

Exploring the spread of a pandemic



COVID-19

A Dashboard Edition

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Introduction

COVID-19 Highlights

Dec. 12, 2019

Wuhan, China - Group of patients experiencing shortness of breath and fever



Mar. 11, 2020
WHO declares COVID-19 as a pandemic

Jan. 26, 2021

Worldwide COVID-19 cases surpass 100 million

Feb. 23, 2020

Italy - Becomes the COVID-19 hotspot

Dec. 14, 2020
First American receive vaccine

Apr. 21, 2021

U.S. surpasses 200 million vaccinations administered





Problem

- Countless dashboards providing extensive analytics and visuals
 - Can feel overwhelmed and bombarded with information
 - Especially if you are just trying to get the 'gist' of it
 - Don't even know where to start looking
- Need to have a subscription to view tracker



The Coronavirus Pandemic >

LIVE Covid-19 Updates

Coronavirus Map and Cases

Hospitalizations in Southern I.C.U.s

Vaccine Mandate



U.S.A.



World



Health

\$d
Coupons
Found!

Coronavirus in the U.S.: Latest Map and Case Count

Updated Sept. 16, 2021

Newly reported cases

Vaccinations

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Solution

#01

- User-friendly
 - Straight to the point

#02

- Interactive/animated graphs
 - To engage users

#03

- Providing up-to-date data

Create my own dashboard!

Methodology



Data Overview

CONFIRMED CASES

279 countries with 606 daily confirmed infections

RECOVERED CASES

264 countries with 606 daily recovered infections

DEATH CASES

279 countries with 606 daily death from infections



CASES BY COUNTRY

195 countries with 16 columns of data

DELTA VARIANT CASES

15,259 rows with 17 columns of data

01.

EXTRACTING DATA

CSSE @ John Hopkin's

02.

STORING TO DATABASE

Loading files to
SQLAlchemy

03.

RETRIEVING DATA

Querying SQLite into
dataframes

04.

CLEANING DATA/EDA

Cleaning columns/rows
Using Plotly Express
and Flourish

05.

CREATING WEB APP

Streamlit

06.

DEPLOYING APP

Heroku



Results

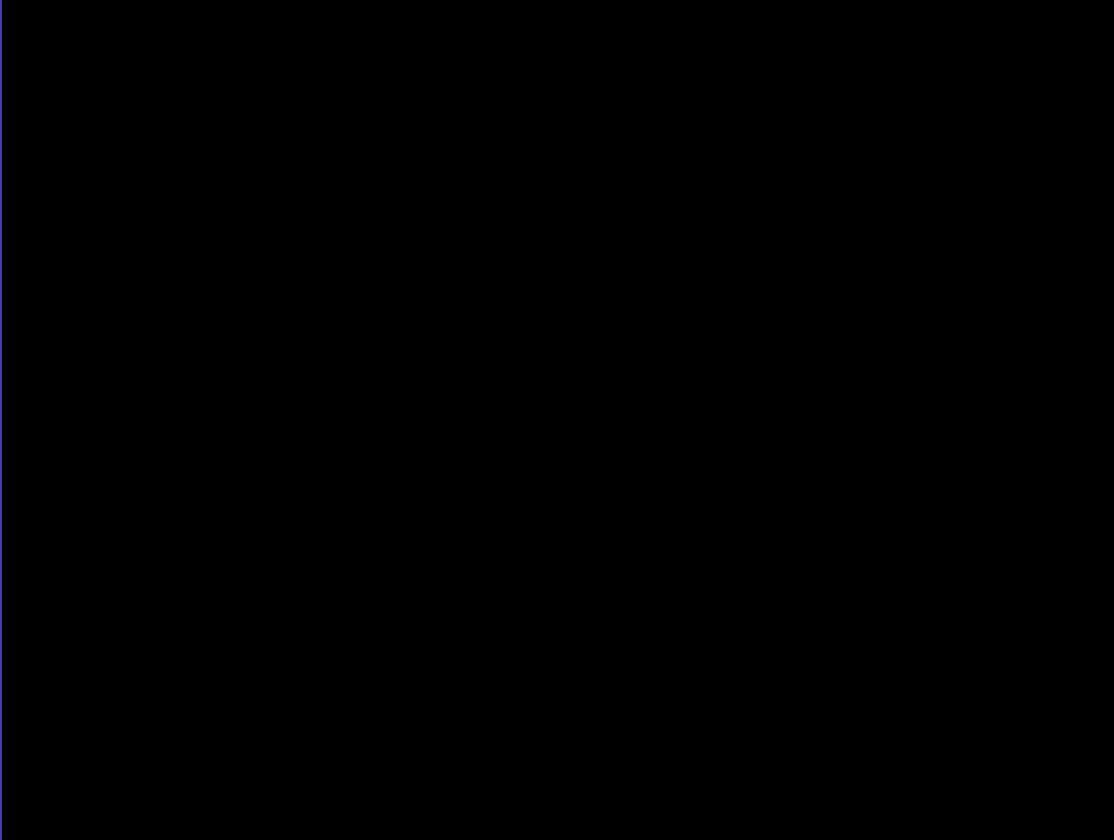
Dashboard Deployment



Streamlit → Heroku

COVID-19 DASHBOARD

App Demo



Thank you!

