**Phonepe-Pulse-Data-Visualization-and-Exploration**

The Phonepe pulse Github repository contains a large amount of data related to various metrics and statistics. The goal is to extract this data and process it to obtain insights and information that can be visualized in a user-friendly manner, The process involves:

1. **Data Extraction & processing:** Scripting to clone the repository and collect data.
2. **Data Transformation:** Using Python and Pandas to clean and structure the data.
3. **Database Management:** Store and retrieve data Using PostgreSQL
4. **Geo visualization:** create and display data on a map using Plotly's built-in geo map functions.
5. **Dashboard Creation:** Using Streamlit and Plotly to build an interactive dashboard.
6. **Data Retrieval:** Fetching data from the database to dynamically update the dashboard.

Key Technologies and Skills Installation Usage Features Contributing License Contact Key Technologies and Skills

Github, Cloning, Python, Pandas, PostgreSQL, Streamlit, Plotly

**Data Collection**: Clone PhonePe Pulse data from the GitHub repository to your local directory for seamless access.

**Data Overview:** Dive into comprehensive insights about the collected data, including detailed breakdowns by states, years, quarters, transaction types, user devices, and more.

**Migrating Data to SQL Database:** Streamline your data by converting PhonePe Pulse data from JSON format to a structured Data Frame and efficiently store it in a PostgreSQL Database.

**Streamlit:** The Streamlit app provides an intuitive interface to interact with the charts and explore the data visually. Users can customize the visualizations, filter data, and zoom in or out to focus on specific aspects of the analysis.

**Plotly:** Utilizing the power of Plotly, users can create various types of charts, including line charts, bar charts, scatter plots, pie charts, and more. These visualizations enhance the understanding of the data and make it easier to identify patterns, trends, and correlations.

**Data Insights and Exploration:** Embark on an analytical journey with interactive Plotly charts and maps, offering insights across states, years, quarters, districts, transaction types, and user brands.

**Live Geo Visualization Dashboard:** Create a live geo visualization dashboard using Streamlit and Plotly for interactive data exploration, allowing you to dynamically interact with the data on maps.

**Top Performers Highlight:** Easily spot top 10 states, districts, and pincodes through user-friendly visualizations.

**User-Focused Dashboard:** Navigate through an intuitive Streamlit dashboard designed for user convenience, making exploration a breeze.

Empower your decision-making process by leveraging valuable trends, patterns, and statistics derived from the PhonePe Pulse data.