IAT 355

Project Proposal

TimHeng
AlfredRodrigues

Our dataset consists of all the Starbucks cafes located across the USA along with their latitudes, longitudes and addresses. We currently have five different concepts for visualizing this data, but plan to pick the most suitable one after getting feedback.

Link to the dataset: http://introcs.cs.princeton.edu/java/data/starbucks.csv

The first visualization is based on a map, with each state being color coded according to the number of cafes in that state. The user can zoom into a state to get a more detailed view of the cafes and their locations.
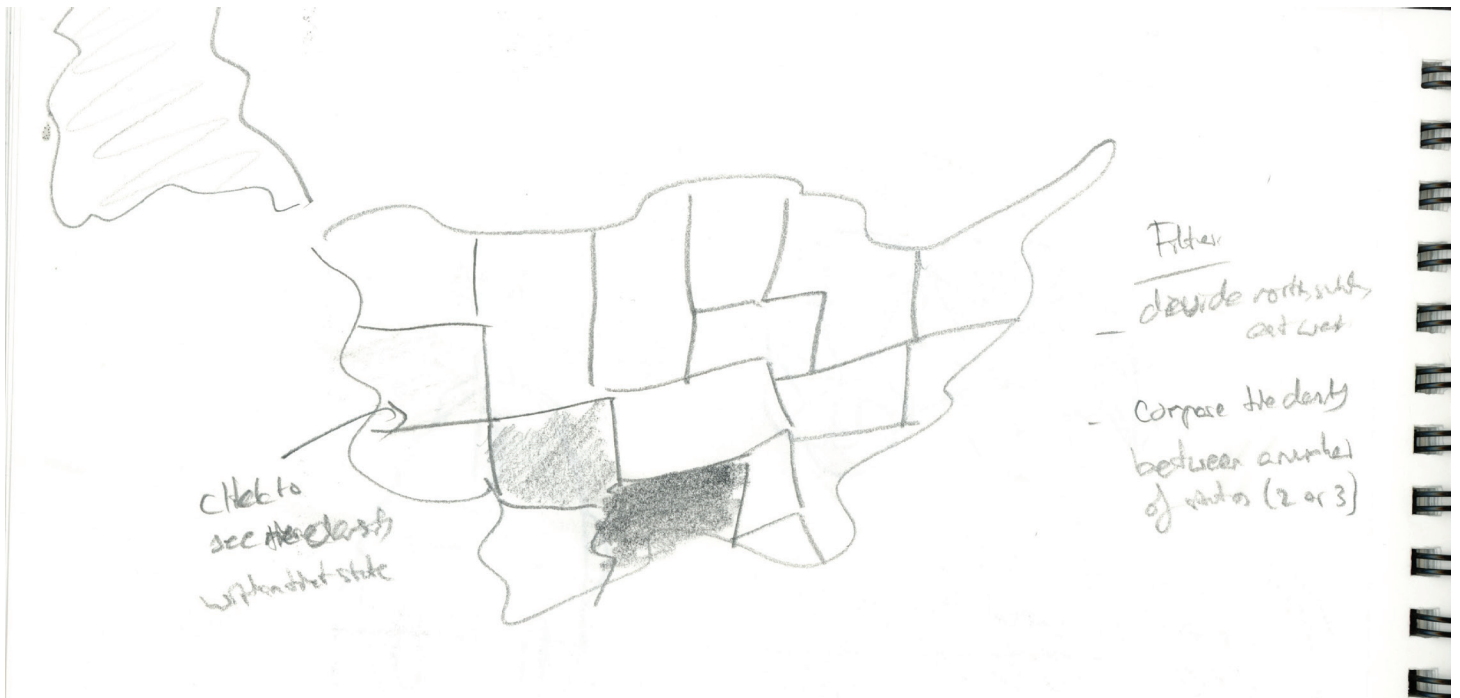

The second visualization is based on clusters and nodes. Points that are clustered together according to region represent the cafes. Lines, whose length represents that distance, link ones that are within a certain distance to each other.
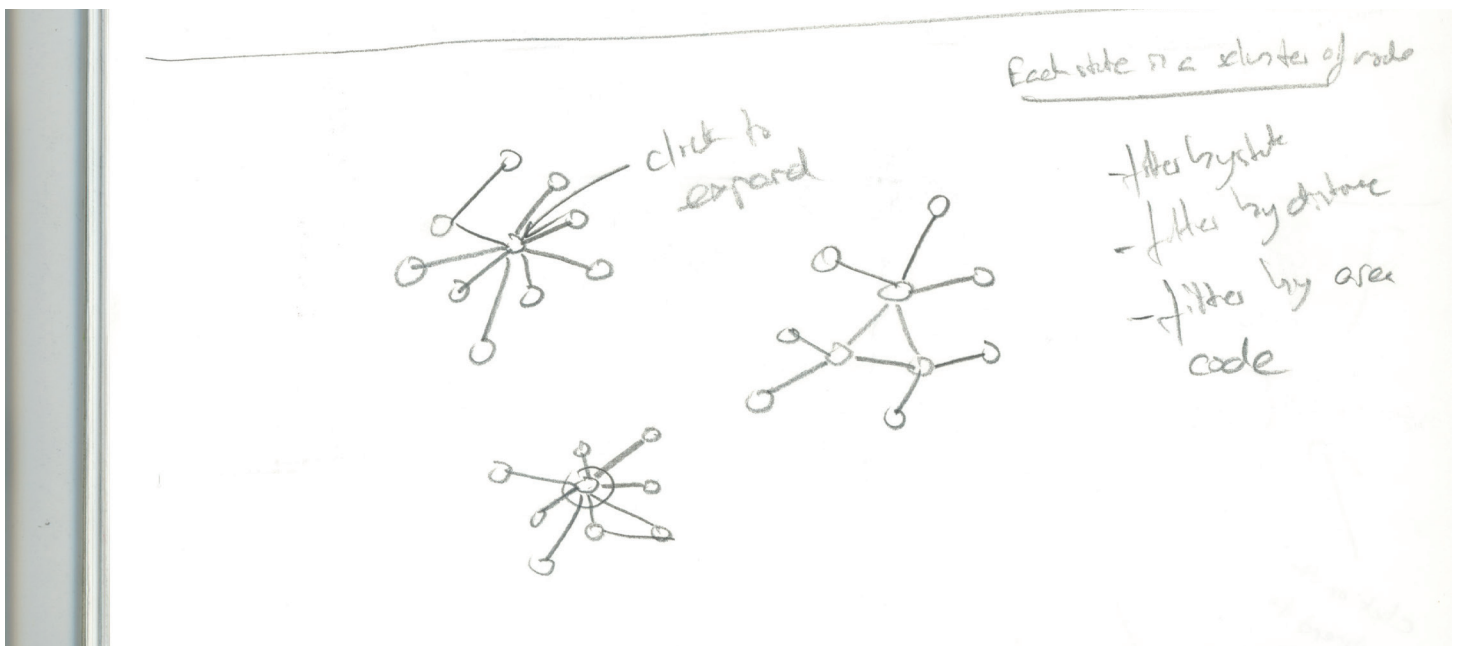
The third visualization represents data in term of regions (north, south, west and east). All the states are represented in circles and clustered according to their regions. Each state is color coded according to the density of Starbucks cafes in that state. The user can merge two or more regions to view the overall density of that two or more regions. Similarly, the user can also click on any individual circle (state) to expand and view the cities in that state that are represented by smaller circles but still color coded to show the density of Starbucks cafes in any specific city.
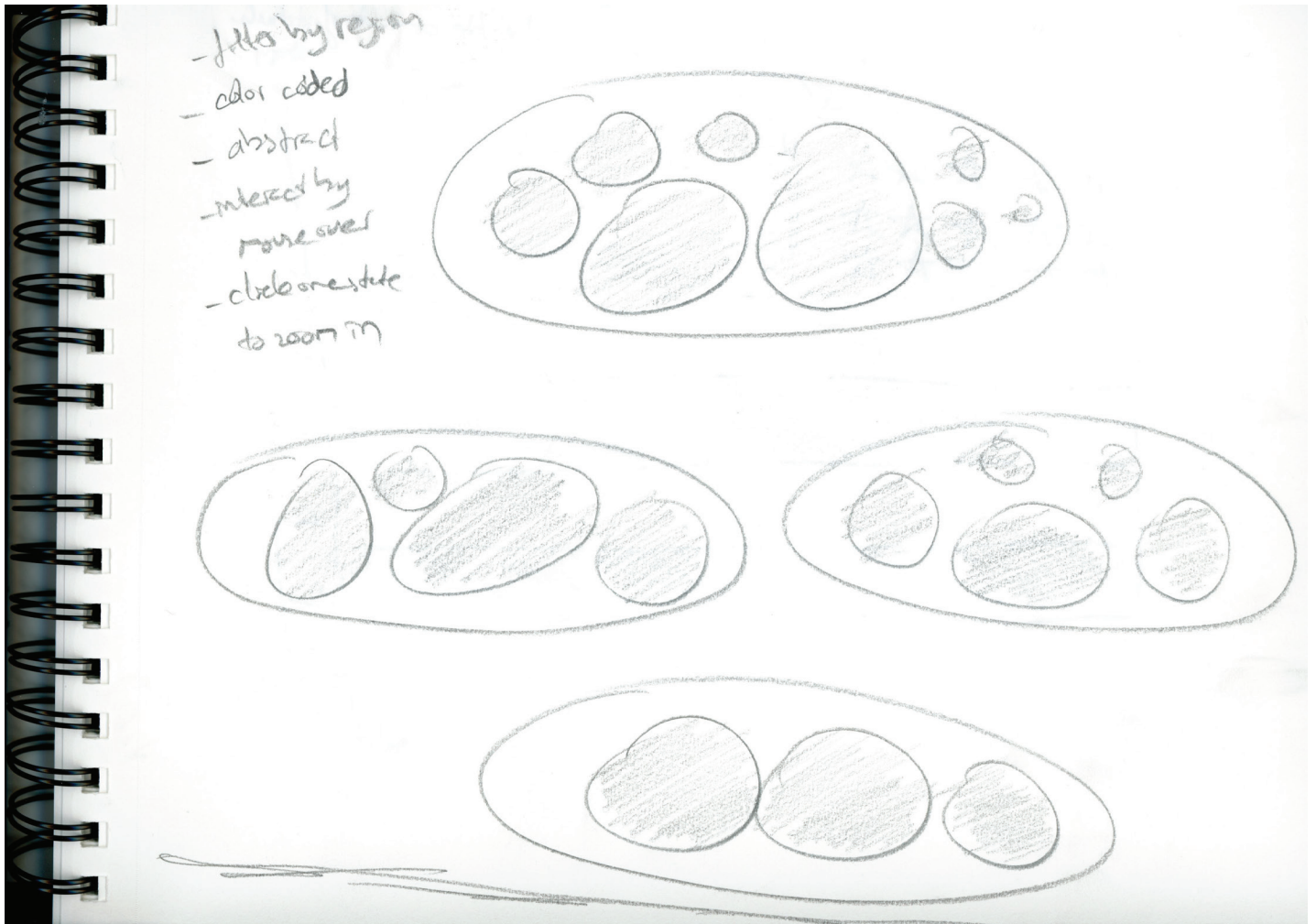
The fourth visualization is based on the latitudes and longitudes. Each café is drawn on a line that represents either the latitude or longitude, and the distance between the cafes are represented by the distance between them on the line. The user can enter his location and his position is also plotted on the line. This enables the user to find the cafes closest to him and filter out ones that are too far away.
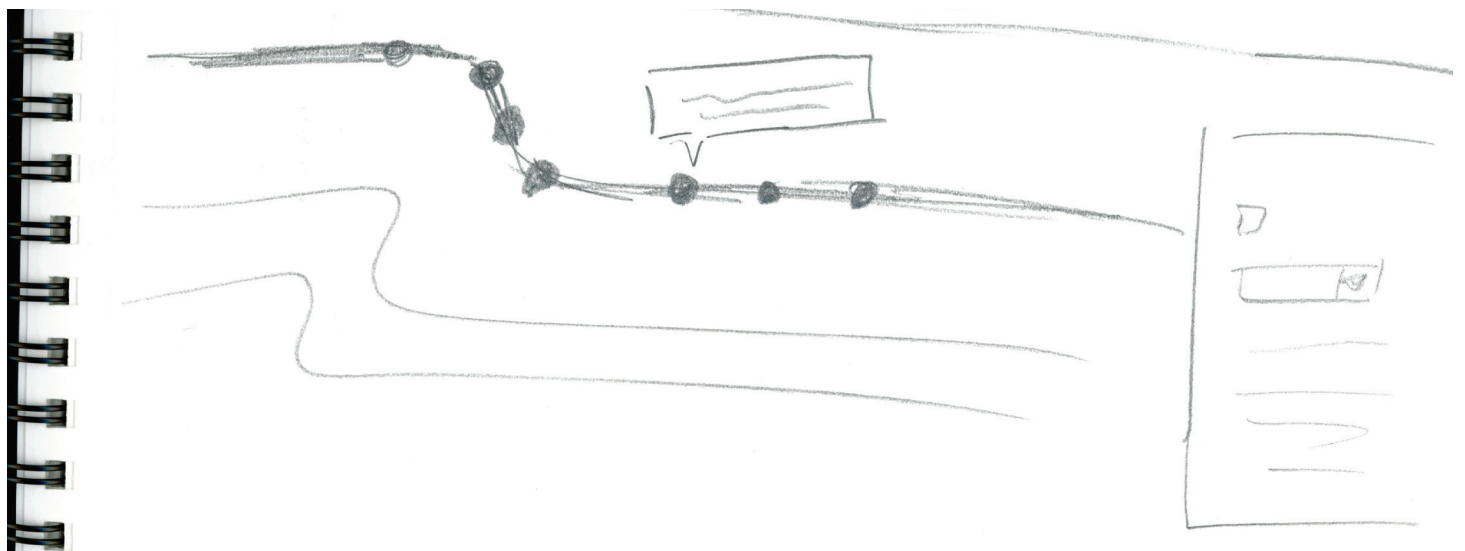
The fifth visualization is based on American flag which allows the user to compare the amount of Starbucks cafes between the two states. The user can assign one state to the red stripe and another one to the white stripe then according to the number of Starbucks cafes in that state, the stroke size of that stripe changes accordingly. For instance, if Boston is assigned to the red stripe and Chicago is assigned to the white stripe and if Boston has more Starbucks cafes than Chicago does, the red stripe would be thicker than the white stripe. We would also make use of the 50 stars on the American flag. They will be button and have state code assigned to them. The user can click on any of the stars to view the amount of Starbucks Café in that state.