

City of Boston: Permitting - Team D Deliverable 0

Accept the Github invite and edit your respective team information page with the following information: their name and class year.

- Team members should indicate their role: "First Name Last Name,Class of 20XX"
 - Euijoon (David) Kim, Class of 2024 - Team Rep
 - Lukas Werk,Class of 2024
 - Efim Sokolov,Class of 2025
 - Zhihuan Hao,Class of 2024
 - Jackson Fisk, Class of 2024
- The team rep should indicate their role: "First Name Last Name, Class of 20XX - Team Rep"

Read the Project Description and fill out your respective team's information (name, email, github name) in the "Student Team Information" row

- Github branch: <https://github.com/BU-Spark/ds-boston-permitting/tree/team-d>
- Format: Name, Email, Github Name
 - Euijoon (David) Kim, dk98@bu.edu, dk-davidekim
 - Lukas Werk, lmwerk@bu.edu, lukasmwerk
 - Zhihuan Hao, haozh@bu.edu, MissMyPetDog
 - Efim Sokolov, efim@bu.edu, EfimSo
 - Jackson Fisk, jfisk@bu.edu, Swaggermuffin64

On the Weekly Scrum Report document, answer all of the questions:

- What is the project focus/overall goal?
 - The project aims to analyze the City of Boston permitting and housing data to gain a better understanding of the equitability of the appeal process and unearth possible underlying systemic inequalities. It also aims to take the issue of affordable housing into account since housing supply plays an important role for housing costs.
 - Analyzing the characteristics of approved and denied building permits in Boston. - Especially the race/ethnicity, income level, and geographic profiles.
- Why is this project important?
 - The housing market is perhaps one of the most important economic drivers of the City of Boston while simultaneously having immense social and political ramifications. Understanding the underlying effects and consequences of this system is not only important for the development and success of the City as a whole but, most importantly, a way to attack systemic socio-economic issues at one of their principal roots. The majority of City's budget relies on revenue from property taxes and 2/3rds of the operational revenue comes from this source.
- What type of data will you collect or be analyzing?

- We will use multiple different types of data, including databases from the Census and Analyze Boston. We will examine databases regarding approved building permits, zoning appeals, and Article 80 development projects.
 - Approved Building Permits - Analyze Boston
 - Information on the building permits that were approved, including location, date, fees, valuation, work type, etc.
 - Article80 Development Projects - Analyze Boston
 - Data on the development projects subject to Article 80 review process, including location, date, status, size, description, etc.
 - Zoning Board of Appeal Tracker - Analyze Boston
 - Detailed information on refused permits that are undergoing the appeal process
 - Census Data for Demographics - United States Census Bureau
 - Demographic data for the locations analyzed in the project
- What are potential limitations of the project?
 - Missing data or information on important permits or projects
 - Lack of expertise in real estate and the Boston permitting process
 - Analyzing the descriptions of each permit or project within the data is excessively time-consuming
 - Too many features that may be challenging for comprehensive analysis and visualization
- What are your next steps? Divide tasks amongst the team
 - Divide the datasets amongst the team to clean and conduct basic analysis, calculations, and visualizations.
 - Share the insights between all team members to combine and organize the final analysis.
 - Run the appropriate machine learning algorithms on the data to analyze the factors that lead the permits/projects to approval or refusal.
 - Exploratory data analysis and visualization with respect to the base project questions and maybe other sub-questions.

Submit all of the following information as a PR to your team's branch on github. (Add your PM and TE as reviewers!)

Submit the Weekly Scrum report to the gradescope and upload to google drive.
