Project proposal

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Setup

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------------------------- tidyverse 1.3
## v tibble  3.0.3     v purrr   0.3.4
## v tidyr   1.1.1     v dplyr   1.0.2
## v readr   1.3.1     v forcats 0.5.0

## -- Conflicts ---------------------------------------------------------------- tidyverse_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()
## x lubridate::intersect()   masks base::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")
```

Section 1. Introduction

In the wake of the election and the Black Lives Matter movement, we as the newest generation of voters need to educate ourselves on the systemic racism within the criminal justice and policing system. The US incarcerates more people than any other country (https://www.sentencingproject.org/criminal-justice-facts/), and people of color make up a disproportionate percent of the prison population. Police funding has grown significantly over the past four decades, and overpolicing in communities of color is a serious issue. In Michelle Alexander's Book, The New Jim Crow: Mass Incarceration in the Age of Colorblindness, she talks a lot about the rise of incarceration rates for black and brown people in the US. Alexander cites the War on Drugs as one of the biggest proponents for contemporary mass incarceration, and she uses police pretext stops as an example. In pretext stops, cops can pull over a "suspicious" driver on the pretext of a very minor traffic violation (e.g. turning on red, going over the speed limit) and then do a drug sweep of the car, which may result in an arrest for drug-related charges. According to a Pew Research Center survey (https://www.pewresearch.org/fact-tank/2020/06/03/10-things-we-know-about-race-and-policing-in-the-u-s/), "black adults are about five times as likely as whites to say they've been unfairly stopped by police because of their race or ethnicity". Given this information, we're investigating traffic stops in Durham from the Stanford Open Policing Project. We would like to see if that same kind of racial bias is evident in police stops in Durham. Our general research question is: what is the relationship between a subject's demographic attributes (gender, race, or age) and the likelihood of being stopped by police in traffic in Durham?

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...
## $ time                  <chr> NA, "04:00:00", NA, "19:50:00", "20:45:00", ...
## $ location              <chr> "Durham, Durham County", "Durham, Durham Cou...
## $ county_name           <chr> "Durham County", "Durham County", "Durham Co...
## $ subject_age           <int> 22, 28, 21, 28, 36, 68, 24, 30, 38, 56, 28, ...
## $ subject_race          <chr> "black", "hispanic", "black", "black", "blac...
## $ subject_sex           <chr> "female", "male", "male", "female", "female"...
## $ officer_id_hash       <chr> "5b9908c1a5", "0c140e68b5", "0c140e68b5", "4...
## $ department_name       <chr> "Durham Police Department", "Durham Police D...
## $ type                  <chr> "vehicular", "vehicular", "vehicular", "vehi...
## $ arrest_made           <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ citation_issued       <lgl> FALSE, TRUE, FALSE, TRUE, FALSE, FALSE, FALS...
## $ warning_issued        <lgl> TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, FALSE,...
## $ outcome               <chr> "warning", "citation", "warning", "citation"...
## $ contraband_found      <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ contraband_drugs      <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ contraband_weapons    <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ frisk_performed       <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_conducted      <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_person         <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_vehicle        <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_basis          <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_frisk      <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_search     <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_stop       <chr> "Investigation", "Stop Light/Sign Violation"...
## $ raw_Ethnicity         <chr> "N", "H", "N", "N", "N", "N", "H", "N", "N",...
## $ raw_Race              <chr> "B", "W", "B", "B", "B", "B", "B", "W", "B",...
## $ raw_action_description <chr> "Verbal Warning", "Citation Issued", "Verbal...
```