

1. What is the project focus/overall goal?

The overall goal of this project is to increase the accessibility and transparency of the Boston planning, zoning, and development process so that the constituents and residents of Boston can better understand the evolving landscape of their city. The specific focus of the project is to build a trackable system for property violations and a matrix to determine if a landlord is a "bad landlord."

2. Why is this project important?

There are several reasons to carry out this project:

1. For many communities, they face an essential issue that is how to make tenants believe the rental properties are safe and habitable. With this trackable system, tenants could acquire the relative information and analysis transparently when renting. In this case, communities with high quality are promoted invisibly. They get a good chance to propagate their responsible and ethical property management for free.
2. For tenants, this system helps them get better service. Because their landlords are implicitly required to maintain their properties and a safer and healthier living environment.
3. By tracking property violations, the project also promotes accountability and ensures that landlords are held responsible for maintaining safe and habitable living conditions for their tenants. This can help to improve the overall quality of life for residents and make the city a better place to live.

3. What type of data will you collect or be analyzing?

The project will utilize various data sets and sources, including building and property violations data, violation codes dictionary, worst landlord formula, property assessment data, shapefile by district, income-restricted housing inventory, property listings, AMI database, and 311 complaints. The initial analysis will involve reviewing the most common types of violations, ranking buildings based on hazardous criteria, analyzing the

number of evictions and housing court cases, and looking at the correlation between flouting housing maintenance code and utilizing evictions to harass tenants.

What are potential limitations of the project?

There are several potential limitations of this project:

1. **Data Quality:** The quality of the data sets and sources used in the project may not be up-to-date, accurate, or complete, which could affect the validity of the results and the conclusions drawn from the analysis.
2. **Data Availability:** Some of the data sets and sources needed for the project may not be readily available or accessible, which could limit the scope and depth of the analysis.
3. **Data Consistency:** The data sets and sources used in the project may not be consistent in terms of format, structure, and definitions, which could make it difficult to combine and analyze the data effectively.
4. **Complexity:** The complexity of the analysis, particularly in terms of combining and analyzing multiple data sets and sources, could increase the risk of errors and inaccuracies in the results.
5. **Privacy and Confidentiality:** The project may involve handling sensitive and confidential data, such as personal and financial information, which could pose privacy and confidentiality risks.
6. **Time and Resource Constraints:** The project may be limited by time and resource constraints, including budget, personnel, and equipment limitations, which could affect the quality and completeness of the analysis.

5. What are your next steps? Divide tasks amongst the team

1. Finding a proper dataset to work that matches our requirements
2. Analyzing the dataset
3. Start working on the dataset: cleaning the dataset,
4. Split the dataset into training, validation and test set
5. Choosing a model for classification

6. Training the model on the dataset
7. Make predictions for our test set
8. Evaluating the model predictions
9. Improving the model for better classification
10. Analyzing our results and visualizing our results
11. Design a interactive UI interface