# **Pre-Hackathon Assignment:**

## **Social Media Performance Analysis**

## **Objective:**

Build a basic analytics module using Langflow and DataStax to analyze engagement data from mock social media accounts.

#### **Tools to Use:**

- DataStax Astra DB for database operations.
- · Langflow for workflow creation and GPT integration.

## **Task Details:**

### 1. Fetch Engagement Data:

- Create a small dataset simulating social media engagement (e.g., likes, shares, comments, post types).
- · Store this data in DataStax Astra DB.
- 2. Analyze Post Performance: Using Langflow, build a simple flow that
  - · Accepts post types (e.g., carousel, reels, static images) as input.
  - Queries the dataset in Astra DB to calculate average engagement metrics for each post type.
- 3. **Provide Insights:** Use GPT integration in Langflow to generate simple insights based on the data
  - · Example outputs:
    - Carousel posts have 20% higher engagement than static posts.
    - Reels drive 2x more comments compared to other formats.

## **Submission requirement:**

- Create your project, link it to level supermind hackathon
- Record a video describing:
  - -Langflow workflow
  - -How DataStax was used to store and query data
  - -How GPT was leveraged to generate insights
- Add the link to your Github repository or Google Drive link of the ZIP file containing your code.
- · Add the YouTube video link.
- · Demo videos are a must.
- The video shouldn't be private.
- A well-written description is a plus.
- · The project repository must be public.

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