

AxisCare: Access to Care

INSPIRATION

Access to timely health care is a fundamental human right.

Data proves that the pandemic may have seen far fewer deaths if the mass populations had access to the needed healthcare services.

Our primary motivation was to explore the state of healthcare access in the United States in the last few years in order to highlight the recent state of healthcare access. There was a need to identify through insight the actions the various states may take in order to bridge the disconnect present in accessibility to the medical facilities, resources, and means available today.

WHAT IT DOES

AxisCare is a data-driven interactive dashboard that provides rich data insights and derives meaningful inferences through the analysis conducted, highlighting the areas various states must focus on in order to bridge the present gaps in access to healthcare.

HOW WE BUILT IT

We build AxisCare using Python (Flask), MongoDB Atlas (NoSQL), Tableau, Plotly (Python), Numpy, Pandas, Git, HTML, CSS, jQuery, Bootstrap, and JavaScript.

We also secured a domain: careaxis.tech through domain.com for AxisCare.

Being a team of 4, we worked on defining the problem statement based on the Elevance Challenge - "Access to Care." We collated datasets that contained data specific to facilities, mobility, vaccination rates and Google Search trends. We conducted our analysis on Access to Care with the accessibility to resources during the pandemic.

Samaksh worked on cleaning, analyzing, pipelining, and visualizing the vaccination and mobility data on Tableau. Shubham and Saksham worked on the data analysis and visualization for vaccination and case-based covid data using Python (Numpy, Pandas and Plotly). Schezeen worked on the end-to-end webapp built using a HTML, CSS and JS frontend and served using a Python (Flask) backend. The data was retrieved from a cluster hosted on MongoDB Atlas.

We worked as a team, each motivating the other to pull through and focus on the bigger picture. We had a lot of fun working together and have learned a lot through the process, the insights we got through the data, and delivering the project!

CHALLENGES WE RAN INTO

The main challenge we ran through was securing relevant, complete, and suitable datasets for the exploration, analysis and visualization on understanding the accessibility to care. We worked with the data we could find, produced cross-correlated datasets during the data preparation phase and cleaned out the irrelevant data to overcome this challenge.

ACCOMPLISHMENTS WE ARE PROUD OF

We are proud of the application we have built and the ability to draw inferences from our analysis. We are super proud of each other for working and collaborating as a team as we learnt a lot through the process.

WHAT WE LEARNED

We learned how to work with the datasets available in order to solve for a problem. We understood the importance of teamwork and a lot from each other, as we all brought our best experiences and expertise to the hackathon! We learned how to deliver an end-to-end project :D

WHAT IS NEXT FOR AXISCARE

We hope to continue using more recent data in order to strengthen the insights we gain from the data. We hope to address the gaps evident using the data to find areas in which states, governments, and policy makers need to divert their attention and focus to when it comes to the accessibility of healthcare.

BUILT BY

Saksham Arora, Samaksh Gulati, Schezeen Fazulbhoy and Shubham Lohiya (Go Jackets!!!)