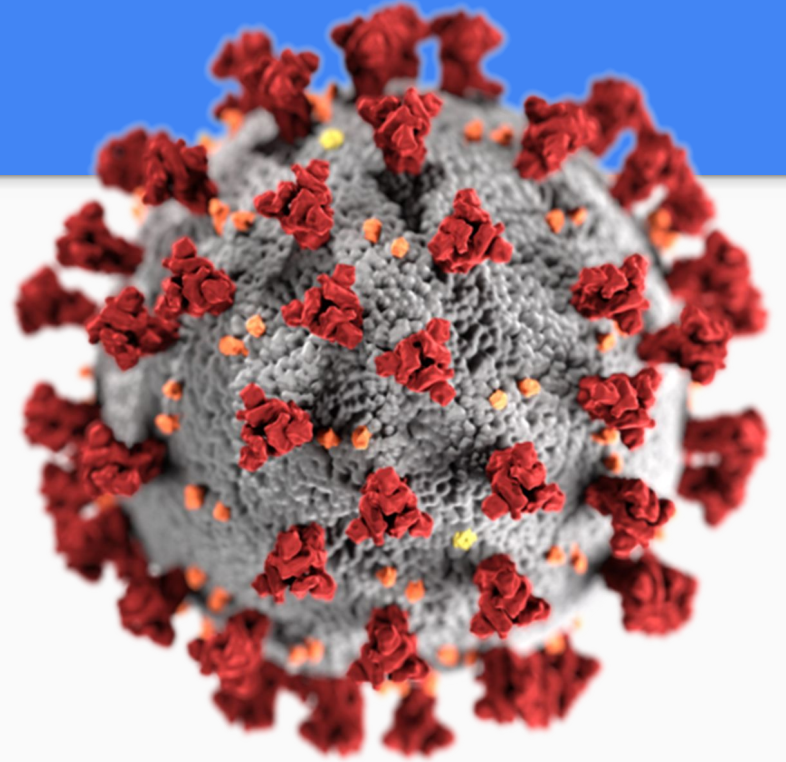# Lifestyle Impacts of COVID-19: Project Presentation

Team Members:
Lauren Heintz, Tara Wilson,
Ratna Chembrolu, David Wei, Zack Garcia

Background

- COVID-19 has changed lives

- In which ways? How much?

- Output: CSV + choice of visualization

Data Sources

COVID-19 data

- Bing.com
- Confirmed cases, deaths, recoveries
- Daily counts and deltas for each of the above
- Detailed location info

Google Trends

- Pytrends package
- Keyword search
- Time series
- Scaled relative search interest (0-100)

Sample Use Case 1: Dog Ownership

- Interested in getting a dog

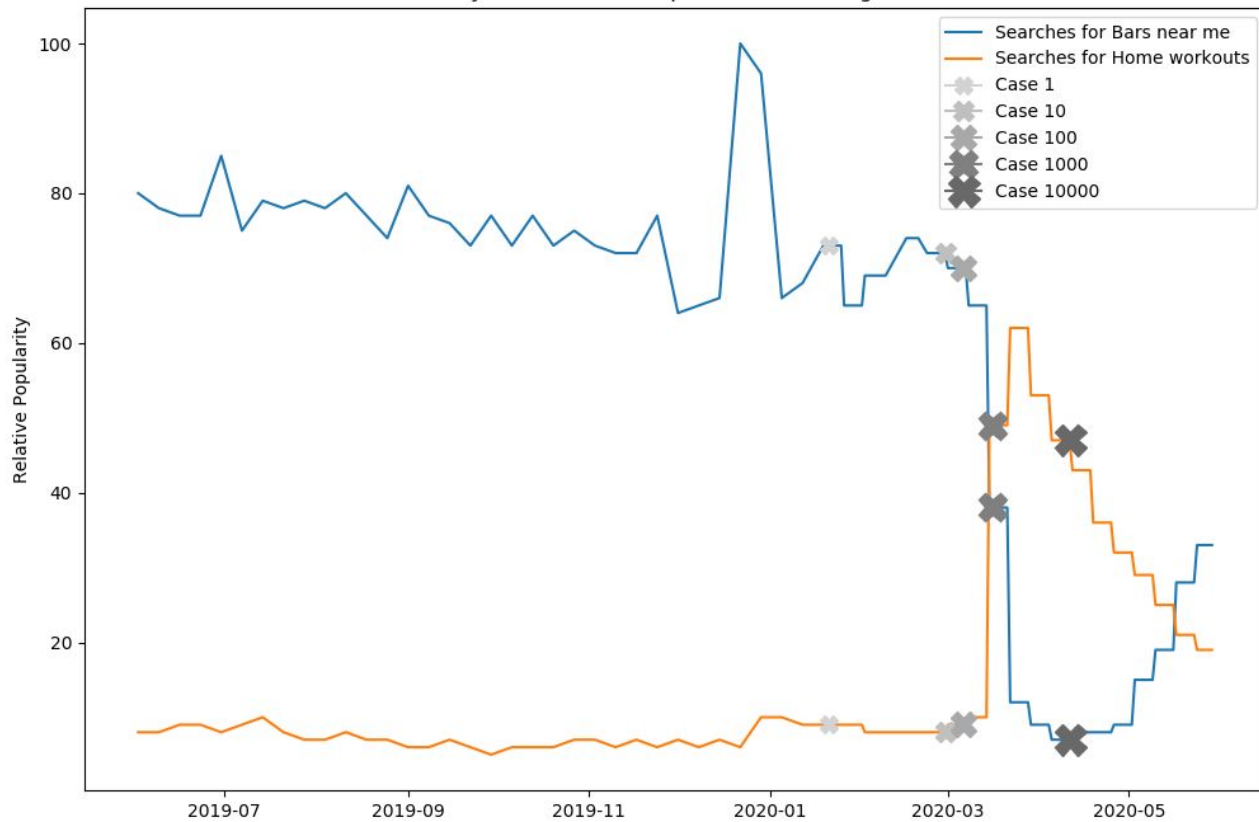- How much more popular are they now as compared to before COVID-19 hit?

Sample Use Case 2: Dreams


- I read this article and want to see if my strange dreams are actually common:

https://www.nationalgeographic.com/science/2020/04/coronavirus-pandemic-is-giving-people-vivid-unusual-dreams-here-is-why/

Keyword Search Comparison in Washington

Date	Confirmed	ConfirmedChange	Deaths	DeathsChange	Recovered	RecoveredChange	Country	State	Bars near me	Home workouts
2019-06-09	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	83.0	9.0
2019-06-16	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	78.0	9.0
2019-06-23	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	80.0	9.0
2019-06-30	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	91.0	8.0
2019-07-07	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	80.0	9.0
2019-07-14	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	81.0	9.0
2019-07-21	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	82.0	9.0
2019-07-28	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	85.0	8.0
2019-08-04	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	82.0	8.0
2019-08-11	0.0	0.0	0.0	0.0	0.0	0.0	United States	Washington	82.0	8.0
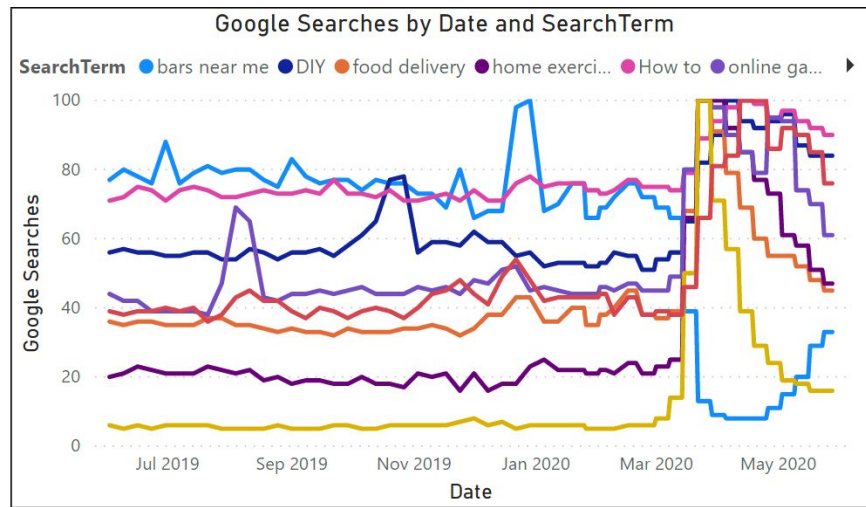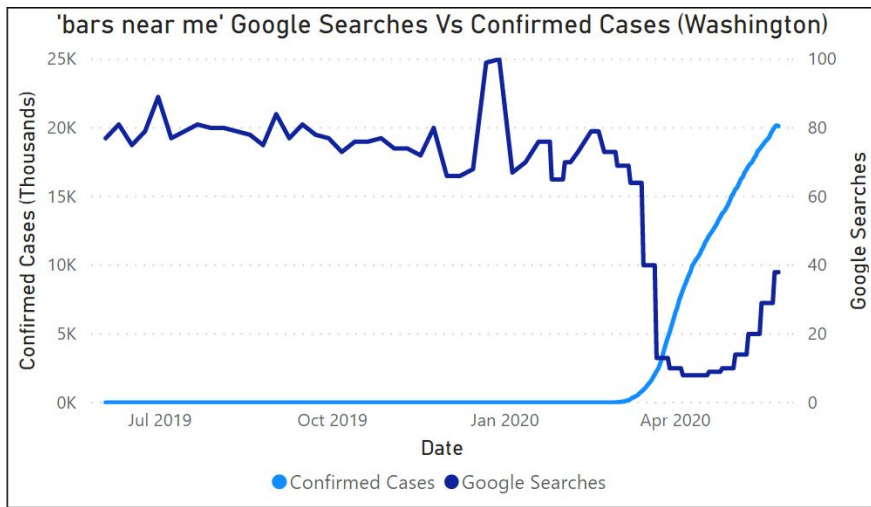
Components/Design
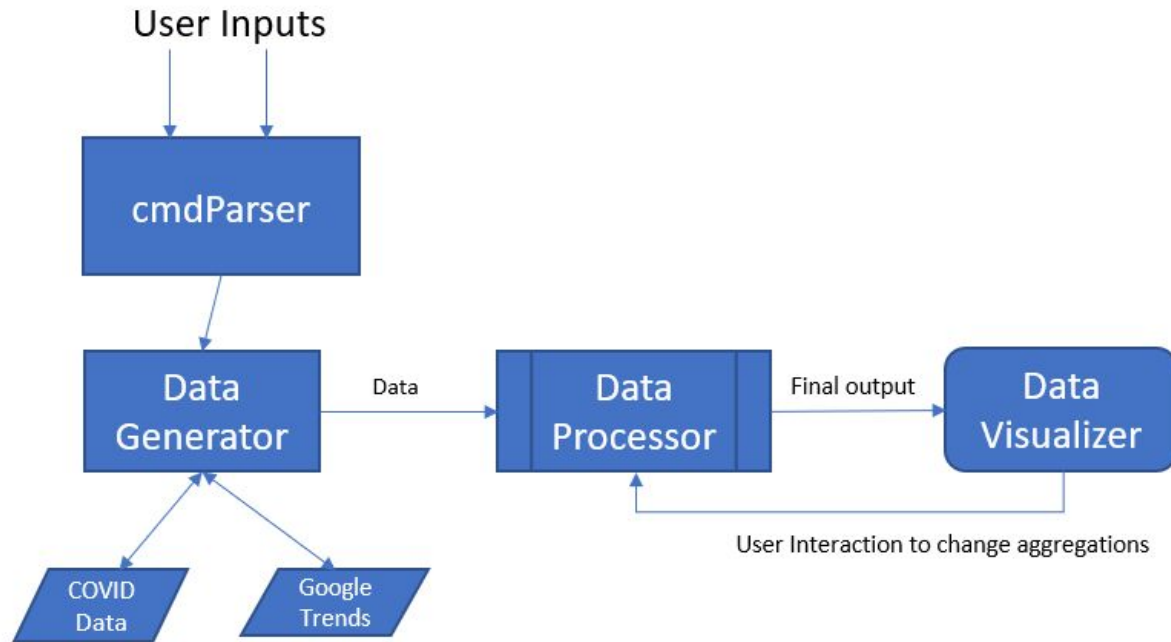
Repository Details

- coronavirus_lifestyle_impacts
  - modules
  - tests/
  - outputs/
- Docs
- Examples
- LICENSE
- Travis-CI
  - Integration test
  - Unit Tests
- Coverage report
- Jupyter Notebook (readable collaboration)

📖 README.md

Coronavirus Lifestyle Impacts Project

`build passing` `coverage 99%`

This is the final project for Data 515 at the University of Washington, Spring 2020.

This project is designed to help users view how lifestyles have been influenced by the 2019 novel coronavirus using Google Trends data. The tool allows people to input geographical locations and keywords to have visualizations and summary statistics generated to summarize the impact.

🔗 Table of contents

Python Dependencies

- Argparse
- Datetime
- Matplotlib
- Pandas
- Pytrends
- Unittest
- US

Lessons Learned/Conclusions

- Even a fairly straightforward project can be tricky to execute well
- Frequent collaboration was very valuable (Slack + Zoom)
- Achieving perfect linting can be a hassle
- Some dependencies take time and/or money (Power BI)
- Learnings from using the software
  - Some things haven't changed much
  - Others have had time to experience multiple waves of changes

Demo

- Command line
- Power BI