Project proposal

Keohane sQUAD: Andrew Qin, Katie Nash, Bob Qian, and Chris Liang

10/09/20

Section 1. Introduction

```
library(tidyverse)
## -- Attaching packages --
## v tibble 3.0.3
                       v purrr
                                 0.3.4
## v tidyr
            1.1.1
                                 1.0.1
                       v dplyr
## v readr
            1.3.1
                       v forcats 0.5.0
## -- Conflicts -----
## x lubridate::as.difftime() masks base::as.difftime()
## x lubridate::date()
                             masks base::date()
## x dplyr::filter()
                             masks stats::filter()
## x readr::guess_encoding()
                             masks rvest::guess_encoding()
                             masks base::intersect()
## x lubridate::intersect()
## x dplyr::lag()
                              masks stats::lag()
## x purrr::pluck()
                              masks rvest::pluck()
## x lubridate::setdiff()
                              masks base::setdiff()
## x lubridate::union()
                              masks base::union()
police <- read.csv("data/nc_durham_2020_04_01.csv")</pre>
```

Section 2. Data description

Section 3. Glimpse of data

glimpse(police)

```
## Rows: 326,024
## Columns: 29
## $ raw_row_number
                            <int> 1219541, 1221117, 1221124, 1221133, 1221146,...
## $ date
                            <chr> "2001-12-28", "2002-01-02", "2002-01-02", "2...
                            <chr> NA, "04:00:00", NA, "19:50:00", "20:45:00", ...
## $ time
                            <chr> "Durham, Durham County", "Durham, Durham Cou...
## $ location
## $ county_name
                            <chr> "Durham County", "Durham County", "Durham Co...
## $ subject_age
                            <int> 22, 28, 21, 28, 36, 68, 24, 30, 38, 56, 28, ...
                            <chr> "black", "hispanic", "black", "black", "blac...
## $ subject_race
                            <chr> "female", "male", "female", "female"...
## $ subject_sex
                            <chr> "5b9908c1a5", "0c140e68b5", "0c140e68b5", "4...
## $ officer_id_hash
                            <chr> "Durham Police Department", "Durham Police D...
## $ department_name
                            <chr> "vehicular", "vehicular", "vehicular", "vehi...
## $ type
## $ arrest_made
                            <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FA...
                            <lgl> FALSE, TRUE, FALSE, TRUE, FALSE, FALS...
## $ citation_issued
```

```
<lgl> TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, FALSE,...
## $ warning_issued
## $ outcome
                                                                                                                                                                  <chr> "warning", "citation", "warning", "citation"...
                                                                                                                                                                  ## $ contraband found
## $ contraband_drugs
                                                                                                                                                                  ## $ contraband_weapons
                                                                                                                                                                  ## $ frisk_performed
                                                                                                                                                                  <lgl> FALSE, FALSE
## $ search conducted
                                                                                                                                                                  <lgl> FALSE, FALSE
                                                                                                                                                                  <lg1> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_person
## $ search vehicle
                                                                                                                                                                  <lgl> FALSE, FALSE
                                                                                                                                                                  ## $ search_basis
## $ reason_for_frisk
                                                                                                                                                                  ## $ reason_for_search
                                                                                                                                                                  <chr> "Investigation", "Stop Light/Sign Violation"...
## $ reason_for_stop
                                                                                                                                                                  ## $ raw_Ethnicity
                                                                                                                                                                  <chr> "B", "W", "B", "B", "B", "B", "B", "W", "B",...
## $ raw_Race
## $ raw_action_description <chr> "Verbal Warning", "Citation Issued", "Verbal...
```