

Rats in NY: Project Proposal

Team BCHZ - Nick Bayer, Richard Cui, Laura Han, Anna Zhang

```
library(tidyverse)
```

```
-- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
v dplyr      1.1.3      v readr      2.1.4
v forcats    1.0.0      v stringr    1.5.0
v ggplot2    3.4.3      v tibble     3.2.1
v lubridate  1.9.2      v tidyr      1.3.0
v purrr      1.0.2
-- Conflicts ----- tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()     masks stats::lag()
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become
```

```
library(tidymodels)
```

```
-- Attaching packages ----- tidymodels 1.1.1 --
v broom       1.0.5      v rsample     1.2.0
v dials       1.2.0      v tune        1.1.2
v infer       1.0.5      v workflows   1.1.3
v modeldata   1.2.0      v workflowsets 1.0.1
v parsnip     1.1.1      v yardstick   1.2.0
v recipes     1.0.8
-- Conflicts ----- tidymodels_conflicts() --
x scales::discard() masks purrr::discard()
x dplyr::filter()   masks stats::filter()
x recipes::fixed()  masks stringr::fixed()
x dplyr::lag()      masks stats::lag()
x yardstick::spec() masks readr::spec()
x recipes::step()   masks stats::step()
* Learn how to get started at https://www.tidymodels.org/start/
```

```
library(httr)
install.packages("httr")
```

Installing package into '/home/guest/R/x86_64-pc-linux-gnu-library/4.3'
(as 'lib' is unspecified)

```
api_url <- "https://data.cityofnewyork.us/resource/p937-wjvj.csv"
response <- GET(api_url)
rats <- read.csv(text = content(response, "text"))
```

```
head(rats)
```

| | inspection_type | job_ticket_or_work_order_id | job_id | job_progress | bbl | | | |
|---|-------------------------|-----------------------------|--------------------|-------------------------|--------------------|----------|---------|---------|
| 1 | Initial | | 13717737 PC8191184 | 1 | NA | | | |
| 2 | Initial | | 13704841 PC8176771 | 1 | NA | | | |
| 3 | Initial | | 13661515 PC8122655 | 1 | NA | | | |
| 4 | Initial | | 11507405 PC7504205 | 1 | NA | | | |
| 5 | Initial | | 13706633 PC8177949 | 1 | NA | | | |
| 6 | Initial | | 13264492 PC7744572 | 1 | NA | | | |
| | boro_code | block | lot | house_number | street_name | zip_code | x_coord | y_coord |
| 1 | 3 | 1790 | 1 | | | 11216 | NA | NA |
| 2 | 1 | 1988 | 165 | 000 | BROADWAY | NA | NA | NA |
| 3 | 1 | 529 | 9 | | | 0 | NA | NA |
| 4 | 5 | 62 | 113 | 000 | YORK AVENUE | NA | NA | NA |
| 5 | 3 | 2699 | 9 | | | 11222 | NA | NA |
| 6 | 2 | 2857 | 95 | 0000 | JEROME AVENUE | NA | NA | NA |
| | latitude | longitude | borough | inspection_date | result | | | |
| 1 | NA | NA | Brooklyn | 2023-09-14T13:10:00.000 | Rat Activity | | | |
| 2 | 0 | 0 | Manhattan | 2023-08-23T10:10:44.000 | Rat Activity | | | |
| 3 | NA | NA | Manhattan | 2023-06-07T16:36:13.000 | Passed | | | |
| 4 | 0 | 0 | Staten Island | 2010-09-16T16:00:00.000 | Failed for Other R | | | |
| 5 | NA | NA | Brooklyn | 2023-08-25T15:00:00.000 | Failed for Other R | | | |
| 6 | 0 | 0 | Bronx | 2021-07-28T12:48:53.000 | Passed | | | |
| | approved_date | location | community_board | council_district | | | | |
| 1 | 2023-09-17T11:50:34.000 | | NA | NA | | | | |
| 2 | 2023-08-28T09:48:25.000 | \n, \n(0.0, 0.0) | NA | NA | | | | |
| 3 | 2023-06-08T10:38:30.000 | | NA | NA | | | | |
| 4 | 2010-09-17T09:47:30.000 | \n, \n(0.0, 0.0) | NA | NA | | | | |
| 5 | 2023-08-28T09:57:23.000 | | NA | NA | | | | |
| 6 | 2021-07-29T13:19:32.000 | \n, \n(0.0, 0.0) | NA | NA | | | | |

```
      census_tract bin nta
1           NA  NA
2           NA  NA
3           NA  NA
4           NA  NA
5           NA  NA
6           NA  NA
```

Introduction

...

Data description

...

Initial exploratory data analysis

...

Analysis approach

...

Data dictionary

The data dictionary can be found [here](#) [Update the link and remove this note!]