

LOVELY PROFESSIONAL UNIVERSITY

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Project: Create Dashboards Using Tableau desktop

Section: KM048

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Programme and Section: B.Tech (CSE Hons.),KM048

Course Code: INT233

Under the Guidance of

MARILINI RANA

Discipline of CSE/IT

&Lovely School of Computer Science & Engineering

Lovely Professional University, Phagwara

CERTIFICATE

This is to certify that "Rohit Kumar Mahato" bearing Registration no. 12013213 has completed "INT 233" project titled, "Covid -19 in India Analysis & Creating Dashboard" under my guidance and supervision. To the best of my knowledge, the present work is the result of his/her original development, effort and study.

Mrinalini Rana

Designation of the Supervisor

School of Computer Science & Engineering

Lovely Professional University

Phagwara, Punjab.

DECLARATION

I, Rohit Kumar Mahato, student of B-Tech CSE under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own intensive work and is genuine.

Date: 10/04/2023 Rohit Kumar Mahato

Reg.No.:12013213

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher "MRINALINI RANA" Ma'am who gave me the golden opportunity to do this wonderful project of analysis of the data to "Create Dashboards Using Tableau desktop" which also helped me in doing a lot of research and I came to know about so many new things. I am thankful to them. Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

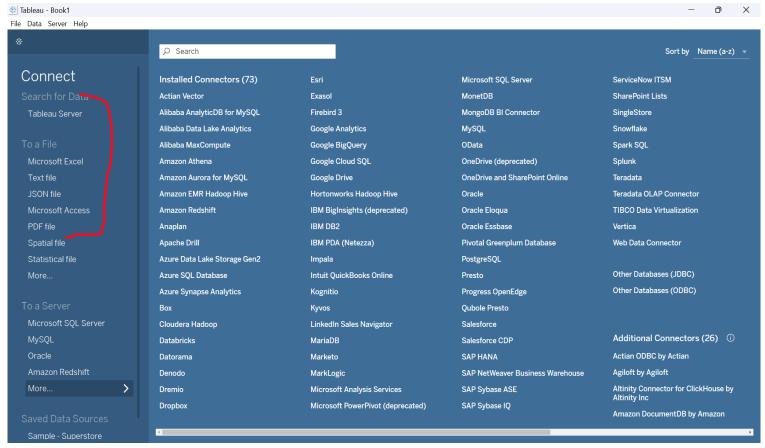
TABLE OF CONTENT

- Introduction
- Description of the solution for Covid -19 in India Dashboard
- Visualization of data set using different type of Graph & chart
- Source of data
- Analysis on dataset (for each analysis)
- 1. Datasheet overview
- 2. Open a Tableau Worksheet
- 3. Prepare data Set as your Requirement
- 4. Analysis and Prepare Visiuals
- 5. Dashboard overview

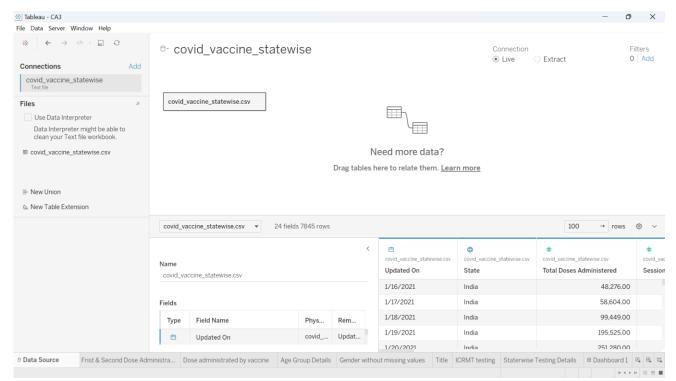
INTRODUCTION

Information that is easy for a person to perceive visually must be supported by associative imagery. Everything we understand is all lived experience. All lived experiences are stored in our memory in the form of index cards. For each described information object in human memory card index, there must be a picture of what the information object is associated with. Moreover, this applies to any objects of information, not just nouns. For example, we have the adverb "hot" reinforced with an image with the predominant color red or orange to store, search for, and quickly retrieve it from memory. It cannot be the color blue or purple with white speckles to associate with the word "hot." Given this fact, you can and should apply these rules in infographics and data visualization for easy perception and quick reads.

Tableau Home Page

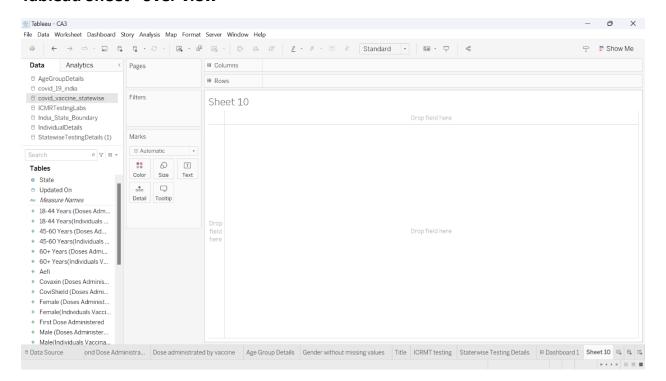


When we open tableau desktop, we found this type of interface. This red mark area where we have a list of file type.



After adding a data file to tableau. It will show you in a table form where data is define in row and columns with data type like text, Integer, Geographical region etc.

Tableau Sheet over view



A Tableau worksheet or sheet is like a report canvas or editor where we have all the tools and functionalities to create a complete report using our data.

Data Pane: The Data pane shows all the available fields from the data sources that are currently connected to Tableau.

Dimensions Section: From the Dimensions section, we can access all the dimension type fields like Order id, Date, Category, Sub-category, Region, City, etc.

Measures Section: The Measures section has got all the measure type fields such as Sales, Profit, Loss, Quantity, etc.

Columns and Rows: The columns and rows sections are the places where you drag and drop your dimension or measure fields while creating charts. If you drag a field in the Rows section it will be displayed vertically on the empty sheet or horizontally if you drag and drop a field in the Columns section.

Drag and Drop Area: The area in the center of the sheet is where our visual or chart is created. We can see it taking shape as we create it here. You can also directly drag and drop your fields of choice here instead of Rows or Columns.

Marks: The Marks section is loaded with useful tools that make your visual interactive, detailed and presentable. This panel has got several options such as Color, Size, Text, Label, Tooltip, etc. You can customize any visual as per your liking from the options given in the Marks card.

Show Me: The Show Me section is the rack having all kinds of visualizations, that is, charts and graphs available in Tableau. You can select whichever visualization you wish to create from here.

Filters: You can drag and drop fields in the filter section and apply filters as per

your requirement in the analysis.

Pages: You can place different fields in the Pages section and Tableau will divide a

report preview based on those selected fields.

Data Sources: From here you can go to the data sources page from where you can

manage and handle the data at the data source level. You can add new data

sources, create joins and edit the old ones.

Sheet: This tab takes you to an active sheet. You can also name a sheet from here.

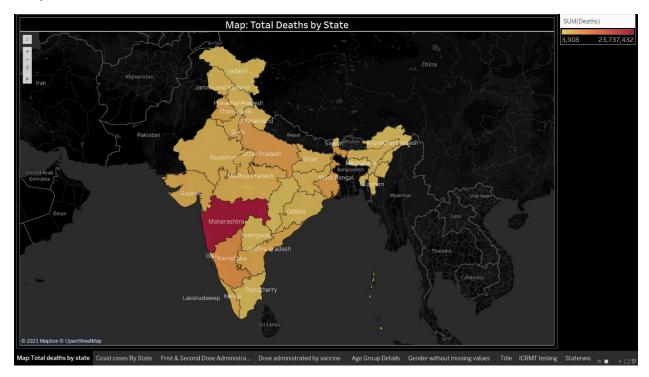
If not named, a sheet is shown as Sheet 1, Sheet 2 and so on.

New Sheet: This will open a new sheet.

New Dashboard: This opens a new dashboard.

New Story: It opens a new story.

Map Death case statewise

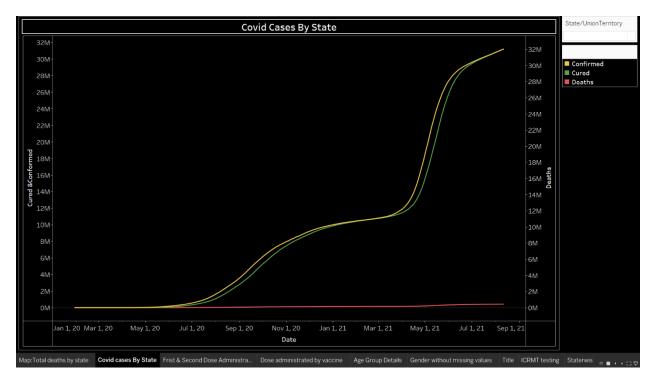


For this map. I am using data set Indian_state_Boundary which I downloaded from Kaggle.com and also a data set which contain data of death in India during covid-19,

Map based on Longitude (generated) and Latitude (generated). Color shows sum of Deaths (covid_19_india). The marks are labeled by State/Union Territory (covid_19_india).

Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Covid cases by state in which Conformed case, Cured cases, Death case.

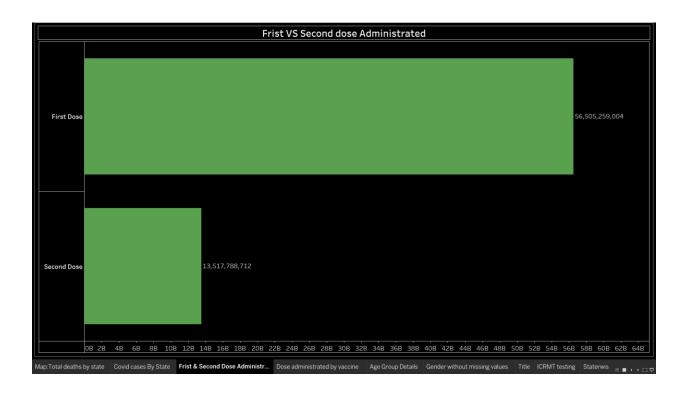


Using line chart in data set covid-19 India using filters, dual axis, masks card,

Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

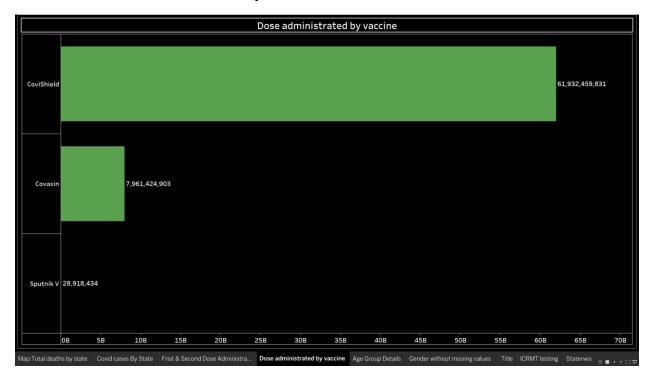
Put date in column and in row sum(conformed case), sum(Cured case) & sum(death). Also use filter in state union/territory, also change ciolor from mask card, this visualization show conformed case, Cured case And death case count

Count of Doses Frist Vs Second does Administrated



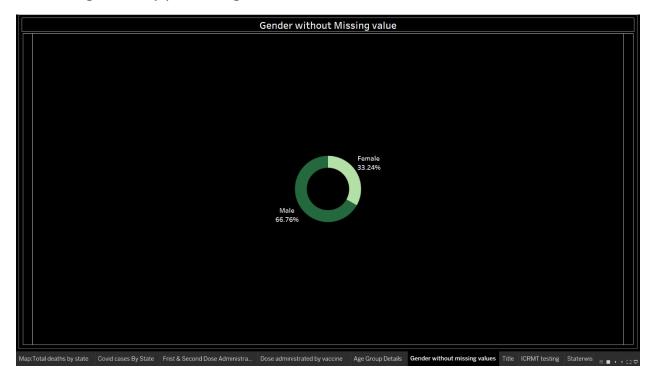
Using data set covid vaccine statewise in which comaparing first dose vs second dose taken by people , I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Count of Dose Administrated by Vaccine



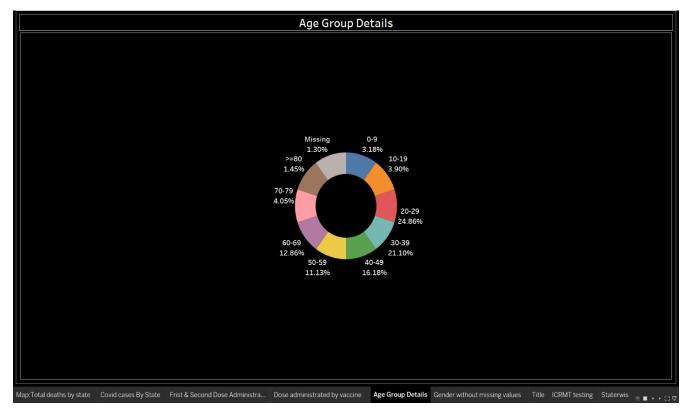
Using data set covid vaccine statewise to calculate which type of vaccine used more and count , I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Count of gender by percentage



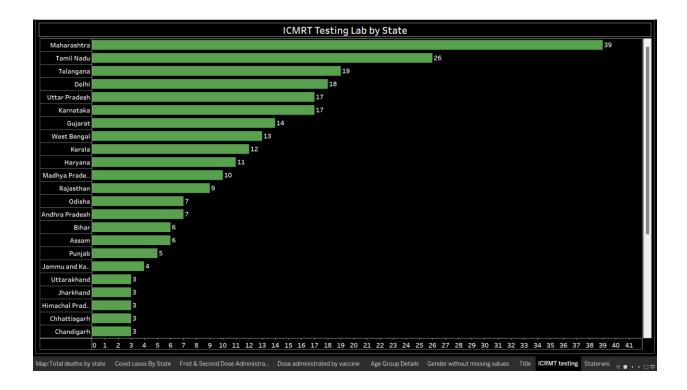
Using data set Indivisdual details to calculate the percentage count of people of age group through Donut chart, I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Category of Age group details



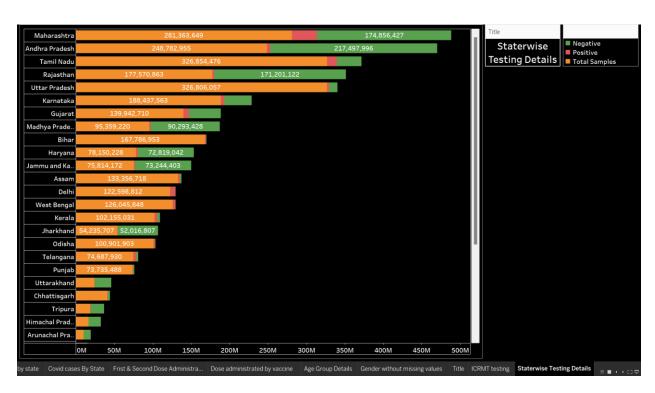
Using data set Age group details to calculate the percentage count of people of age group through Donut chart, I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Count of ICMRT Testing lab by state



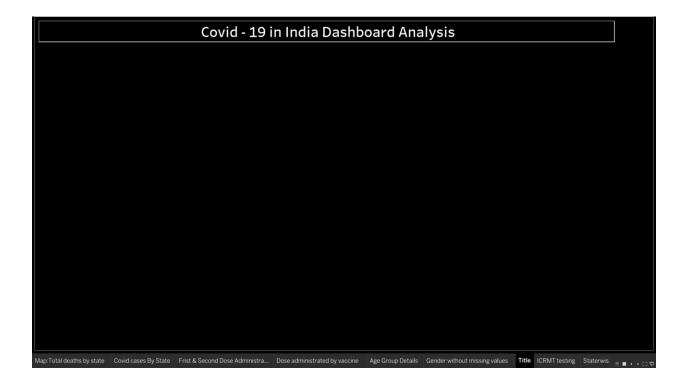
Using data set ICMRT testing lab to calculate the count of lab statewise using bar chart, I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Count of Statewise Testing Details in which negative case, positive case and total samples



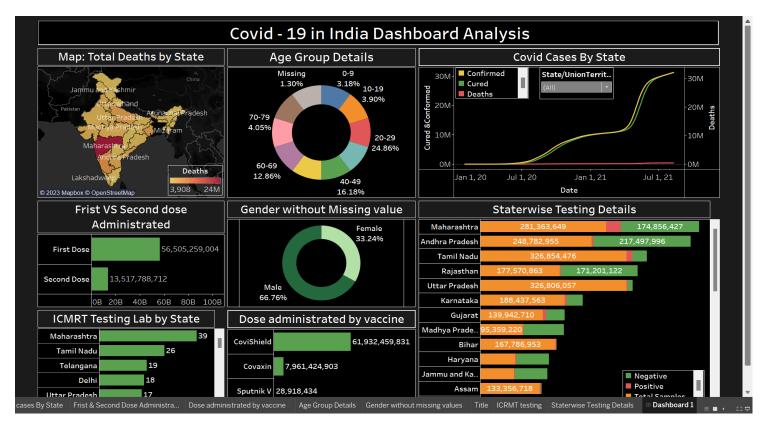
Using data set statewise testing details to calculate count of sample test ,Positive case & Negative test, , I use filter, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

Title of Dashboard



Creating dashboard Title, using calculated field, creating bar chart and Use formatting in which I change color of worksheet, border, then edit title of the map and add border in title

DASHBOARD



This Dashboard is showing Analysis of covid-19 cases in India Statewise, Age groupwise, Statewise testing, Covid case by state, Death case by state, ICMRT testing Lab by State, Vaccine which is more used, Gender count by percentage

References:

Kaggle.com

Google.com

Youtube.com

https://data-flair.training/

Future scope

The COVID-19 pandemic has affected almost every aspect of our lives, including public health, the economy, education, and social interactions. As of my knowledge cutoff date of September 2021, the pandemic had caused over 200 million confirmed cases and more than 4 million deaths worldwide, with significant ongoing transmission in many countries.

Looking forward, the future scope of COVID-19 analysis involves continuing efforts to track and monitor the spread of the virus, develop effective vaccines, and control the pandemic's impacts on society and the economy. Here are some potential areas of focus:

Vaccine development and distribution: As of my knowledge cutoff date, several highly effective COVID-19 vaccines were available, but there were still challenges with vaccine distribution, access, and vaccine hesitancy. Efforts are ongoing to ensure that vaccines are available to everyone who needs them, especially in low-income countries where vaccination rates have been low.

Monitoring and controlling new variants: As the virus continues to spread, it is likely that new variants will emerge, some of which may be more transmissible or resistant to existing vaccines. Scientists are monitoring the situation closely and developing new strategies to track and control the spread of new variants.

Understanding long-term effects: While most people who contract COVID-19 recover without long-term complications, some people experience ongoing symptoms and health effects. Researchers are working to better understand these long-term effects and develop treatments to address them.

Economic and social impacts: The pandemic has had significant impacts on the global economy and society, with many people experiencing job losses, reduced incomes, and other hardships. Efforts are ongoing to address these impacts, including providing financial support, job training, and other forms of assistance.