

COVID-19 Twitter Reactions

A DS 4002 Case Study by Lily England



Imagine it's March 2020. COVID-19 is spreading rapidly and the U.S. is shutting down. As a data scientist working for a mental health research group, you have been assigned to a critical task: help understand what people are truly feeling.

In this case study, you will work with real social media data to uncover the dominant emotions people are expressing during the early COVID-19 shutdowns. Are they paralyzed by fear? Grieving in sadness? Furious at leadership?

You'll process text data, measure shifts in public sentiment, and map tweets to key emotions such as fear, anger, sadness, and joy. Your job is to uncover emotional trends and present a clear, simple analysis that could help mental health organizations better respond to future crises.

This case challenges you to clean data, perform text analysis, and tell a clear, compelling story with your findings. You will create simple visualizations that help a non-technical quickly understand which emotions are most powerful.

You will submit a short written report summarizing your findings, along with basic visualizations that help explain the emotional trends you discovered. Your audience is a non-technical mental health team seeking actionable insights.

For more details, see attached rubric and Github repository:

<https://github.com/l-e13/ds4002-case-study/tree/main>