



PLACEMENTDOST

Note:

Please be advised that these assessment inquiries are designed to accommodate interns with diverse skill levels, ranging from novices to seasoned analysts. Should you encounter any challenging questions, you are encouraged to seek solutions independently or reach out to us for assistance at intern@placementdost.com. Best wishes for success in completing the assessment!

Tools needed :- PowerBi, MS Excel

1. Data Loading and Exploration:

- Load the menu_items and order_details tables into Power BI.
- Examine the structure of the dataset and identify any missing values.

2. Basic Visualizations:

- Create a bar chart to show the distribution of menu items across different categories.
- Develop a table to display the top-selling menu items.

3. Price Analysis:

- Visualize the average price of menu items in each category using a stacked column chart.
- Display the total revenue generated by each category.

4. Order Date Analysis:

- Create a line chart to show the trend of order count over different dates.
- Implement a filter to explore the order details for a specific date range.

5. Time-based Analysis:

- Visualize the peak order times throughout the day using a line chart or heatmap.
- Calculate and display the average order processing time.

6. Category-wise Revenue Contribution:

- Develop a donut chart to represent the percentage contribution of each category to the total revenue.

- Implement tooltips to display additional information about each category.

7. Customer Spending Patterns:

- Create a histogram to analyze the distribution of customer spending on menu items.
- Use bins to categorize spending ranges.

8. Item Popularity Analysis:

- Utilize a treemap to display the popularity of menu items based on the number of times they were ordered.
- Include tooltips to show detailed information about each menu item.

9. Order Frequency Analysis:

- Create a bar chart to show the frequency of orders placed by different customers.
- Highlight the top customers with the highest order counts.

10. Customer Segmentation:

- Categorize customers into segments based on their spending patterns.
- Visualize the distribution of customers in each segment.

11. Top-N Analysis:

- Implement a slicer to allow users to dynamically select the top N menu items or categories.
- Adjust visuals accordingly to display information for the selected subset.

12. Customer Retention Analysis:

- Develop a line chart to show the retention rate of customers over different months.
- Calculate and display the percentage of returning customers.

13. Relative Price Comparison:

- Use a matrix visual to compare the prices of menu items within each category.
- Implement conditional formatting to highlight higher or lower prices.

14. Dynamic Date Filtering:

- Implement a date filter that allows users to compare order details for different time periods dynamically.
- Utilize a relative date filter for enhanced flexibility.

15. Customer Loyalty Program Analysis:

- Analyze the impact of a customer loyalty program on revenue and order frequency.
- Develop visuals that showcase the difference in spending between loyalty program members and non-members.

16. Customer Satisfaction Analysis:

- Integrate a survey or feedback dataset (if available) to analyze customer satisfaction.
- Create visuals to represent overall satisfaction scores and identify areas for improvement.

17. Cross-filtering and Drill-through:

- Implement cross-filtering between visuals based on menu item selection.
- Develop a drill-through page to provide detailed information about a selected menu item.

18. Forecasting:

- Use the forecasting feature to predict future order counts or revenue based on historical data.
- Evaluate the accuracy of the forecast and visualize predictions.

19. Scenario Analysis (What-If):

- Identify a relevant scenario (e.g., price changes or new menu items) for a what-if analysis.
- Use what-if parameters to demonstrate the impact on revenue and customer behavior.

20. Dashboard Presentation:

- Combine all the created visuals into a cohesive and interactive dashboard.
- Add a summary section and annotations to highlight key insights.