the web page to make a personalized calculation. They can also provide their personal devices in their house and their costs and emissions will be calculated based on the user's devices and their energy source. This allows users to get a better understanding of their Energy Consumption Footprint:

- Personalized devices list
- Lists California energy sources
- Show specific area's energy sources
- Calculate user expected energy draw and costs
- Calculate user expected emissions
- Device comparison
- User Requests to add new devices
- Shows user a graph of which devices produce the most carbon dioxide

Future Road Plan:

- Work with IOT devices to get specific energy usage
- Expand to different states