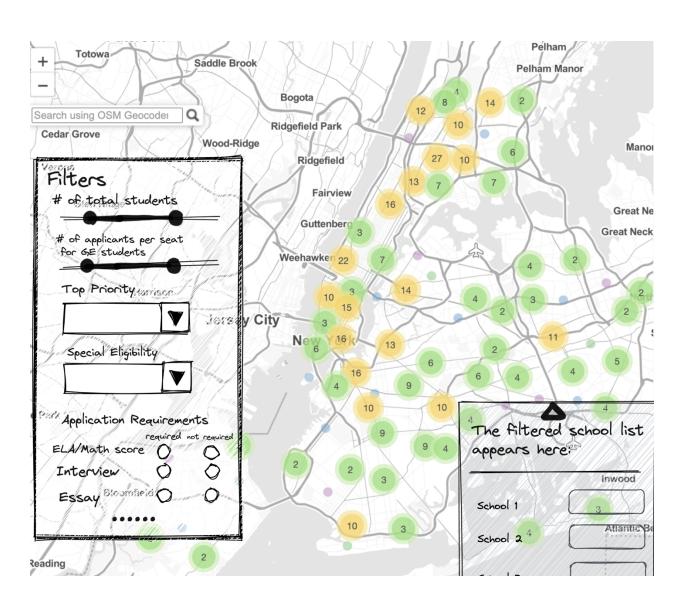
A Map of the Schools

Using leaflet and RStudio, I managed to map all the listed 442 public high schools in NYC and display some major facts on hover (see the file "first_map.html"). I spotted several minor errors and omissions in the data: 2 schools with missing GPS coordinates (I might somehow obtain them), and one school with unknown accessibility. It also should be noted that in the data, there are cases of multiple schools sharing the same address and geographic location. Those school clusters on the map are verified to be accurate.

A Lo-Fi Prototype of the Dashboard



I made a low-fidelity schematic prototype to illustrate the basic layout and features of the HS dashboard. It is a rather sketchy representation and I mainly focused on the design of the **filters** that narrow down the programs(schools) to be shown on the map.

The two sliders on the top set the range of **number of students** and number of **applicants per seat** (for GE students here, I might also include a similar slider for students with disabilities) for the target high school programs.

The dropdown box "**Top priority**" divides the programs into 8 major categories for selection, in correspondence with the admission priority 1 of each program. The admission priorities 2, 3 and so on are not used as selection criteria for this prototype as they are not as important for program admission. The eight categories are:

Top priority	Freq [‡]
Other	90
to Bronx residents	81
to Brooklyn residents	53
to continuing 8th graders	105
to Manhattan residents	26
to NYC residents	248
to Queens residents	46
to Staten Island residents	36

Likewise, the dropdown box "Special Eligibility" allows the user to select programs that are open only to students of a particular kind (for example, a school may "open only to Brooklyn students or residents"). For this filter, I would keep most of the 36 categories of the original data, because the special eligibilities are rather specific and strict restrictions that must be noted in high school application. I feel obliged to list the detailed categories.

Each high school program has a set of **selection criteria requirements** in deliberating over the admission decisions. The user needs to select high school

programs based on such requirements. The radio buttons are used to filter the programs with or without certain application requirement. For each requirement/row, no more than one button ("required" or "not requirement") would be selected. The three requirements listed are schematic and more options should be included.

(A lot of programs require all "2018-19 ELA/Math State Test Scores","2018-19 Final Grades" and "2019-20 Marking Period Grades" for their applicants, and **these three requirements often appear together for some reasons**. They might all get listed on the dashboard)

For the time being, I cannot guarantee the usability of the filtering options due to my general lack of knowledge of the parents' and students' concerns when handpicking high school programs to apply to. I might conduct user study and research into the high school application process to optimize the filters feature.