THE CHALLENGE

The challenge is to build a prototype of a data analysis tool, for large datasets on market performance, with a chatbot interface that will return values (texts, chats and tables) based on user input in the chatbot.

Content of the Datasets for the challenge

For this challenge, you will be provided with an Excel dummy dataset on Noodles. The dataset includes the following metrics:

- **Product Information:** Detailed descriptions of various noodle products, including brands, type, packaging, and price.
- Sales performance of each SKU
- Inventory level: Stock levels of each SKU.
- Pricing information: Pricing data for each SKU.

What Success looks Like

A query about "*what is the best performing brand in Abidjan*" should return a result which shows the brand with the most volume sales as calculated from the provided dataset. Submission will be graded on responsiveness of the chatbot (speed and conversational ability), accurate calculation of returned values, aesthetics of the tool and the ability to provide extra information relevant to the query.

Accurate calculations are crucial for the success of this challenge, as they directly impact the quality and reliability of the chatbot's insights. The chatbot should be able to answer questions about retail performance based on the provided dataset. This may involve calculating sales performance, percentage changes, and market share metrics.

The chatbot should be able to handle a variety of queries, including:

- Product sales trends over time (e.g., What were the top-performing brands in the last quarter?)
- Comparison of sales performance across different cities (e.g., What was the performance of BRAND A compared to BRAND B in each quarter in the various cities)
- Market View: What is the market size in each quarter?

BONUS CHALLENGE

Build a paywall for the tool.

In addition to the core functionality, we're interested in your innovative solutions for a paywall and different billing models for the tool.

- **Subscription Model**: Propose a tiered subscription plan based on usage or data access levels.
- **Pay-Per-Query Model**: Develop a system where users pay per question asked to the chatbot.
- **Hybrid Model**: Combine elements of both subscription and pay-per-query models.

EVALUATION CRITERIA

- Functionality and usability of the LLM integration
- User-friendliness and intuitiveness of the interface
- Depth and comprehensiveness of data analysis capabilities
- Creativity and feasibility of proposed billing models (bonus)
- Overall presentation and communication skills

CHALLENGE PRIZES

The top three submissions will receive recognition at the Indaba X Ghana conference and receive cash prizes of:

- GHC5,000- 1st Place
- GHC 2,500 – 2nd Place
- GHC 1,500 – 3rd Place

HACKATHON TIMELINES

- Hackathon Begins: 27th June 2024
- Hackathon Ends: 11th July 2024
- Judging: 12th – 15th July 2024
- Winners announced: 16th July 2024

For project support, please contact thebbie.arthur@gmail.com or akuadelly7@gmail.com
We look forward to seeing your innovative ideas come to life!