

## Overview

The Earth is warming at an alarming rate, and the growth of CO2 emissions is a major reason for this change. Many countries have signed agreements to reduce CO2 emissions, and many cities in the United States, like Los Angeles, are taking the lead in reducing CO2 emissions. However, actions like diplomatic agreements are not enough. Without an easy to use way for everyday people to see environmental changes, people cannot observe and understand the changes of regional CO2 emissions. Also, people don't know whether their actions really mitigate global climate change or not.

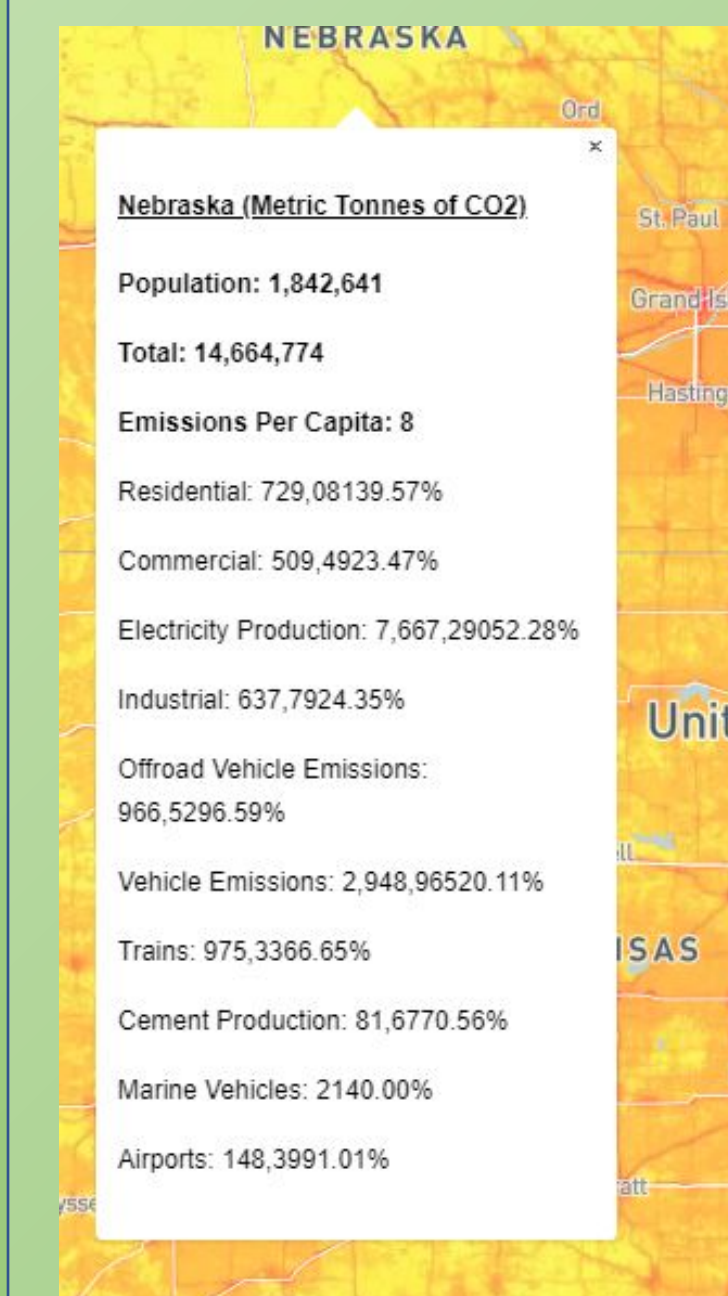
## Problem

Our clients want more than just pictures and videos of the map; they want interactive graphics that help people visualize their city and their personal emissions in order to illustrate how their actions are affecting the environment in which they live. The data they have is only available in technical formats and it's hard to interpret.

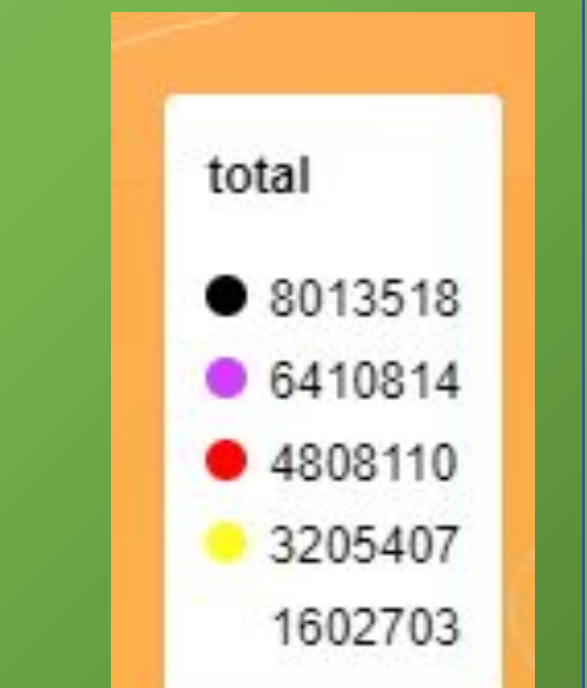
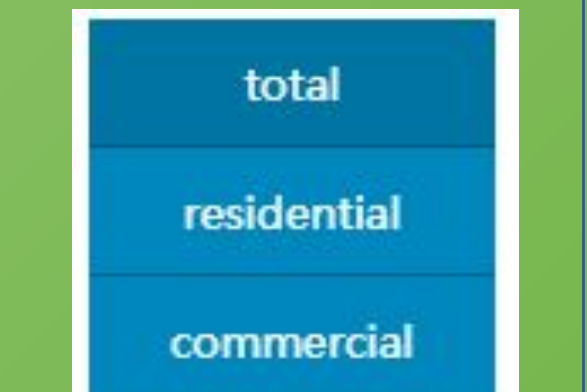
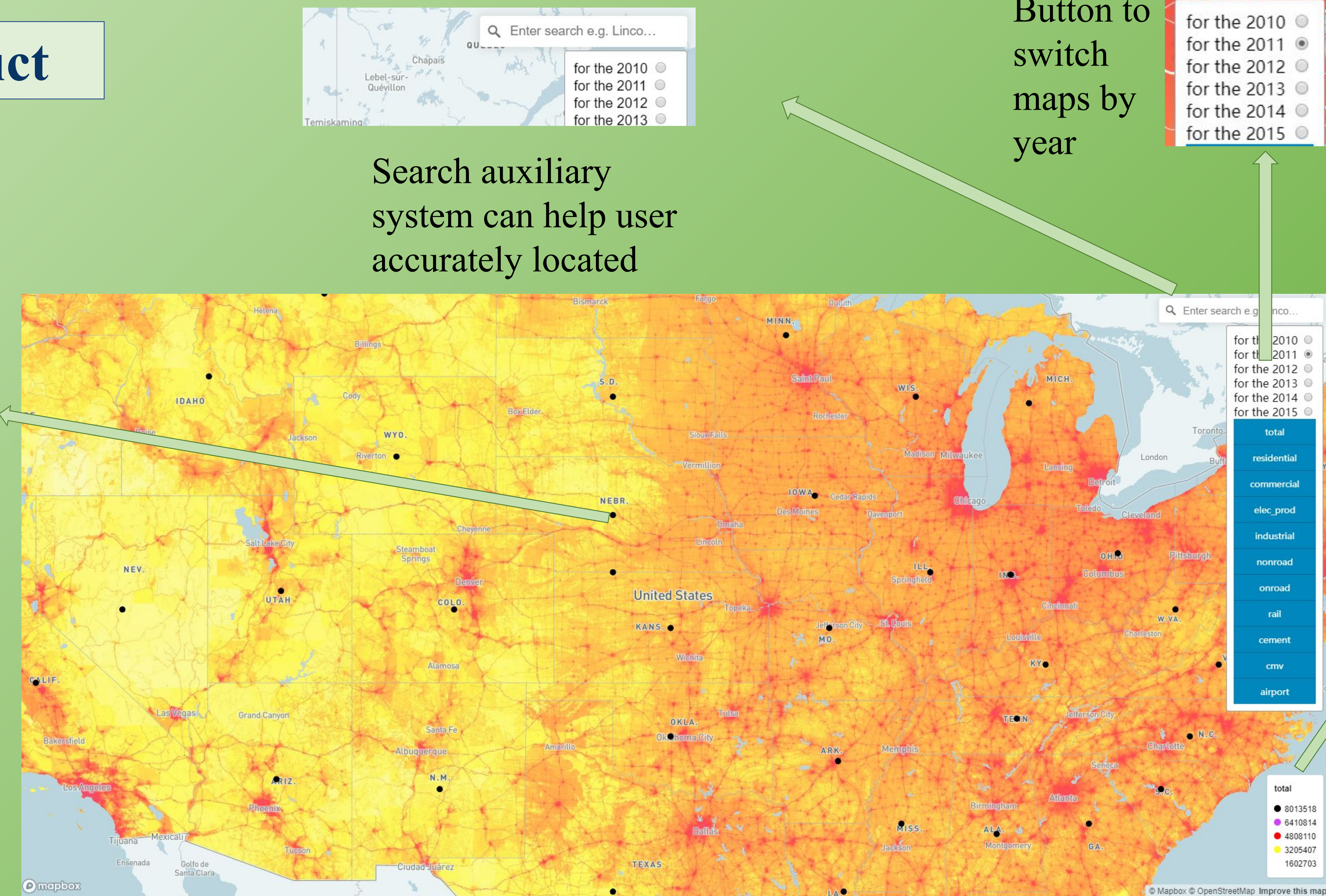
## Solution

Our primary goal is to build an easily accessible interface that allows everyday people to understand and explore CO2 emission findings. The solution our team for our sponsor is an interactive map that can show the CO2 emissions in an interactive graphical interface. Users can access our map and see a map displaying relative CO2 emissions. And we also provide a ranking map for users to view the ranking information about emission and a download page for users to download our client's data.

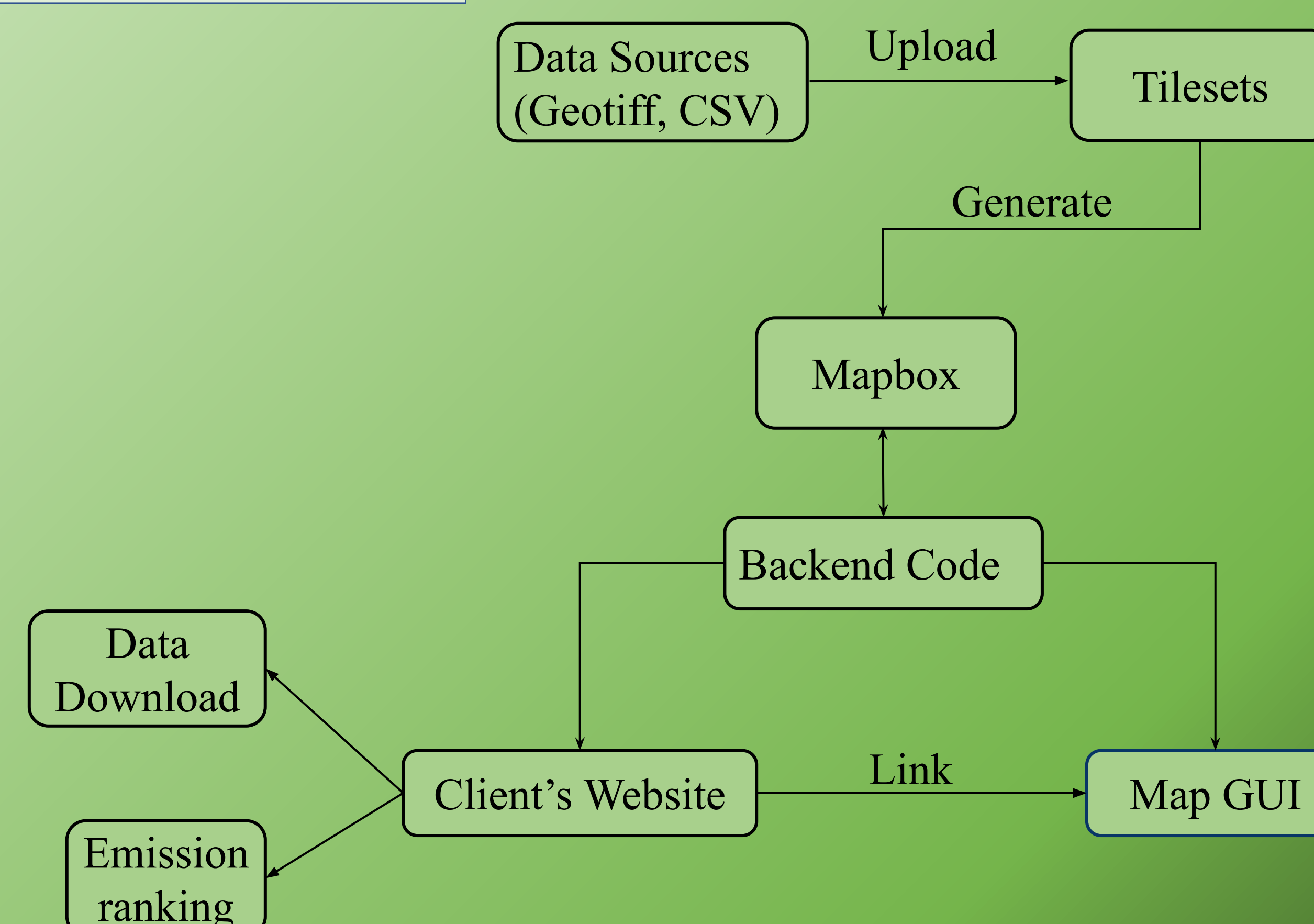
## Our Product



Click the black dot will show the info. about that state



## UML



## Technologies

We using Python tool GDal to colour the raster layer, add layers in Mapbox Tilesets and create the map in Mapbox Studio, then using Mapbox GL JS and JavaScript to write the user interaction function, and write the ranking & download pages by Express.



## Future Work

This project has numerous useful extensions: Using Mapbox SDK for IOS and Android can implement the user interaction emission map on IOS and Android smart phones.