Data 73200: Interactive Data Visualization
Final Proposal
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Proposal

This project visualizes data about the built environment from the US Census Bureau's American Community Survey, through physical housing characteristics in New York City. It will allow the user to explore an interactive map of tract-level representations of renter-occupied and owner-occupied buildings that lack adequate plumbing facilities. A more advanced version may include correlative data simple graphs, such as poverty rates by borough or racial and ethnic composition by borough.

Its primary audience will be Master's level social work students, who are learning about homelessness and social welfare policy. It will be used to help students imagine how housing characteristics might indicate housing insecurity or zones between housed and homeless for its residents that are missed by population count estimates of homeless persons. Framed by short excerpts from readings in critical data studies and policy studies, it will encourage its viewers to interact with the visualization searching for indicators of possible 'problems', and to imagine at what point those problems might intersect with human service organizations and professional social workers. Embedded within an asynchronous module, it will then incorporate a survey for students to reflect on their perceptions and experience of the visualization.

Visualization

An interactive map, with a dropdown menu to switch between owner-occupied and renter-occupied occupied housing units, and a tool tip revealing demographic data about residents of each census tract.

Data source

US Census Bureau, American Community Survey, Selected Housing Characteristics, 5-year estimate table

Architecture

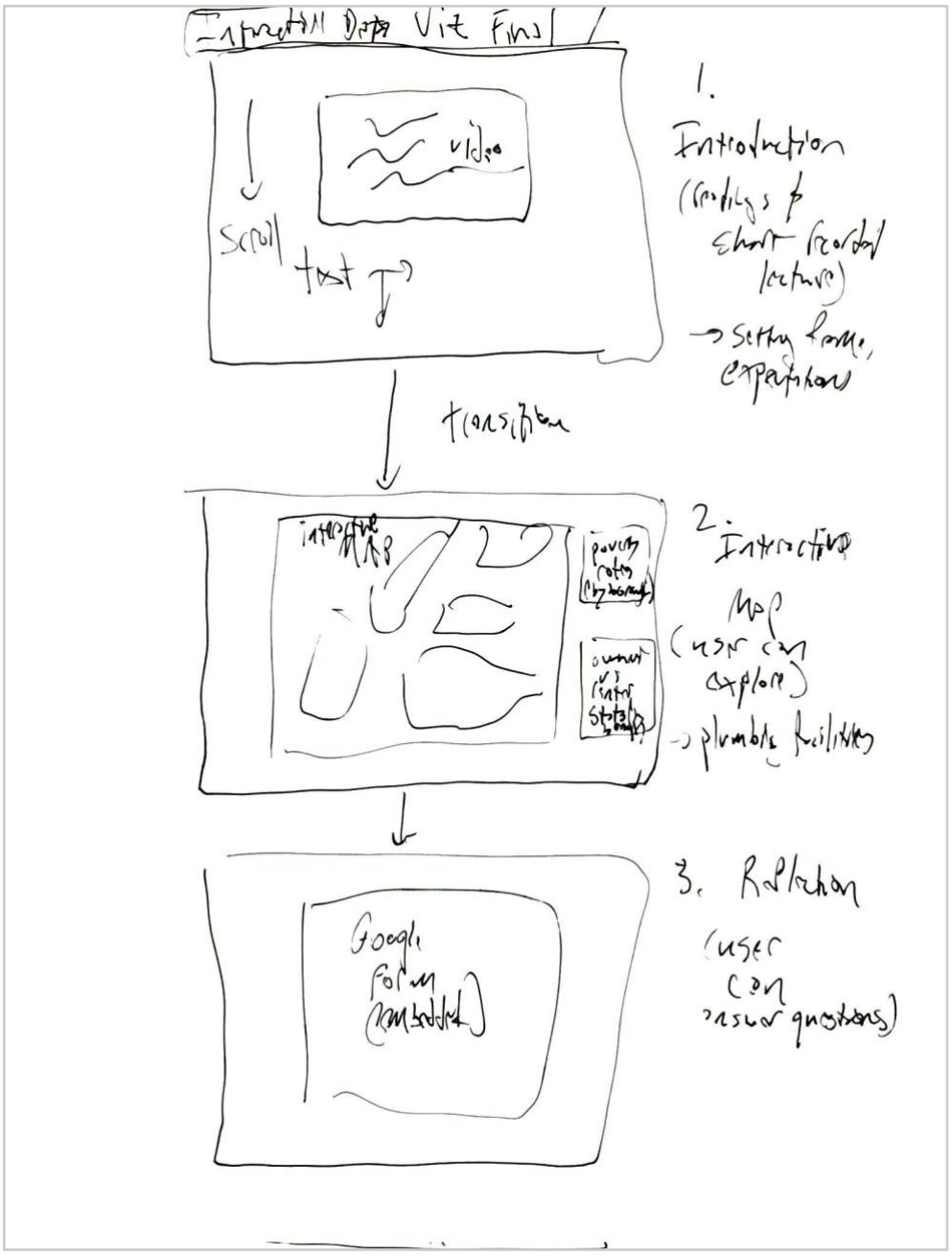

Figure 1: Sketch

Model

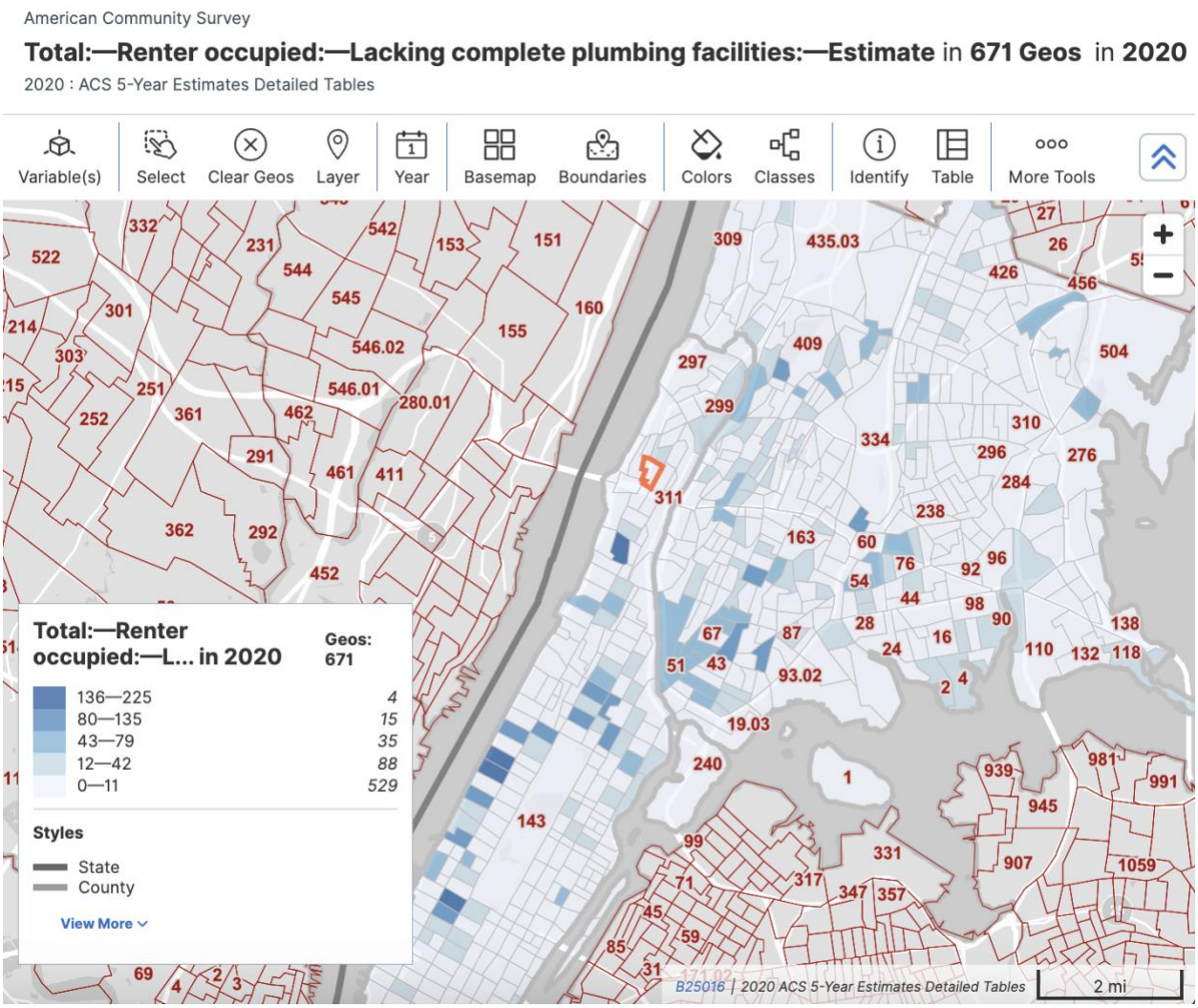

Figure 2: Census map

I will replicate some of the functionality of the official Census map, with improved design features.

- Better color choice (such as contrasting colors)
- Stronger borders
- Adding tooltip to reveal additional, potentially correlating data
- Recoding variable groupings for more nuance at smaller counts