### **Report: Analysis of User Behavior, Cooking Preferences, and Order Trends**

#### **1. Introduction**

This report presents an analysis of datasets related to user behavior, cooking preferences, and order trends for **upliance.ai**, a company focused on creating AI-powered cooking assistants. The analysis covers three main areas:

* Relationships between cooking sessions and user orders.
* Popular dishes among users.
* Demographic factors influencing user behavior, including age and location.

#### **2. Key Findings**

##### **2.1. Relationship Between Cooking Sessions and User Orders**

The correlation between **Session Rating** and **Order Rating** was found to be **0.61**, indicating a moderate positive relationship. This suggests that users who rate their cooking sessions higher tend to give higher ratings to their orders. Therefore, enhancing the user experience during cooking sessions could lead to higher customer satisfaction and potentially more positive order ratings.

##### **2.2. Popular Dishes**

The most popular dishes ordered by users were:

* **Spaghetti** (4 orders)
* **Grilled Chicken** (4 orders)
* **Caesar Salad** (3 orders)

These dishes were frequently ordered, indicating a preference for familiar and versatile meals like pasta and salads. Understanding dish popularity can help tailor meal offerings and marketing strategies.

##### **2.3. Demographic Factors**

* **Location**:
  + Users from **Austin** and **Boston** had the highest average ratings of **5.0**.
  + Cities like **Chicago** and **San Francisco** had lower average ratings, suggesting room for improvement in user experience or dish quality in these locations.
* **Age**:
  + The majority of users fall in the **20-30 age group**, with **8 orders** from this group.
  + Fewer orders were placed by users in the **30-40** and **40-50** age groups, indicating that younger users are more engaged in ordering meals.

This finding suggests that marketing efforts could be more effective if targeted toward the younger demographic (20-30 years old).

##### **2.4. Meal Preferences by Age Group:**

* The data showed varying preferences in meal types across different age groups. For instance, **younger users (20-30 years old)** preferred **Dinner** and **Lunch**, while older age groups may prefer lighter meals such as **Breakfast**.

This insight could help in customizing meal offerings for different age groups to better align with their preferences.

#### **3. Business Recommendations**

##### **3.1. Improve User Experience in Low-Rating Locations**

The lower ratings from locations like **Chicago** and **San Francisco** indicate that there is potential for improvement in these areas. It may be beneficial to investigate customer feedback in these regions to identify pain points, whether they relate to food quality, delivery experience, or other factors. Improving user satisfaction in these locations could result in higher ratings and increased order frequency.

##### **3.2. Target Younger Demographics**

Given that the **20-30 age group** places the most orders, marketing strategies should be tailored to this demographic. Consider offering promotions, discounts, or meal bundles targeted at younger users to boost engagement. Additionally, user interface and experience improvements in the app could appeal to this tech-savvy group, making it easier for them to place orders.

##### **3.3. Popular Dishes and Menu Customization**

The analysis of popular dishes reveals a demand for familiar, easy-to-prepare meals like **Spaghetti**, **Grilled Chicken**, and **Caesar Salad**. It would be advantageous to highlight these dishes in promotional campaigns and ensure their availability. Moreover, offering customizations (e.g., add-ons or variations) can enhance the customer experience.

##### **3.4. Age-Specific Meal Options**

Considering the varying preferences across age groups, offering tailored meal options for different demographics could increase user satisfaction. For example:

* Offer more **light breakfast options** for older age groups (40+).
* Highlight **dinner and lunch options** that are quick and easy for the younger demographic.

##### **3.5. Enhance Cooking Session Experience**

Since there is a moderate positive correlation between **Session Ratings** and **Order Ratings**, improving the cooking session experience (through better AI-powered guidance, recipes, and meal suggestions) could lead to higher satisfaction during cooking, which in turn could result in more positive order feedback.

#### **4. Conclusion**

This analysis provides valuable insights into user behavior, cooking preferences, and order trends. By focusing on improving user experiences in certain locations, targeting younger demographics, and offering popular and customized meal options, **upliance.ai** can increase customer satisfaction, drive engagement, and optimize its service offerings.