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Course: DE211 (Data Analysis)

Project 1



- Title: Survey on Ramadan Desserts
- Population of Interest: EUI Students
- Sampling Method:
 - A **convenience sampling method** was used to collect data. This approach was chosen to maximize randomness and accessibility
- Bias Identification:
 - To minimize bias, the survey targeted a **similar socioeconomic group** (EUI students) to ensure that the questions and dessert options were familiar and relevant to all participants. This approach helped reduce variability in responses due to differences in cultural or economic backgrounds.
- Survey Questions:
 1. Which place did you try dessert from?
 2. Opinion on Pricing
 3. Rate from 1 to 5 (1 would never get it again & 5 being would get again)

4. What do you think is the best place for Ramadan desserts?

5. Which place do you want to try the most?

- Online survey link:

https://docs.google.com/forms/d/1WJdNhwypFtX_4HiLVrZ_5YV1z7CEFWwYlu2_gTAD9Rs/edit#responses

- Number of samples collected: 56

- Analysis:

1. Descriptive Analysis:

- The most selected brand in each category was identified.
- **BreadFast** and **Blabn** emerged as the most frequently ordered and recommended brands.

2. Visualizations:

- **Pie Chart:** Visualized the distribution of pricing opinions, showing that **65%** of respondents perceived the desserts as **Fairly Priced**.
- **Histogram:** Displayed the distribution of dessert ratings, which was **left-skewed**, indicating that most respondents gave high ratings (4 or 5).
- **Bar Graph:** Showcased the **average ratings** for each brand, highlighting the top-performing brands.
- **Bar Graph:** Compared the **average ratings** across different pricing perceptions (Fairly Priced, Over Priced, Under Priced).

3. Hypothesis Testing:

- A **chi-square test of independence** was conducted to determine if there is a significant association between **Previous Order** and **Best Place**.
- The results showed a **significant association** ($p < 0.05$), indicating that the brand considered the **Best Place** is often the same as the **Previous Order** brand.
- Conclusion
 - BreadFast and Blabn are the most ordered and recommended brands for Ramadan desserts among EUI students.
 - More than 65% of respondents perceive the pricing of Ramadan desserts as Fairly Priced, indicating general satisfaction with the cost.
 - There is a significant association between the brand considered the Best Place and the Previous Order brands, as confirmed by the chi-square test of independence ($p < 0.05$).