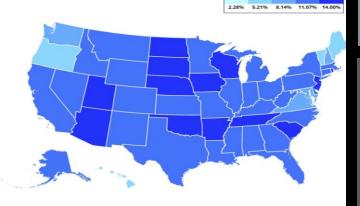


#### COLLEGE OF SCIENCE&ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

# COVID Tracker



Percent of Population

TCU Senior Design 2021

### TheTeam



Nick Bell Front End Developer



Joe Donoghue Front End Developer



Damon Ramirez Project Lead Front End Developer



Cuong Nguyen Front End Lead



Zach Macadam Backend Lead

### Client

Dr. Bingyang Wei Assistant Professor at TCU b.wei@tcu.edu



## Presentation Overview

- 1. Background and Requirements
- 2. Product Architecture
- 3. Technologies
- 4. Front End Features
- 5. Tracking the Virus
- 6. Retrospect
- 7. Questions & Answers

Real-Time COVIDTracker

US, State, and County Data

Cases, New Cases, Deaths, Vaccinations, Hospitalizations

Project Summary Client Requirements: Interactive Map Real-Time Data Charts News Existing Problems: Cluttered Dashboards Slow Sites Overwhelming Data Scope Too Wide

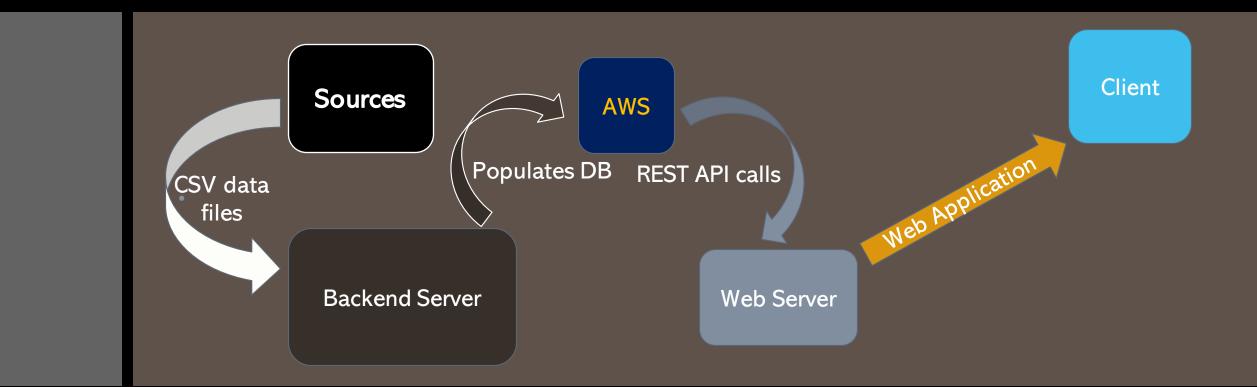
> Problems & Requirements



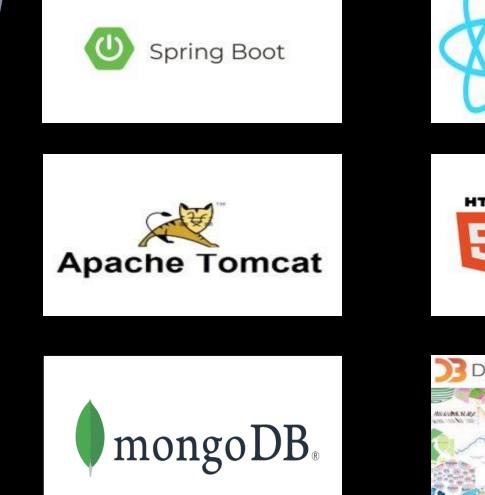
33.7 second load-time before interactive per Google PageSpeed Insights

## The Competition

### System Structure

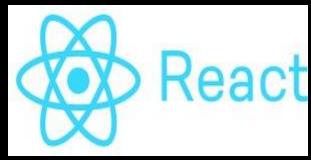


# Technologies



Back End

#### Front End









### Sources

- The New York Times: Cases and Deaths <u>https://github.com/nytimes/covid-19-data</u>
- Our World in Data: Vaccinations (After 01/12/2021) <u>https://github.com/owid/covid-19-data</u>
- The COVID Tracking Project: Hospitalizations (Before 03/07/2021) <u>https://covidtracking.com/</u>

#### JOHNS HOPKINS CORONAVIRUS

Covid Tracker

Home Tracking Testing Tracing Vaccines By Region Events & News About

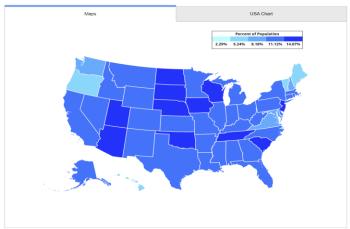
Tracking Home Critical Trends V Global Map U.S. Map Data in Motion Tracking FAQ

🐨 COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)



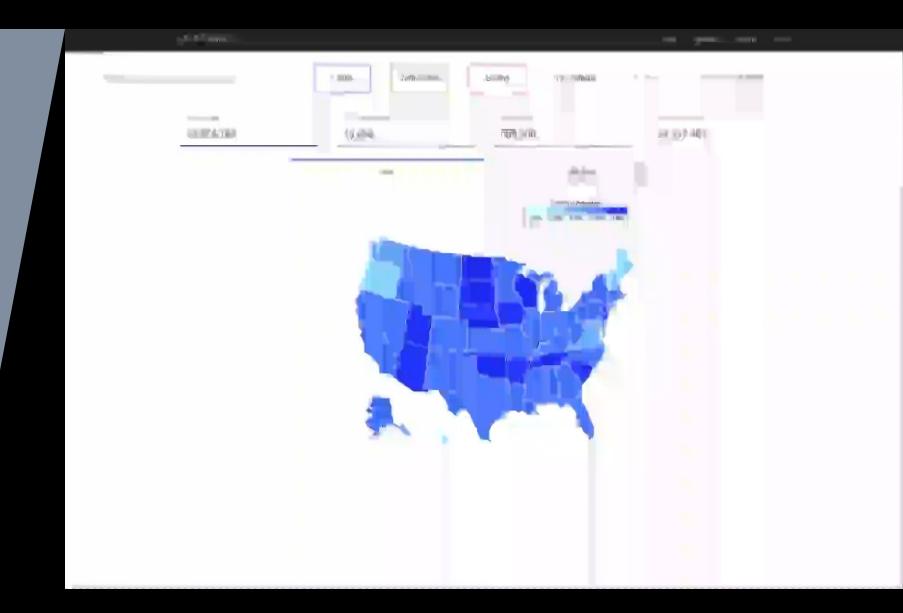


Search	Cases	New Cases	Deaths	Vaccinations	Hospitalizations*	Change date: 04/28/2021	
USA cases	USA new ca	USA new cases 54,181		USA death		USA vaccinated	
32,081,457	54,181			571,500		96,516,919	

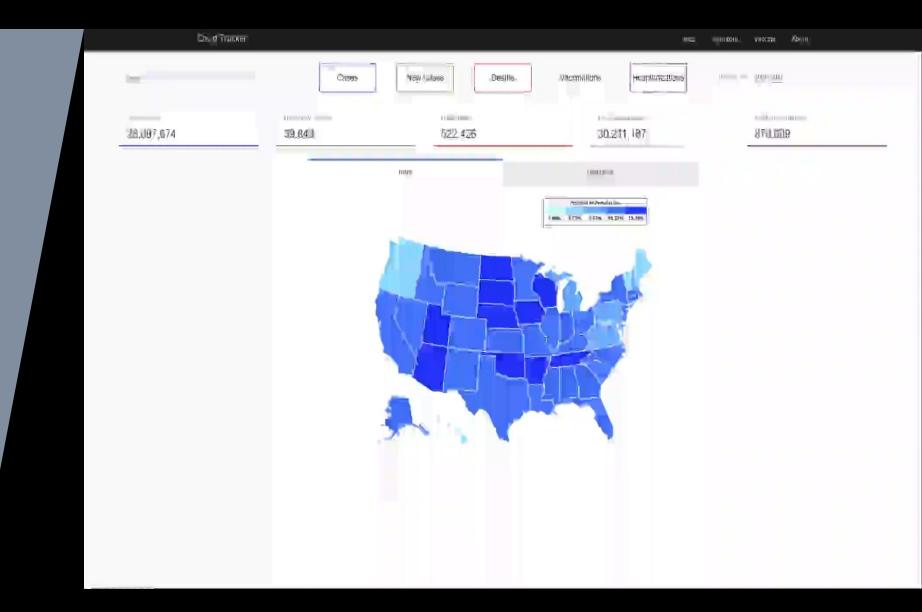


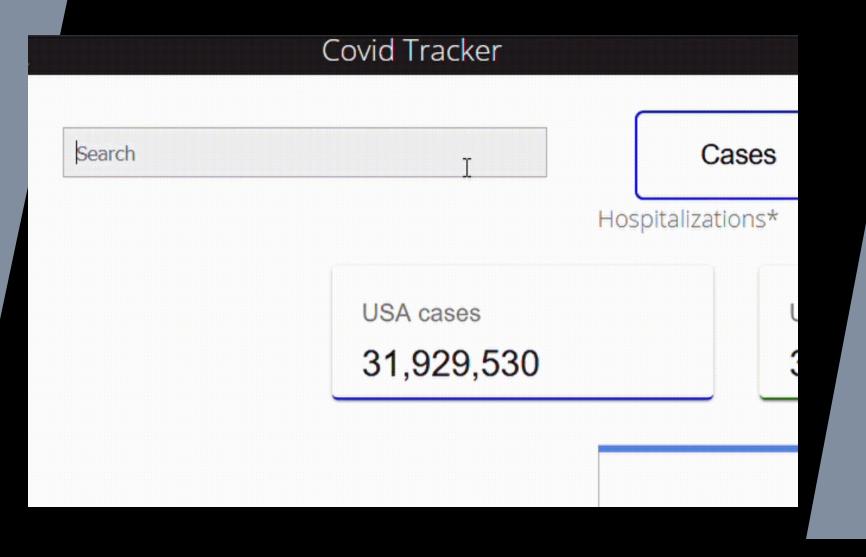
# Front End View

## Buttons and Calendar



# Map, Cards, and Chart





Search Bar

# News and Other Tabs



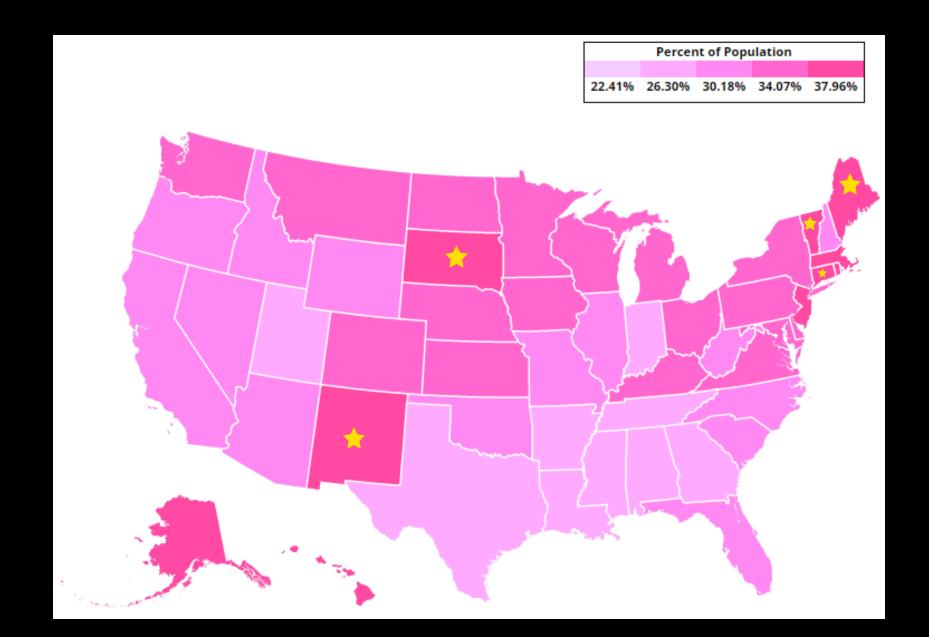
### Let's Track the Effect of the Vaccine





Top 5 Most Vaccinated States as of April 29th

State:	% Population Vaccinated:	New Cases Yesterday:
#1 Maine	37.96	261
#2 Connecticut	37.23	621
#3 Vermont	36.35	48
#4 New Mexico	36.04	220
#5 South Dakota	35.38	170



# Looking Back

- Lessons Learned:
  - Online Teamwork
  - Work Delegation
  - Choice Overload
- Challenges Faced:
  - Multiple Render
  - Middleware
  - Open-Source Data
  - Limited Data
  - Deployment
  - Learning Curve

# Plans for the Future

- Transfer ownership to Dr. Wei
- Keep publicly deployed for client use
- Incorporate economic trends



#### COLLEGE OF SCIENCE&ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

# Thank you for listening! Any questions?

Check out our site yourself! --> http://covidtracker.games:8080/