Project 2: Spatial Data Wrangling & Visualization

Start Assignment

- Due Oct 16 by 11:30pm
- Points 150
- Submitting a file upload

Goal: Combine multiple datasets, clean and join them, and create thematic maps.

Key Skills:

- Spatial joins and overlays
- Attribute filtering and aggregation
- Spatial weights as a starting point for analysis
- Choropleth mapping and advanced visualization

Student Freedom: Pick a topic that combines spatial and tabular data.

Example Ideas:

- 1. Combine demographic data with neighborhood boundaries to visualize population density.
- 2. Merge environmental data (e.g., air quality) with city zones to show pollution patterns.
- 3. Join land use data with zoning regulations to explore urban planning.

Special Notes:

This is a team project.

As stated on the **rubric**

(https://docs.google.com/forms/d/e/1FAlpQLSeVC9mxBsrsglsFx8LjipXXvJANKRTaYQYJOFq_pX4KtQmmtg/viewform)

, you must show evidence of your editing the product. To do this, turn in at least five different views generated. Along with each view, write a paragraph about what you think is going well, and what needs more attention. The final view you provide should address all of your 'self-criticism' of the project and be your strongest representation of the goal of the project; which is to weigh in significantly on your own hypothesis. This should all be within a Jupyter Notebook that you will turn in for evaluation.

Please review the **rubric**

(https://docs.google.com/forms/d/e/1FAlpQLSeVC9mxBsrsglsFx8LjipXXvJANKRTaYQYJOFq_pX4KtQmmtg/viewform) carefully, it specifies in the clearest terms I can provide how you will be graded.