DEV02

Topic: Peeking The Emissions

Based on statistics, the download of one GB of data from the internet emits 11 grams of CO2-equivalents. An unoptimized website generally loads MBs of data on request. Considering that the website gets visited thousands and sometimes millions of times every day, major websites might have an unforeseen carbon footprint per user.

Objectives:

- Make a browser extension and calculate carbon footprint based on the total data sent/received when a user visits any website.
- Generate and display to the user the expected carbon footprint he has caused by visiting various websites.
- Create a website and display web pages based on their rank based on the overall footprint.
- Provide detailed carbon emissions caused by users on different sessions.
- To categorize websites as Green, Semi-Green, and Non-Green using parameters from emission data.

Brownie Points:

- Store all-time data showing the total emission caused by the user.
- Recommend users visit sites with a lesser footprint and provide similar functionality.
- Recommend users to upgrade their network depending upon the percentage of packets lost during transmission.

Reference:

- https://www.bbc.com/future/article/20200305-why-your-internet-habits-are-not-as-clean-as-you-think
- https://sphera.com/blog/the-carbon-footprint-of-the-internet/
- https://sustainablewebdesign.org/calculating-digital-emissions/