

# **Data Analyst Intern Assignment**

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## **Situation:**

The assignment involves analysing user behaviour, cooking preferences, and order trends using three datasets: UserDetails, CookingSessions, and OrderDetails. The objective is to clean and merge the datasets to create a cohesive structure for analysis. Key focus areas include exploring the relationship between cooking sessions and user orders, identifying popular dishes, and understanding demographic factors influencing user behaviour.

Through the analysis, insights into user engagement, preferences, and patterns will be uncovered. These findings will be visualized to aid interpretation and incorporated into a comprehensive report. The report will include actionable business recommendations derived from the limited data, aimed at enhancing user experience and optimizing order trends.

## **Tools Used:**

Excel, Word

## **Analysis and Insights:**

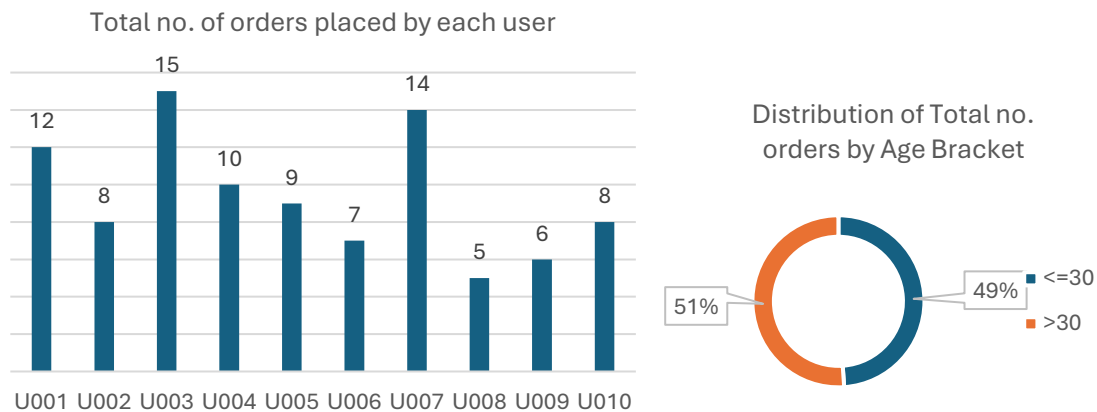
### **Analysis:**

First, the analysis is undertaken with user details and then the merged data for user details, cooking sessions and order details is used. Upon analysis, relationship between cooking sessions and order details is established and consolidated in insights section.

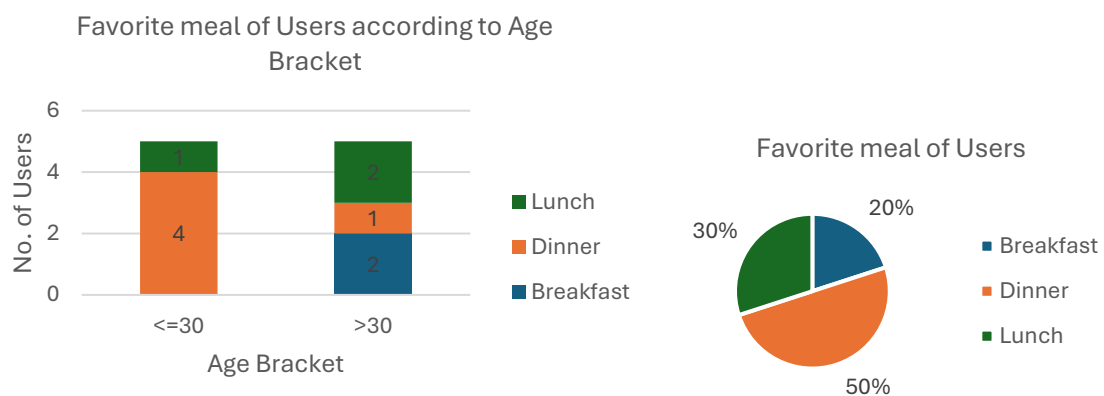
### **User Details:**

- There is total 10 distinct users who have placed a total of 94 orders.

- The total number of orders placed by users in the age bracket >30 years is slightly more than that of users in age bracket of <=30 years.

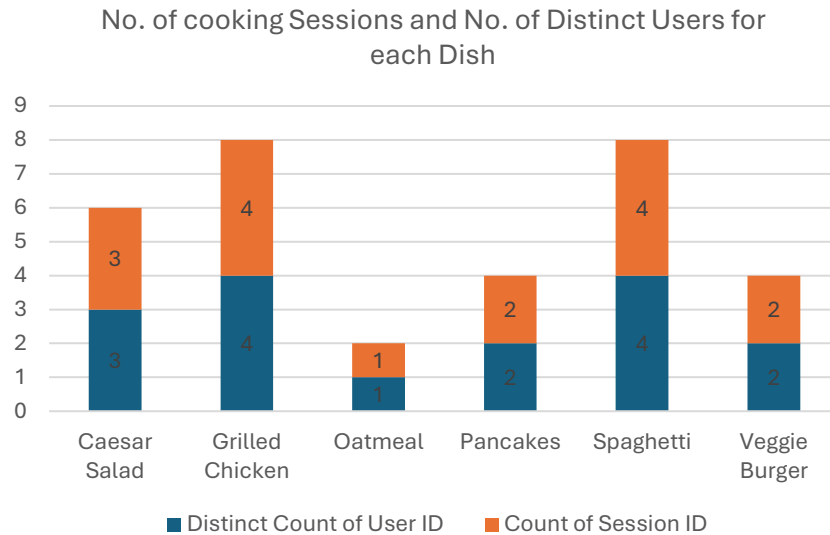


- While dinner is the favourite meal of 50 % of the users, upon bifurcation on the basis of age bracket, there are definite different preferences as shown in following figure.

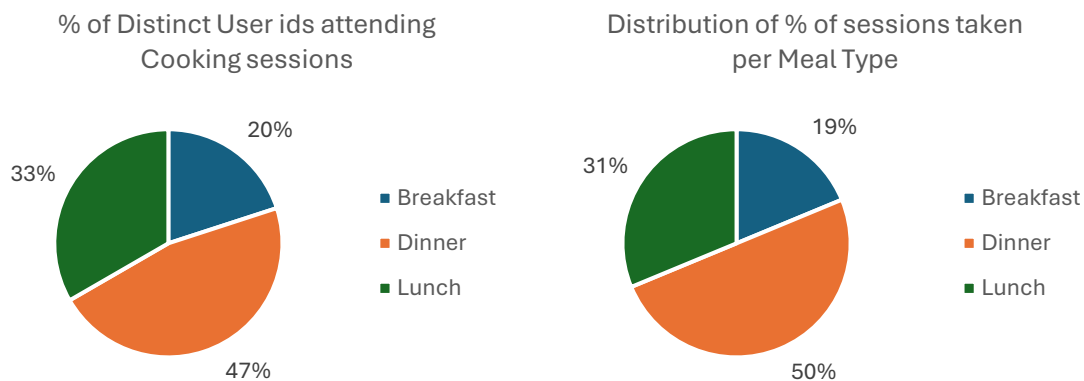


### Cooking Sessions:

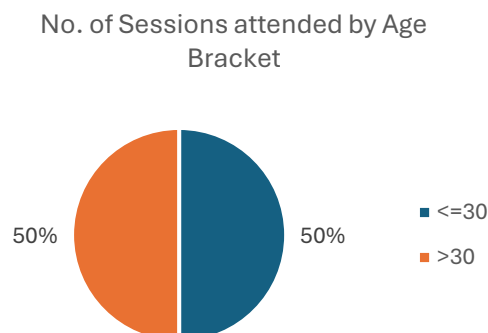
- There is total 16 cooking sessions held, which are attended by 8 out of 10 users.
- The total number of sessions held for each dish and the unique number of users for each dish are exactly the same.



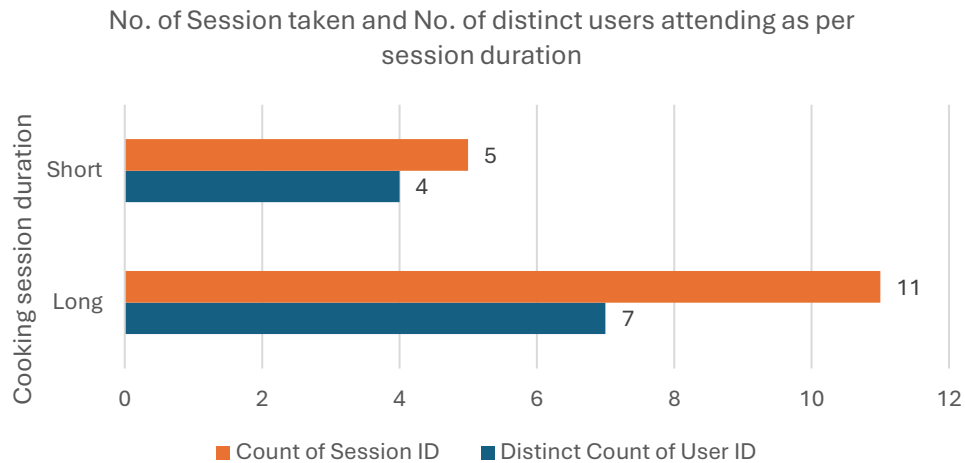
- The percentage distribution of number of users attending the cooking session for a specific meal type is not exactly the same as percentage distribution of sessions taken per meal type.



- On comparing on the basis of age bracket, half the sessions are attended by those  $\leq 30$  years of age and the other half by  $> 30$  years of age.

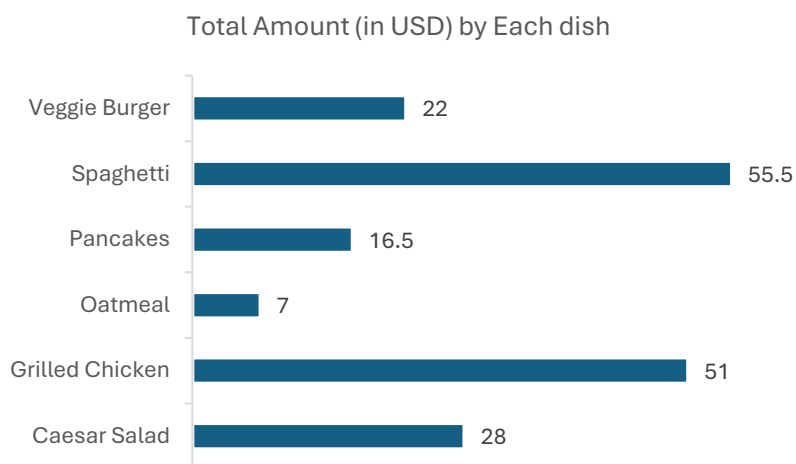


- The long sessions ( $\geq 30$  minutes) form the majority and are also attended by majority of users.

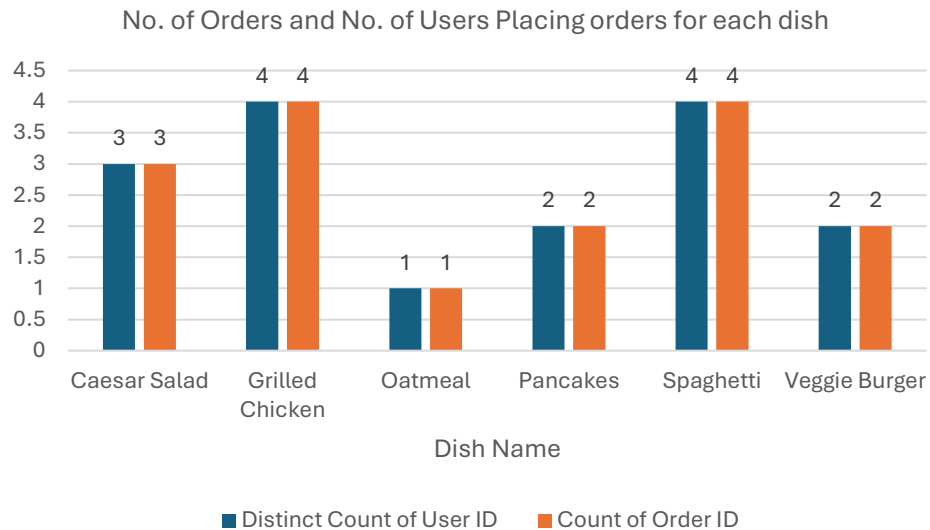


### Order Details:

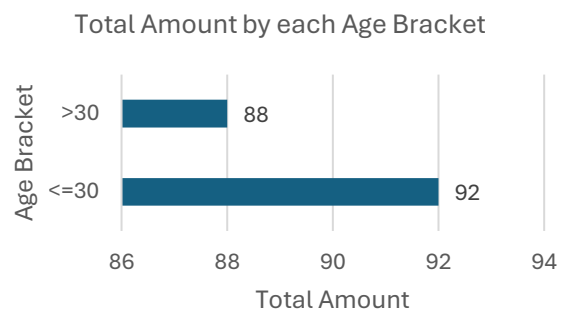
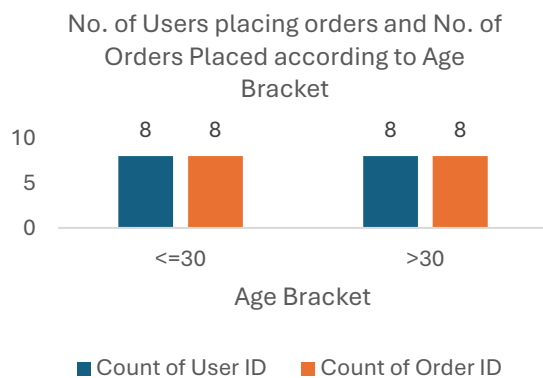
- There are a total of 16 orders placed by 8 out of 10 users and the total sum of amount is 180(USD) with average being 11.25(USD). [According to UserDetails, all the users have placed orders, so may be data for 2 users is not available.]
- The top 2 dishes contributing the most to total amount are spaghetti and grilled chicken.



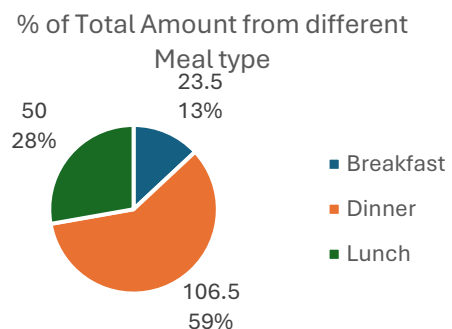
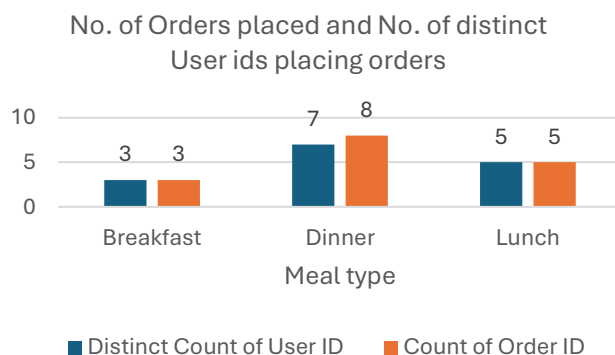
- The number of orders and number of users placing the order for each dish exactly the same.



- While the number of orders placed and number of distinct users placing the order in different age bracket is exactly the same, the total amount by each age bracket is different.

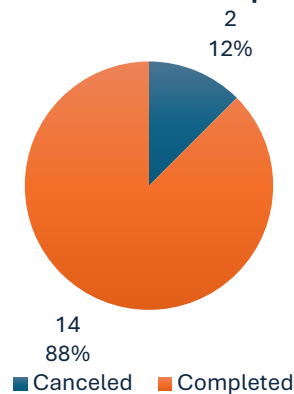


- The number of orders placed and number of distinct users placing the order according to different meal type are as follow. The contribution of each of these orders to total amount is also proportional.



- Order status of orders placed follows the distribution as shown in the following figure where two orders are cancelled and form 12% of the total orders placed.

**Order Status of Orders placed**



### **Insights and business recommendations:**

- Among the total 10 distinct users who have placed a total of 94 orders, the user with user id 'U003' has placed maximum number of orders (15).
- There is a little higher tendency in the age bracket >30 years to place more orders, but contribute a little less to the total amount. The age bracket <=30 years contributes more to the total amount as while placing less orders.
- There is a difference in favourite meal according to age bracket, dinner is the choice for age <=30 years, whereas breakfast and lunch for the other age bracket of >30 years. This can help categorise and schedule cooking sessions also as there is direct correlation between cooking sessions and orders placed.
- With the total 16 cooking sessions held, only 8 out of 10 distinct users attend these. Maximum number of sessions, around 50%, are held for the meal type 'dinner'.
- There is a preference of longer sessions by the users. This should also be kept in mind while organizing cooking sessions.
- The meal type 'dinner' dominates the orders placed in terms of number of orders placed, the number of distinct users placing the order as well as the share towards total amount. This should be properly leveraged while organizing cooking sessions.
- The popularity of grilled chicken and spaghetti is the highest for cooking sessions as well as order dish items and they contribute the highest shares to the total amount.
- An interesting observation is that among cooking session taken by users, only seven times out of 16, the meal type matches the favourite meal type. The same

is the case with orders placed, only seven times out of 16, the meal type ordered matches the favourite meal type. It exhibits that there is no direct correlation between favourite meals and cooking sessions and the order placed.

- All the users who have ordered, have also had cooking session for the same dish on the same day. May be the orders are placed for sampling the dishes and then trying to learning them. This can help in scheduling the cooking sessions and clearly establishes a correlation between cooking sessions and order details.