TASK 1 DATA COLLECTION

For a data science project that aims to provide a quick view of the price surge in the Nigerian economy, here’s a concise guideline for data collection:

1. [**Define the Research Aim**: Clearly state the problem you’re addressing, such as the impact of price surges on the Nigerian economy1](https://blog.panoply.io/data-collection-how-what-when).
2. [**Determine Data Needs**: Decide on the type of data required, which could include inflation rates, commodity prices, and exchange rates1](https://blog.panoply.io/data-collection-how-what-when).
3. [**Identify Data Sources**: Collect data from reliable sources like the World Bank, IMF, CBN, NBS, and other relevant organizations](https://blog.panoply.io/data-collection-how-what-when)[2](https://www.omdena.com/chapter-challenges/quick-view-of-price-surge-in-nigeria-economy-using-data-science).
4. [**Data Collection Timeline**: Set a timeline that covers a significant period, for instance, 20 years up to December 2023, to capture long-term trends2](https://www.omdena.com/chapter-challenges/quick-view-of-price-surge-in-nigeria-economy-using-data-science).
5. **Data Preprocessing**: Clean and preprocess the data to ensure quality and consistency for analysis.
6. **Exploratory Data Analysis**: Perform initial investigations on the data to discover patterns, spot anomalies, and test hypotheses.
7. **Data Visualization**: Create visual representations of the data to identify trends and insights related to price surges.
8. **Modeling**: Develop regression models to predict future price surges based on historical data.
9. [**Dashboard Creation**: Use tools like Streamlit to develop a dashboard that presents the data in an interactive and user-friendly manner](https://blog.panoply.io/data-collection-how-what-when)[2](https://www.omdena.com/chapter-challenges/quick-view-of-price-surge-in-nigeria-economy-using-data-science).
10. **Dashboard Deployment**: Make the dashboard accessible to stakeholders for real-time insights into the price surge trends.

Remember, data collection is iterative; you may need to revisit earlier steps based on findings during analysis. For a detailed overview of the price surge in the Nigerian economy using data science, you can refer to projects and studies that have analyzed this phenomenon.

**Indicators**

The indicators for price surge and inflation in the Nigerian economy are as follows:

* [**Inflation Rate**: Nigeria’s headline inflation rate reached **33.69%** in April 2024, marking the highest since March 19961](https://tradingeconomics.com/nigeria/inflation-cpi).
* [**Food Inflation**: A significant component of Nigeria’s inflation basket, food inflation soared to **40.5%** in April1](https://tradingeconomics.com/nigeria/inflation-cpi).
* [**Housing & Utilities**: Prices in this category increased to **28.8%**, contributing to the overall inflation1](https://tradingeconomics.com/nigeria/inflation-cpi).
* [**Transportation**: Costs in this sector also saw an increase, with a rate of **25.4%**, influenced by the rise in electricity tariffs and fuel prices1](https://tradingeconomics.com/nigeria/inflation-cpi).
* [**Core Inflation Rate**: Excluding farm produce and energy, the core inflation rate jumped to a record high of **26.8%** in April1](https://tradingeconomics.com/nigeria/inflation-cpi).

These indicators reflect the challenges in the Nigerian economy, including the effects of currency weakness and policy changes like the removal of fuel subsidies. [On a monthly basis, consumer prices rose by **2.29%** in April, showing a slight easing from a **3.02%** surge in the previous month1](https://tradingeconomics.com/nigeria/inflation-cpi).