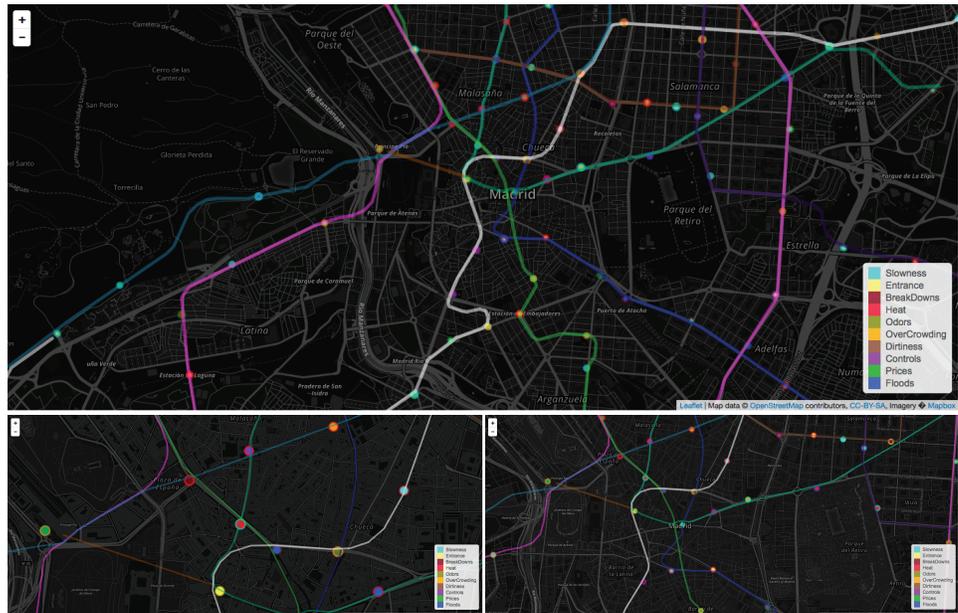# Madrid Subway Complaints

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Detailed Description

We used the subway stations in Madrid to show the type of complaint that was made in that location using different colors to represent specific complaints that were made and their frequency.

We tried to visualize the complaints made by different users of the Madrid subway station through line and circle shape integration of the data.

The pop up box features information about the station when clicked on. There is also a zoom in and out feature that allows for users to view a more detailed version of the map by clicking on the plus sign and a more broader version of the map by clicking on the minus sign.

Inspiration

http://bl.ocks.org/mbostock/2206590

Data

We used data from CartoDB map to illustrate the quantity and category of complaints made about the subway system in Madrid, also illustrating traffic patterns and quantities of the transportation system.

Data Source

https://congosto.cartodb.com/viz/e5da12e2-9fe7-11e4-bc43-0e853d047bba/public_map

This data includes 6 parameters.
These are the parameters the data contains:

X-coordinate of the station on the canvas
Y-coordinate of the station on the canvas
Name of the station
Type of the complaint
Number of the complaints
Actual location of the station in the JSON file

Interaction and Animation

Each circle on the map represents a station and the user hovers at different station and pop up displays include the information such as the name of the station, type of the complaint and frequency of the complaints that was made for that station.

The station's lines are differentiated with colors and each line's information can be gathered by clicking on the line.

The user can click on the circle which is the station on the map and can lock up the pop up menu along with the information in it and can still hover at different sections of the map.

We provide Zoom in and Zoom out feature with the help of which the user can zoom into or out of a particular zone. This zoom in and zoom out can be done either by the mouse wheel up or down or through the + and - sign on the map.

Group Work Division

Computer science

Vinit Kumar worked on importing the data and creating the skeleton of the framework which implemented the basic functionalities like reading the values from the file, create map, draw the lines and circles on the map according to the values provided in the sheet, a pop up menu and zoom in and out feature.

Graphic design

Kailei Malauskas, Joe Kim, and Beiruo He worked on utilizing their design expertise for the color and shape aspects of elements and helping with implementing the basic functionalities in the project.