

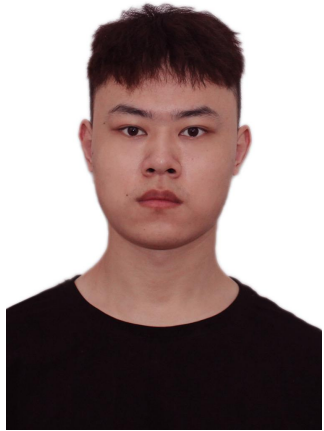
CITY OF BOSTON: REMODELING AND UNIT LOSS TEAM B



EARLY INSIGHTS



TEAM BREAKDOWN



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PROJECT DESCRIPTION

- Our analysis and visualizations focus on improving how the City operates. This project will help the city understand trends that can be addressed at a strategic level.
- Our project will focus on how remodeling and conversions impact rental units around the City of Boston, specifically how the movement of higher income individuals into the city might be REDUCING the number of housing units available because buyers are converting homes with multiple units into larger units, reducing the overall number of units available. This project looks at the role remodeling and zoning conversions have played in the housing markets in Boston.

PROJECT OVERVIEW & CLIENT MEETING

- Build a working pandas codebase for analyse
- Gather API data from Approved Building Permits and Property Assessment
- Getting the first step of data cleaning
- Try two diff ways to fetch data, and choose one as the main solution.
- Using SQL API to fetch from website
- Create a Python script named `sqlDataFetch.py` to get the database id, and fetch the data by the SQL query.
- Create a Python notebook to let teammates know how to use "sqlDataFetch", and give some examples.
- Solved everyone's problem with reading `dataId.txt` on different OS.
- Initially address the goal of data analysis by needing to go over mean, median, and average.

PRELIMINARY ANALYSIS REPORT

- What communities are building more housing units?
- Which ones are losing housing units?
- Use `propertyAssessmentDataFetch.ipynb` to fetch data for 2009 - 2024(except 2014)
 - `zip code`
 - `total_res_units`,
 - `total_com_units`,
 - `total_rc_units`
 - `Year`
 - `total_units`

ZIPCODE vs ZIP_CODE vs zipcode

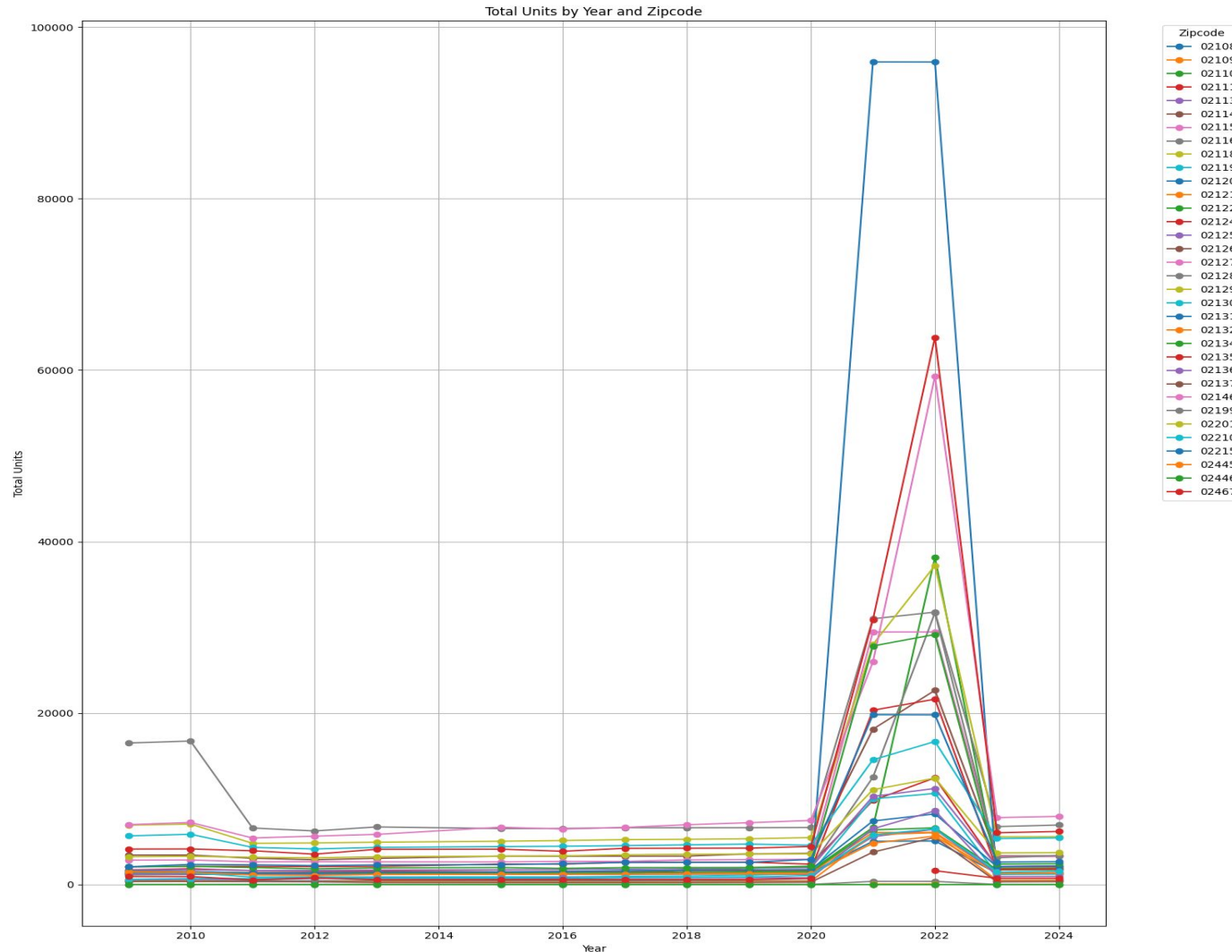
RES_UNITS, COM_UNITS, RC_UNITS

vs

S_UNIT_RES, S_UNIT_COM, and S_UNIT_RC

	zipcode	total_res_units	total_com_units	total_rc_units	Year	total_units
0	02108	1031	216	2	2009	1249
1	02109	1199	84	8	2009	1291
2	02110	872	273	0	2009	1145
3	02111	1635	154	285	2009	2074
4	02113	1132	38	28	2009	1198

PRELIMINARY ANALYSIS REPORT



PRELIMINARY ANALYSIS REPORT

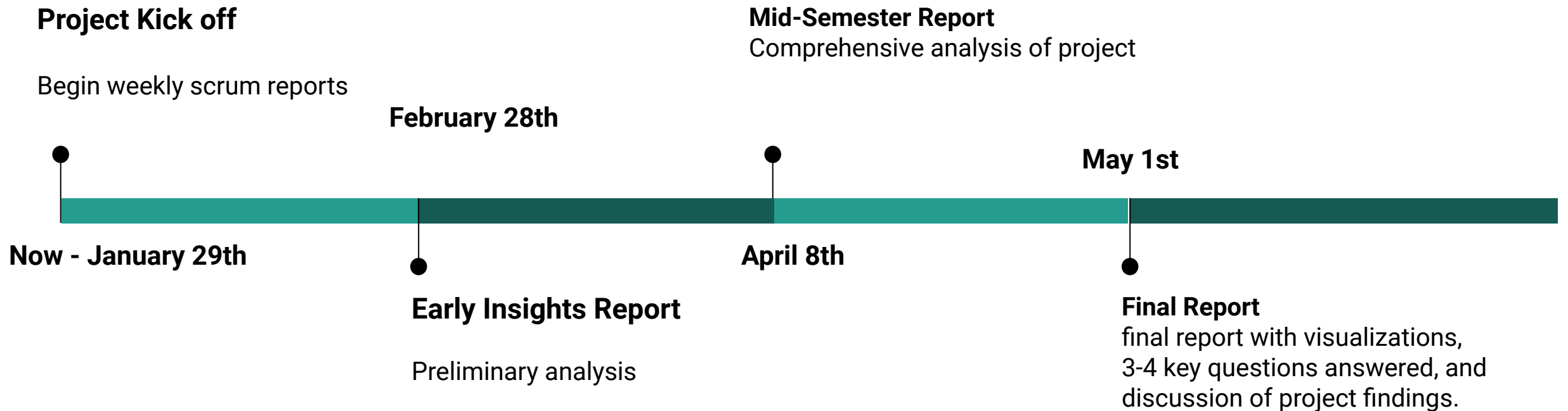
```
Zipcode 02113: Increasing
Zipcode 02114: Increasing
Zipcode 02115: Increasing
Zipcode 02116: Increasing
Zipcode 02118: Increasing
Zipcode 02119: Increasing
Zipcode 02120: Increasing
Zipcode 02121: Increasing
Zipcode 02122: Increasing
Zipcode 02124: Increasing
Zipcode 02125: Increasing
Zipcode 02126: Increasing
Zipcode 02127: Increasing
Zipcode 02128: Increasing
Zipcode 02129: Increasing
Zipcode 02130: Increasing
Zipcode 02131: Increasing
Zipcode 02132: Increasing
Zipcode 02134: Increasing
Zipcode 02135: Increasing
Zipcode 02136: Increasing
Zipcode 02137: Stable
Zipcode 02146: Stable
Zipcode 02199: Increasing
Zipcode 02201: Stable
Zipcode 02210: Increasing
Zipcode 02215: Increasing
Zipcode 02445: Stable
Zipcode 02446: Increasing
Zipcode 02467: Increasing
```

```
02108      102.0
02109       93.0
02110      731.0
02111      -22.0
02113      109.0
02114      -92.0
02115      411.0
02116    -9566.0
02118   -1343.0
02119    -141.0
02120       13.0
02121      106.0
02122      353.0
02124       79.0
02125      511.0
02126      -15.0
02127      961.0
02128     2027.0
02129      466.0
02130     -230.0
02131      590.0
02132     -180.0
02134      360.0
02135     2058.0
02136      362.0
02137         NaN
02146         NaN
02199         0.0
02201         NaN
```

TASKS FOR NEXT 2 WEEKS

- Figure out the key component in Comprehensive analysis
- Figure out that whether we need more data
- Key findings from the base analysis
- Proposal of possible extension analysis

PROJECT OVERALL TIMELINE



PROCESS OF WORKING TOGETHER

- Meet for weekly client meetings
- Discuss progress during weekly lab sessions
- Team meet weekly every Friday to go over progress
- Keeping track of and engaging with Trello board & Slack
- Communicating with PM as needed

TOOLS AND DOCUMENTATION

- Github: <https://github.com/BU-Spark/ds-boston-remodeling/tree/team-b>
- Pandas Cheat Sheet: https://pandas.pydata.org/Pandas_Cheat_Sheet.pdf
- Datasets: [Property Assessment - Dataset - Analyze Boston](#)
[Approved Building Permits - Dataset - Analyze Boston](#)
- Meeting Notes: [Weekly Team Meeting Notes](#)
- Project Description Doc: [City of Boston: Remodeling and Unit Loss](#)

Thank you!

