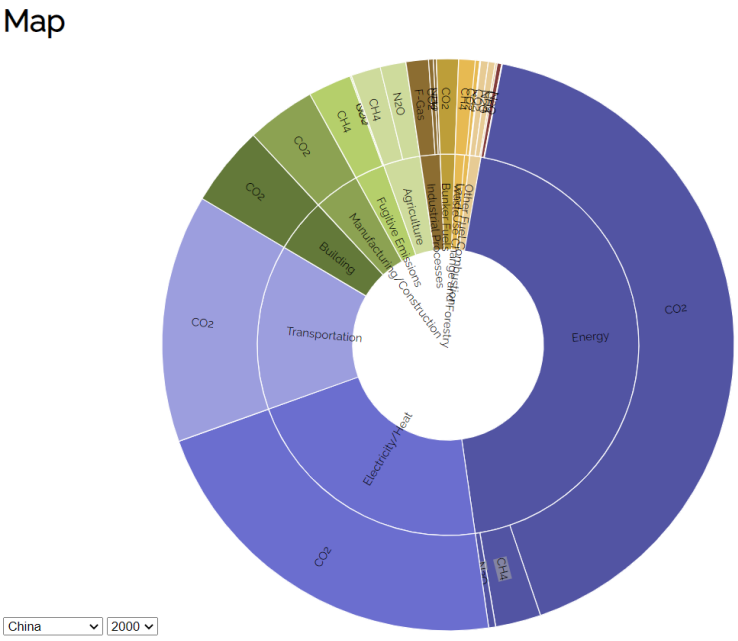
Milestone 4: Status Update

[10%] Screenshots of the current interface status:

- *images of the current interface (rough prototype is fine). These do not need to be beautiful, just show the progress you've made in getting to a working interface.*



[15%] Description of changes to the previous proposed approach + **[20%]** Description of implementation (libraries, etc):

One change is the third visual that we are representing. Instead of doing a density graph that displays the emissions and frequency of certain greenhouse gas in a specified country, we are going to do a stream graph for each country that displays the amount of total contribution of each greenhouse gas over the years so users can see the relative shifts in the type of greenhouse gases that the country produces. The previous visualization after further consideration, while it did focus on the individual greenhouse gases, did not produce as much insight and didn't allow as much exploration as the new idea. This will allow users to see aggregate contributions as well as witness trends in the emissions data.

We have mainly used D3 to construct our visualizations and have built out a static HTML page to contain our code.

[10%] Description of current schedule + **[25%]** Current challenges:

We are tracking well with the milestones we gave ourselves. We have finalized the interface once changing the density plot, and have begun the rough frameworks for all three of the major components of the visualization. We are a bit behind on reworking the data to be better manipulated for the different aspects of the visualization. One of the blockades

One challenge is collaborating one one code base. To start the framework and the separate aspects of the interface, we coded on our separate devices, but it was difficult to compile our code into one file and site.

One major challenge is modifying the data to be correctly formatted for the streamline graph. The ideal format of the data is having columns for each greenhouse gas, and columns for country and year. Currently the data is formatted to have columns for each year, type of greenhouse gas, country, and other data. We are using python to manipulate current dataframe in order to get it formatted properly to feed into the streamline visualization, so currently the streamline visualization is displaying random data, so that the framework is setup so when the data is done being manipulated and formatted, we can easily feed it into the framework.

[20%] Current code:

https://emory-infovis-f21.github.io/m4-status-update-save-the-earth/