

LAT-LONG Mapping : Visualization of Airport across the Globe

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Aim of the project

Visualization of the airport distribution across the globe based on the latitude, longitude, and Country.

Features incorporated in this project.

- As it is interactive, will show the information about the airport like timezone, name, country etc..just on the click.
- Search based query about the airport.
- We can see the airports within the country.
- Also can see which country have most airports and how the number of airport varies for different countries.

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Data/Methods utilised in the project

Data

Airport dataset from openflights.org (OpenFlights: Airport and airlines Data).

Schema of database: (AirportID,Name,City,Country,IATA,ICAO,Latitude,Longitude,Altitude, Timezone,DST,Tz,Type)

Methods

For making this project Tableau has been used.

- Tableau is a software that produces interactive data visualization products focused on business intelligence.
- focused on data visualization and data analytics.
- connects easily to nearly any data source.
- can create interactive visualization interface called dashboards.

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Experiments performed in the project

- Visualization of countries based on number of airports in a country.(shown using treemap and symbol map)
- Searching of airport has been performed.
- Interactive dashboard has been made incorporating various functionality like
 - searching,
 - airport belongs to which country,
 - showing other airports in the country and number of airport across the country.

Results

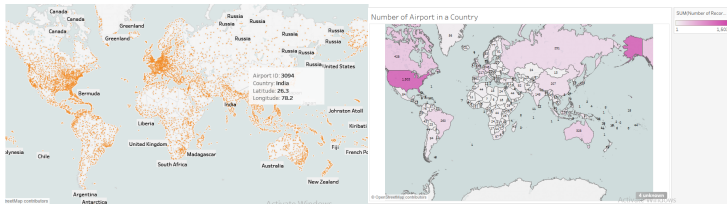
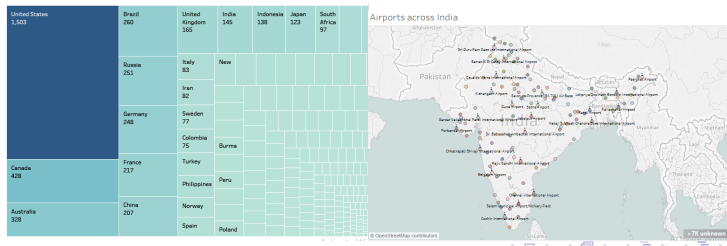
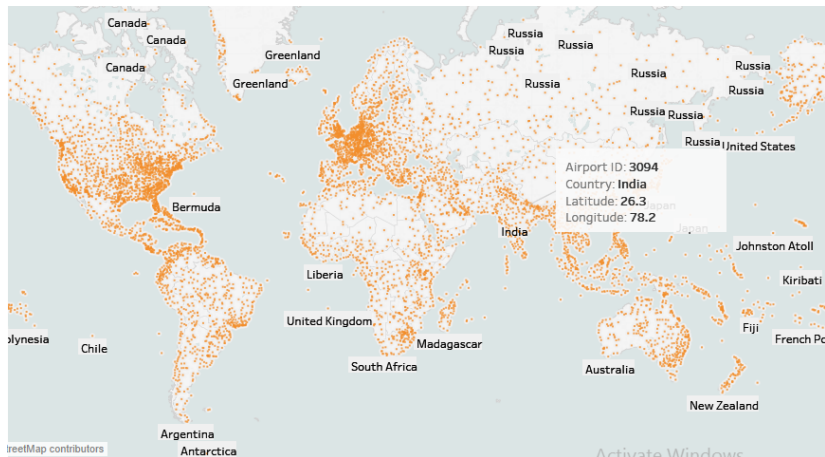


Figure: The Airports: 1) Showing airports across a globe in a map. 2) Showing count of Airports in a country. 3) Showing Tree map. 4) Showing airports across India

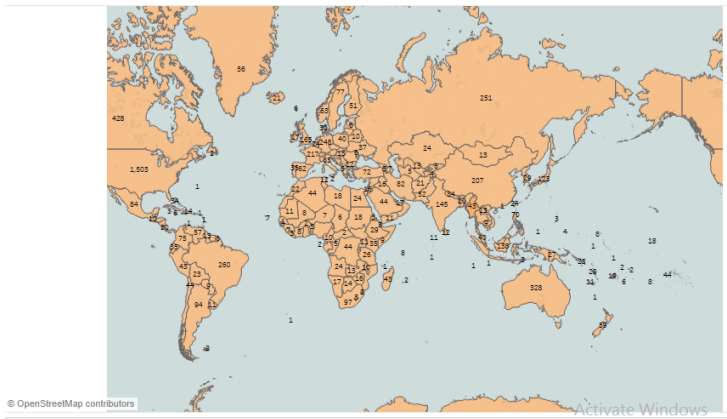


Visualizations: Showing airports across a globe in a symbol map,



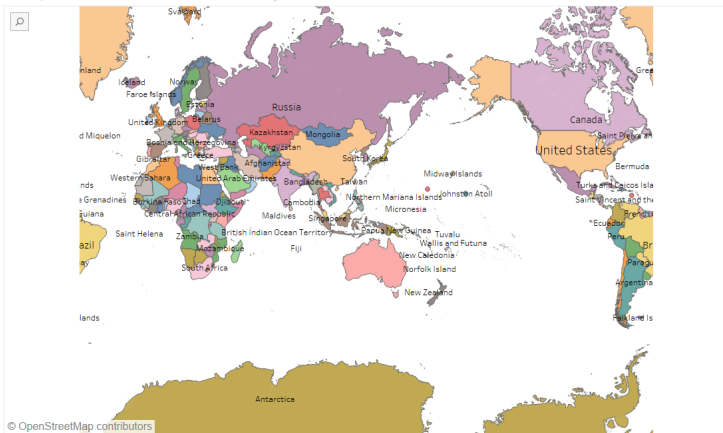
Visualizations: Number of Airport in a country.

Number of Airport in a Country



Visualizations: Airports in a Country.

Airport based on the Country.



Discussion and Conclusion

- Tableau allows for instantaneous insight by transforming data into visually appealing, interactive visualizations called dashboards. This process takes only seconds or minutes rather than months or years, and is achieved through the use of an user interface.
- Interactive dashboard is made and can be deployed, share on any device mobile phone, tablets etc.
- With the help of tableau we can easily perform analysis on huge data and can instantaneously perform the visualization.
- In the end, project deals with designing an effective and efficient data visualization on the airport database.

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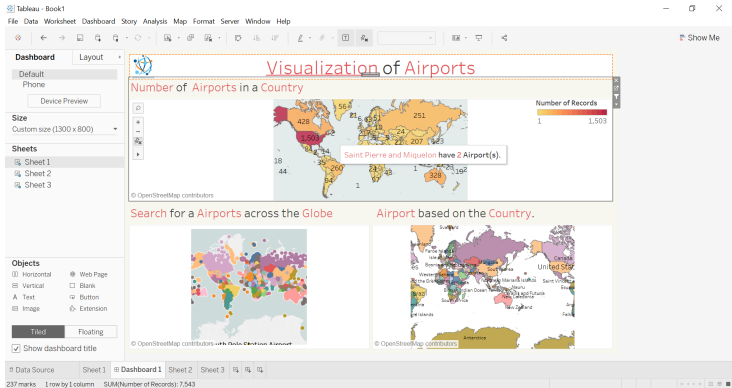
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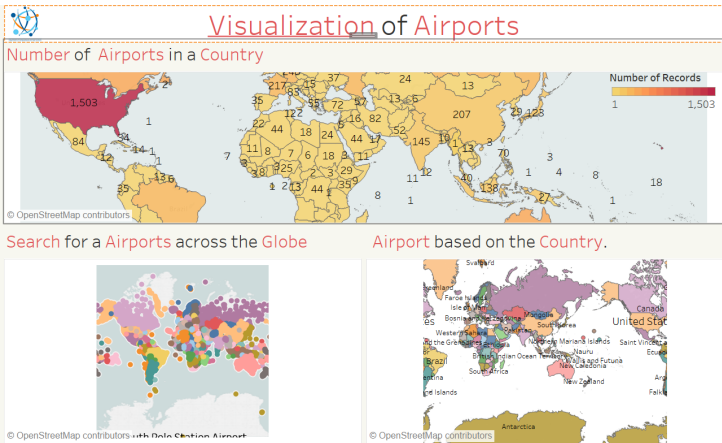
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Dashboard Layout



Dashboard Interface



Latitude-Longitude Mapping

References



Tableau

<https://www.tableau.com/>