Major Project -3

Create an interactive Power BI dashboard to visualize and analyze global and country-specific COVID-19 trends, leveraging the dataset from Kaggle.

Dataset:

- Dataset link: **COVID-19 Dataset**
- This dataset contains global data on COVID-19 cases, deaths, and recoveries, along with relevant dates and country-level information.

Project Guidelines:

1. **Data Understanding & Preparation:**
   - Load the dataset into Power BI.
   - Clean the data: handle missing values, filter out incomplete data, and check for inconsistencies.
   - Create any necessary calculated columns (e.g., active cases = confirmed cases - recovered - deaths).
2. **Dashboard Requirements: The dashboard should include the following visual elements:**
   - Global Overview:
     - A map visualization to show the spread of COVID-19 by country.
     - Cards for total confirmed cases, recoveries, and deaths worldwide.
     - A line chart showing global trends over time (confirmed cases, deaths, recoveries).
   - Country-Specific Analysis:
     - A filter to select individual countries for analysis.
     - A stacked bar chart comparing active cases, recoveries, and deaths for the selected country.
     - A line chart showing the selected country's trends over time (confirmed cases, deaths, recoveries).
   - Comparative Insights:
     - A bar chart comparing the top 10 countries with the highest number of confirmed cases.
     - A matrix showing key statistics (cases, recoveries, deaths) for all countries.

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3. Additional Features:

Use slicers for date range filtering (e.g., show data for specific months or periods).
Incorporate KPIs (Key Performance Indicators) for daily changes in confirmed cases, deaths, and recoveries.
Include tooltips with additional information (e.g., recovery rate, death rate).
Add appropriate titles, labels, and tooltips for clarity.

4. Design & Interactivity:

Ensure the dashboard is well-organized, visually appealing, and easy to navigate.
Make use of colors to differentiate between key metrics (e.g., confirmed cases vs. deaths vs. recoveries).
Allow users to interact with the dashboard by filtering data by country, date, or other metrics.

5. Analysis & Insights:

Highlight significant trends or patterns observed (e.g., which countries have seen rapid increases or decreases in cases).
Provide a brief report (1-2 slides or a paragraph) summarizing your insights from the dashboard.

Submission: The Entire assignment should be submitted by Sunday (27/10/2024), You have to upload the PowerBi file (*.pbix or *.pbit) with the proper Project name in Git Hub.

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