DATA ANALYTICS ASSIGNMENT

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Assignment for Data Analytics Intern at **upliance.ai**:

Description of Assignment:
- The objective of this assignment is to analyze datasets related to user behaviour, cooking preferences, and order trends.
- You will work with three datasets: UserDetails, CookingSessions, and OrderDetails.
- The task involves cleaning and merging the data, analyzing the relationship between cooking sessions and user orders, identifying popular dishes, and exploring demographic factors that influence user behaviour.
- Additionally, you will create visualizations to showcase key insights and write a report summarizing your findings and business recommendations.

SUMMARY:

I have analyzed data from three datasets—UserDetails, CookingSessions, and OrderDetails—to understand user behaviour, cooking preferences, and ordering trends.

TECHSTACK:

- o Google Colab (jupyter notebook platform)
- o Python (libraries and utilities)
- o Power BI (visualization tool)
- o EDA- Exploratory Data Analysis (merged_report (1).pdf) : contains relational graphs, key insights, overview, data informatics.)

Project Structure

- Datasets:
    - o Contains the three CSV files: UserDetails.csv -CookingSessions.csv - OrderDetails.csv
- Notebook :
    Data-Cleaning-and-Preprocessing.ipynb: Merges and preprocesses the data, handling missing values and transforming it into an analysable format.
- Report:
    PowerBI-Report:
    A PowerBI file showing the interactive analysis of key metrics and trends. (TO ACCESS THE POWERBI FILE, DOWNLOAD IT AND OPEN IT AT POWER BI DESKTOP)
    EDA-Report.pdf: A detailed report summarizing the findings of the exploratory data analysis, including charts and insights.

<u>Here are the key findings:</u>

1. Who Are the Users?

- Users are aged between 25 and 42, with an average age of 31 years.

- They are located in various cities, including New York, Los Angeles, and Chicago.

2. What Are They Cooking and Ordering?

- **Dinner** is the most popular meal type, followed by lunch and breakfast.

- Favourite dishes include Spaghetti, Grilled Chicken, and Caesar Salad.

- The top-notch dish name is: Spaghetti and Grilled Chicken.

3. How Do Sessions and Orders Connect?

- Cooking sessions typically last around 30 minutes, with higher-rated sessions leading to increased spending.

- The average order value is $11, with the majority of orders occurring during dinner sessions.

4. What Influences Preferences?

- Younger users (aged 25-30) prefer faster, lighter meals.

- Older users (aged 40+) tend to favourite breakfast dishes like Pancakes and Oatmeal.

<u>Recommendations for Upliance company:</u>

1. Personalize User Experiences

- Leverage user data to recommend dishes based on demographics and past cooking sessions.

- Highlight trending dishes for specific meal types, such as dinner.

2. Enhance User Engagement

- Offer rewards for highly rated cooking sessions to encourage repeat participation.

- Promote dinner sessions through exclusive campaigns, as they are the most popular.

3. Expand Offerings

- Introduce more breakfast options in cities with older demographics.

- Add variety to popular dishes like Spaghetti and Grilled Chicken.

4. Streamline Cooking Sessions

- Provide quick, step-by-step guides for top-rated dishes to reduce session duration and improve user satisfaction.