Homework 04 - Wrangling Spatial Data

Author Goes Here

Load packages and data

```r
library(tidyverse)
```

```r
dennys <- read_rds("data/dennys.rds")
laquinta <- read_rds("data/laquinta.rds")
states <- read_csv("data/states.csv", col_types = cols(
  name = col_character(),
  abbreviation = col_character(),
  area = col_double()
))
```

Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

```r
# Implementation from dsbox
haversine <- function(long1, lat1, long2, lat2) {
  # convert to radians
  long1 = long1 * pi / 180
  lat1  = lat1  * pi / 180
  long2 = long2 * pi / 180
  lat2  = lat2  * pi / 180

  # Earth mean radius in km (WGS84 ellipsoid)
```

```
  R = 6371.009

  a = sin((lat2 - lat1)/2)^2 + cos(lat1) * cos(lat2) * sin((lor
  d = R * 2 * asin(sqrt(a))
  # Return the distance in km
  d
}
```

Exercise 6

Exercise 7

Exercise 8

```
compute_closest_dennys <- function(the_state) {
  dn_state <- dennys %>%
    filter(state == the_state)
  lq_state <- laquinta %>%
    filter(state == the_state)

  # join to get all possible pairings

  # compute distances

  # compute distance to closest Denny's for each La Quinta loca

  return(dist_to_closest)
}
```

Exercise 9

Exercise 10

Exercise 11

Wrap-Up

GitHub permalink

Partners

Reflections