ONLINE FOOD DELIVERY

SQL PROJECT

Prepared by

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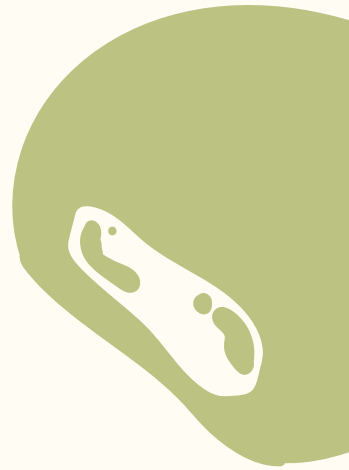
CONTENT

ENGAGEMENT

ANALYSIS REPORT

EXECUTIVE DASHBOARD

TOTAL ORDERS
2,847

TOTAL REVENUE
2.1M

UNIQUE CUSTOMERS
1,234
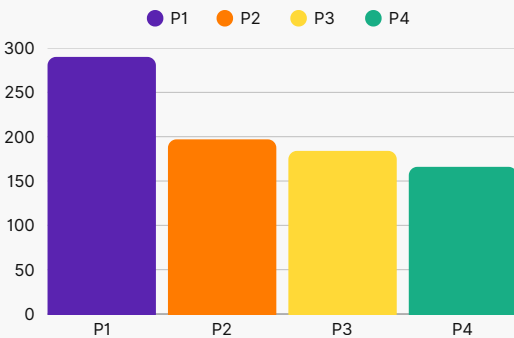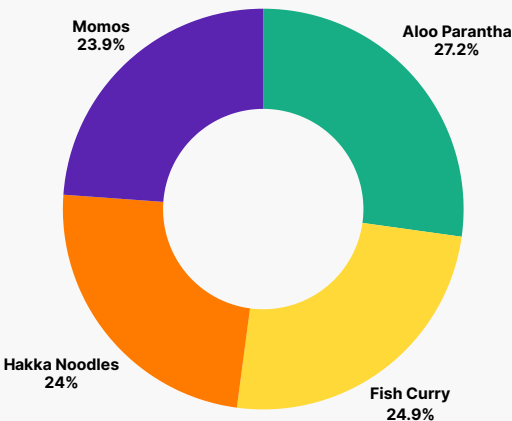
ACTIVE RESTAURANTS
87

CITY-WISE ORDER ANALYSIS

- **JAIPUR** 290
- **HYDERABAD** 197 ▲
- **DELHI** 184 ▲
- **PUNE** 166 ▲

Chart legend: ● P1 ● P2 ● P3 ● P4

(Bar chart values: P1 ≈ 290, P2 ≈ 197, P3 ≈ 184, P4 ≈ 166)

Performance by food item :

- Aloo Parantha 27.2%
- Fish Curry 24.9%
- Hakka Noodles 24%
- Momos 23.9%

RESTAURANT WISE ORDER-COUNT

- GOLDEN TABLE
- Spice Palace
- Happy Diner
- Fresh Garden

Conclusion :

- Captures the main paradox: Jaipur leads orders, Hyderabad leads revenue
- ✅ Essential metrics: All key numbers and percentages included
- ✅ Strategic insights: Seasonal patterns, customer distribution, product performance
- ✅ Actionable recommendations: Immediate actions and growth opportunities
- ✅ Clear verdict: ₹3M+ revenue projection with proper execution

Dataset Preview

📊 Online Food Delivery Dataset

5	**~3,000**
Number of Tables	Total Rows

2,700
Largest Table

🗄 Database Schema Overview

👥 Customers

User profiles & signup details

🏪 Restaurants

Restaurant info, locations & registration
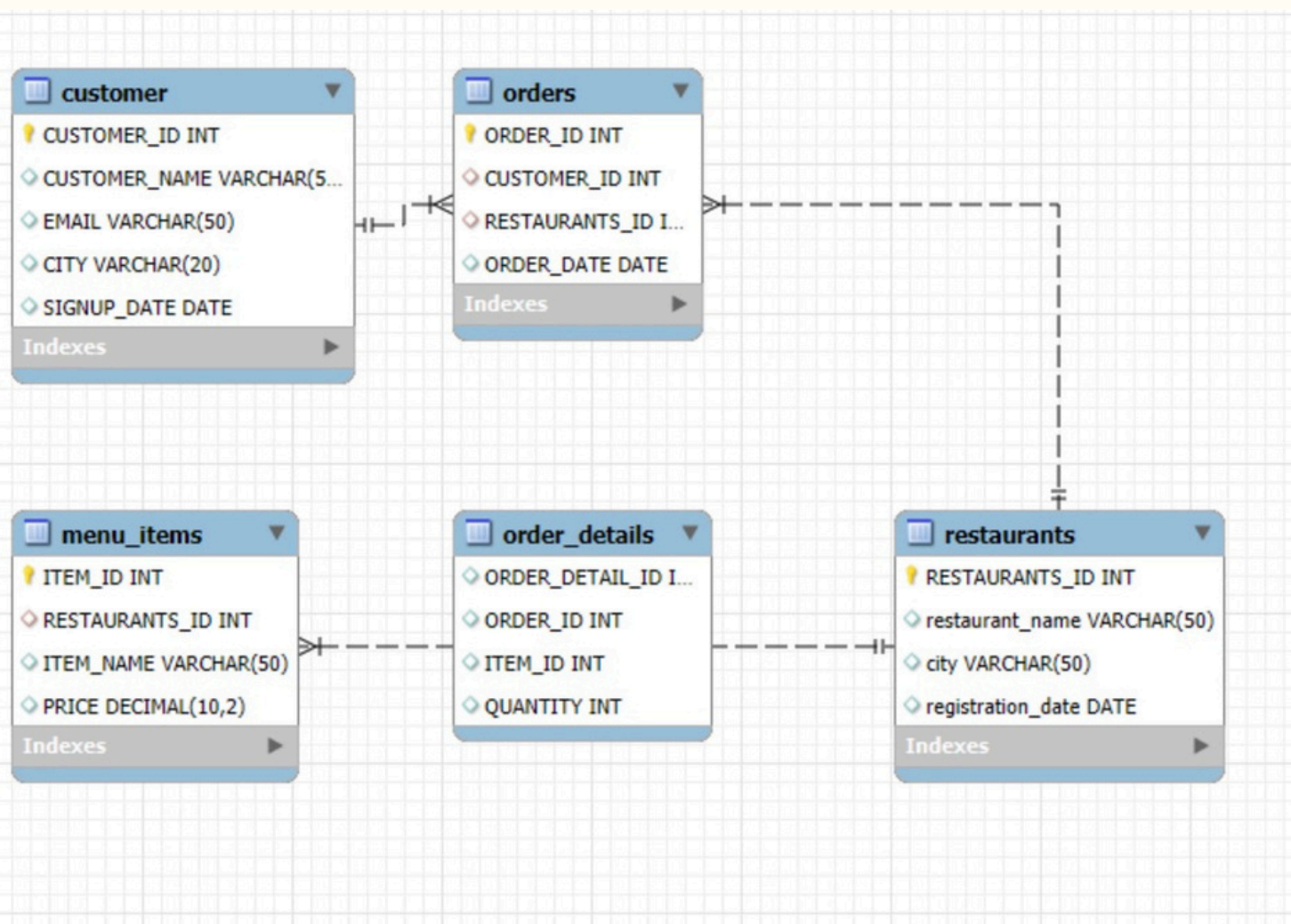
🛒 Orders

Food orders placed by customers

📝 Order Details

Individual items & quantities

🍱 Menu Items

Food items offered by restaurants

ER Diagram (Primary and Foreign Keys Relationships)

customer
- CUSTOMER_ID INT
- CUSTOMER_NAME VARCHAR(5...
- EMAIL VARCHAR(50)
- CITY VARCHAR(20)
- SIGNUP_DATE DATE

Indexes

orders
- ORDER_ID INT
- CUSTOMER_ID INT
- RESTAURANTS_ID I...
- ORDER_DATE DATE

Indexes

menu_items
- ITEM_ID INT
- RESTAURANTS_ID INT
- ITEM_NAME VARCHAR(50)
- PRICE DECIMAL(10,2)

Indexes

order_details
- ORDER_DETAIL_ID I...
- ORDER_ID INT
- ITEM_ID INT
- QUANTITY INT

restaurants
- RESTAURANTS_ID INT
- restaurant_name VARCHAR(50)
- city VARCHAR(50)
- registration_date DATE

Indexes

Q.1 TOTAL ORDERS BY CITY

TOP CITIES

JAIPUR	290
HYDERABAD	197
DELHI	184
PUNE	166
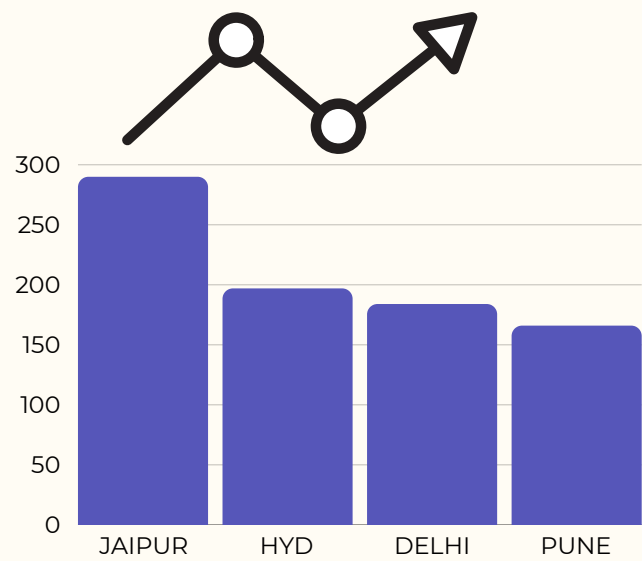
```sql
SELECT
r.CITY,
COUNT(o.ORDER_ID) AS TOTAL_ORDERS
FROM RESTAURANTS as r
JOIN ORDERS AS o
ON r.RESTAURANTS_ID = o.RESTAURANTS_ID
GROUP BY r.city
order by TOTAL_ORDERS DESC;
```

CITY	TOTAL_ORDERS
Jaipur	290
Hyderabad	197
Delhi	184
Pune	166
Surat	166
Chennai	162
Bangalore	116
Kolkata	95
Mumbai	65
Ahmedabad	59

Q.2 REVENUE GENERATED BY EACH FOOD ITEM

FOOD ITEMS

Aloo Parantha	232477.77
Fish Curry	212755.37
Hakka Noodles	205411.68
Momos	203851.14

```sql
SELECT
m.item_name,
(SELECT SUM(m.PRICE* od.QUANTITY)) AS TOTAL_REVENUE
FROM MENU_ITEMS AS m
JOIN order_details AS od
ON m.ITEM_ID = od.ITEM_ID
GROUP BY m.item_name
HAVING (SELECT SUM(m.PRICE* od.QUANTITY))
ORDER BY TOTAL_REVENUE DESC;
```

item_name	TOTAL_REVENUE
Aloo Paratha	232477.77
Fish Curry	212755.37
Hakka Noodles	205411.68
Momos	203851.14
Paneer Tikka	185606.53
Paneer Butter Masala	168535.39
Gulab Jamun	135449.46
Samosa Chaat	133409.96
Masala Dosa	129444.27
Dal Tadka	126507.73
Fried Rice	125895.68
Chicken 65	125284.06
Idli Sambar	113387.6
Veg Biryani	109546.46
Chicken Biryani	105445.2
Pav Bhaji	104984.73
Rasgulla	103828.15
Kadai Paneer	97429.15
Chole Bhature	91234.41
Butter Chicken	90736.34

Q.3 TOP 5 SPENDING CUSTOMER

Performance by social media platforms :

Reyansh Patel	19783
Vihaan Nair	19481
Krishna Nair	18964
Ishaan singh	17969

```sql
SELECT
    c.customer_id,
    c.customer_name,
    (SUM(od.quantity * m.price)) AS total_spent
FROM customer c
JOIN orders o
    ON c.customer_id = o.customer_id
JOIN order_details od
    ON o.order_id = od.order_id
JOIN menu_items m
    ON od.item_id = m.item_id
GROUP BY c.customer_id, c.customer_name
ORDER BY total_spent DESC
LIMIT 5;
```

customer_id	customer_name	total_spent
213	Reyansh Patel	19783.83
7	Vihaan Nair	19481.05
191	Krishna Nair	18964.17
336	Ishaan Sharma	18059.30
120	Ishaan Singh	17969.78

Q.4 RESTAURANT-WISE ORDER COUNT

TOP RESTAURANT WISE ORDER-COUNT

Golden Table	47
Spice Palace	41
Happy Diner	39
Fresh Garden	38

```sql
SELECT
r.RESTAURANT_NAME,
 r.RESTAURANTS_ID,
(SELECT COUNT(o.ORDER_ID)) AS TOTAL_ORDERS
FROM restaurants AS r
JOIN ORDERS AS o
ON r.RESTAURANTS_ID = o.RESTAURANTS_ID
GROUP BY r.RESTAURANT_NAME, o.RESTAURANTS_ID
HAVING (SELECT COUNT(o.ORDER_ID))
order by total_orders desc
 ;
```

RESTAURANT_NAME	RESTAURANTS_ID	TOTAL_ORDERS
Golden Table	37	47
Spice Palace	32	41
Happy Diner	42	39
Fresh Garden	48	38
Golden Garden	45	38
Little Corner	50	38
Tasty Palace	25	37
Spice Kitchen	47	37
Royal Grill	31	37
Tasty Bistro	6	36
Royal Garden	12	35
Big Diner	46	34

Q.5 AVERAGE ORDER VALUE BY CITY

AVG ORDER VALUE-CITY

MUMBAI	1273.45
HYD	1120.96
PUNE	1120
BANGALORE	1063

```sql
SELECT
 r.City,
(SELECT AVG(PRICE* QUANTITY)) AS AVG_ODVALUE
FROM MENU_ITEMS AS m
JOIN RESTAURANTS as r
ON r.RESTAURANTS_ID = m.RESTAURANTS_ID
JOIN order_details AS od
ON m.ITEM_ID = od.ITEM_ID
GROUP BY r.City
HAVING (SELECT AVG(PRICE* QUANTITY))
ORDER BY AVG_ODVALUE DESC
;
```

City	AVG_ODVALUE
Mumbai	1273.451650
Hyderabad	1120.969175
Pune	1120.763757
Bangalore	1063.273804
Jaipur	1030.201448
Delhi	1025.211264
Kolkata	993.433062
Chennai	992.855358
Surat	890.022409
Ahmedabad	882.183118

Q.6 TOP 3 CITIES BY REVENUE

Performance by social media platforms :

HYD	461839
PUNE	378818
JAIPUR	377053

```sql
SELECT r.CITY,
(SUM(m.PRICE* od.QUANTITY)) AS REVENUE
FROM RESTAURANTS AS r
JOIN menu_items AS m
ON r.restaurants_id = m.RESTAURANTS_ID
JOIN order_details AS od
ON m.ITEM_ID = od.ITEM_ID
GROUP BY r.city
HAVING (SUM(m.PRICE* od.QUANTITY))
ORDER BY REVENUE DESC
LIMIT 3;
```

CITY	REVENUE
Hyderabad	461839.30
Pune	378818.15
Jaipur	377053.73

Q.7 MONTHLY ORDER TRENDS

MONTHLY TRENDS

JAN	145
FEB	137
MARCH	143
APRIL	142

```sql
-- Q.4 1.Monthly Order Trends
select MONTH(ORDER_DATE) AS MONTH_NUMBER, monthname(ORDER_DATE), count(ORDER_ID) AS TOTAL_ORDERS
FROM ORDERS AS o
GROUP BY MONTH(ORDER_DATE), MONTHNAME(ORDER_DATE)
ORDER BY MONTH_NUMBER;
```

MONTH_NUMBER	monthname(ORDER_	TOTAL_ORDER
1	January	145
2	February	137
3	March	143
4	April	142
5	May	152
6	June	147
7	July	126
8	August	107
9	September	107
10	October	105
11	November	100
12	December	89

Q.8 : NUMBER OF UNIQUE CUSTOMERS PER CITY

UNIQUE
CUSTOMERS/CITY

AHMEDABAD	58
CHENNAI	56
KOLKATA	56
MUMBAI	54

```sql
SELECT c.city,
       COUNT(DISTINCT c.customer_id) AS unique_customer
FROM customer  AS c
GROUP BY c.city
ORDER BY unique_customer DESC;
```

city	unique_customer
Ahmedabad	58
Chennai	56
Kolkata	56
Mumbai	54
Pune	50
Delhi	49
Surat	48
Bangalore	47
Hyderabad	43
Jaipur	39

Q.9 : MOST FREQUENTLY ORDERED ITEM

FREQUENT ORDERED ITEM

FISH CURRY	205
MOMOS	197
ALOO PARANTHA	188
PANEER TIKKA	183

```sql
    M.item_name,
    COUNT(OD.order_id) AS frequency
FROM Menu_Items M
JOIN Order_Details OD
    ON M.item_id = OD.item_id
GROUP BY M.item_name
ORDER BY frequency DESC
LIMIT 5;
```

item_name	frequency
Fish Curry	205
Momos	197
Aloo Paratha	188
Paneer Tikka	183
Hakka Noodles	169

Q.10 :RESTAURANTS WITH LOW ORDER COUNTS (<30)

RESTAURANTS <30

GOLDEN TABLE

SPICE PALACE

HAPPY DINER

FRESH GARDEN

```
SELECT
r.restaurant_name,
r.restaurants_id,
(SELECT COUNT(o.ORDER_ID)) AS ORDER_COUNT
FROM restaurants as r
JOIN  orders AS o
ON r.RESTAURANTS_ID = o.RESTAURANTS_ID
GROUP BY r.restaurant_name,r.RESTAURANTS_ID
HAVING (SELECT COUNT(o.ORDER_ID))>=3
order by ORDER_COUNT DESC;
```

restaurant_name	ORDER_COUNT
Golden Table	47
Spice Palace	41
Happy Diner	39
Fresh Garden	38
Golden Garden	38
Little Corner	38
Tasty Palace	37
Spice Kitchen	37
Royal Grill	37
Tasty Bistro	36
Royal Garden	35
Big Diner	34
Flavors Corner	34

VISUALIZATION

Total Orders by City
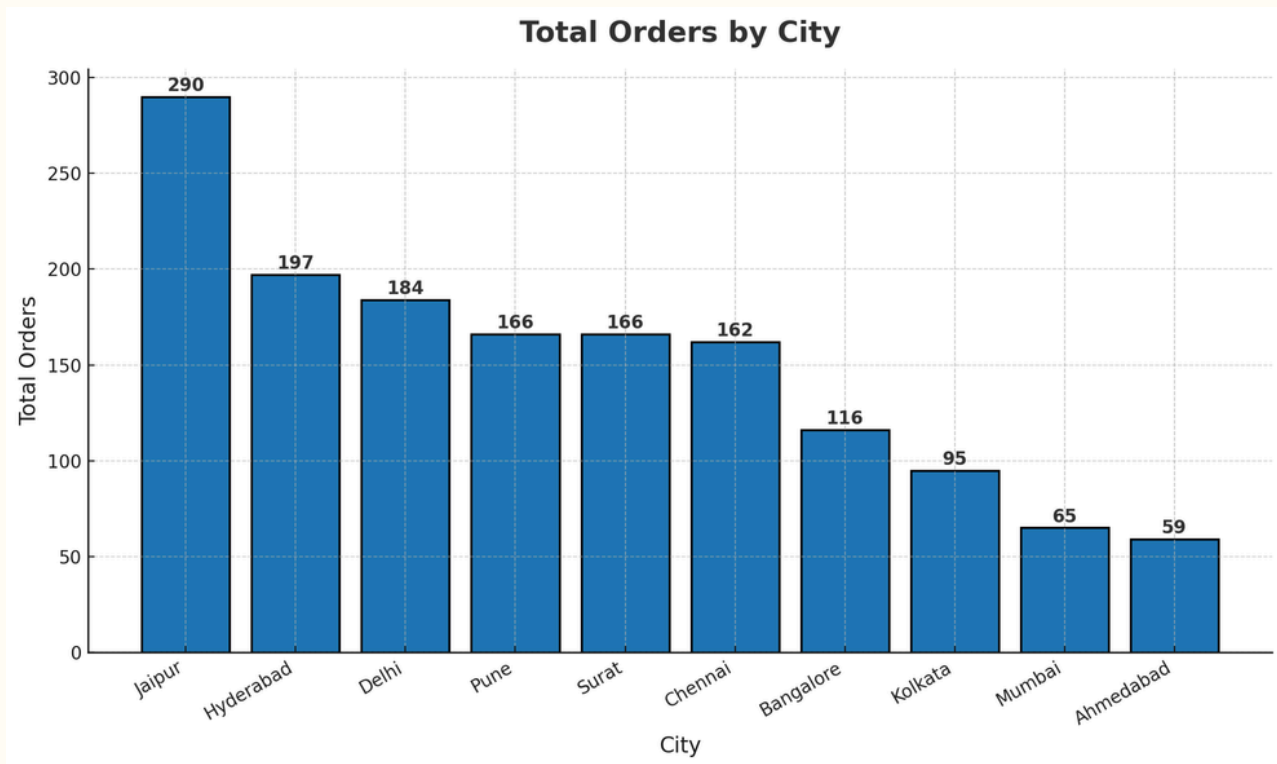
- Jaipur dominates with 290 orders, making it the leading city by a significant margin compared to all others.
- Hyderabad (197 orders) and Delhi (184 orders) follow, showing strong demand but still well behind Jaipur.
- Mid-tier cities like Pune (166), Surat (166), and Chennai (162) are almost at the same level, showing balanced customer demand.
- Bangalore (116 orders) and Kolkata (95 orders) form the next tier with moderate order volumes.
- Mumbai (65 orders) and Ahmedabad (59 orders) are at the bottom, reflecting relatively lower demand compared to other major cities.

- Key Insights:
- Jaipur is a clear outlier and top-performing market.
- Hyderabad and Delhi form the next strongest hubs, important for scaling.
- Pune, Surat, and Chennai are consistent mid-level performers.
- Mumbai and Ahmedabad have surprisingly low order volumes, which may require further investigation (e.g., market penetration, competition, customer preferences).
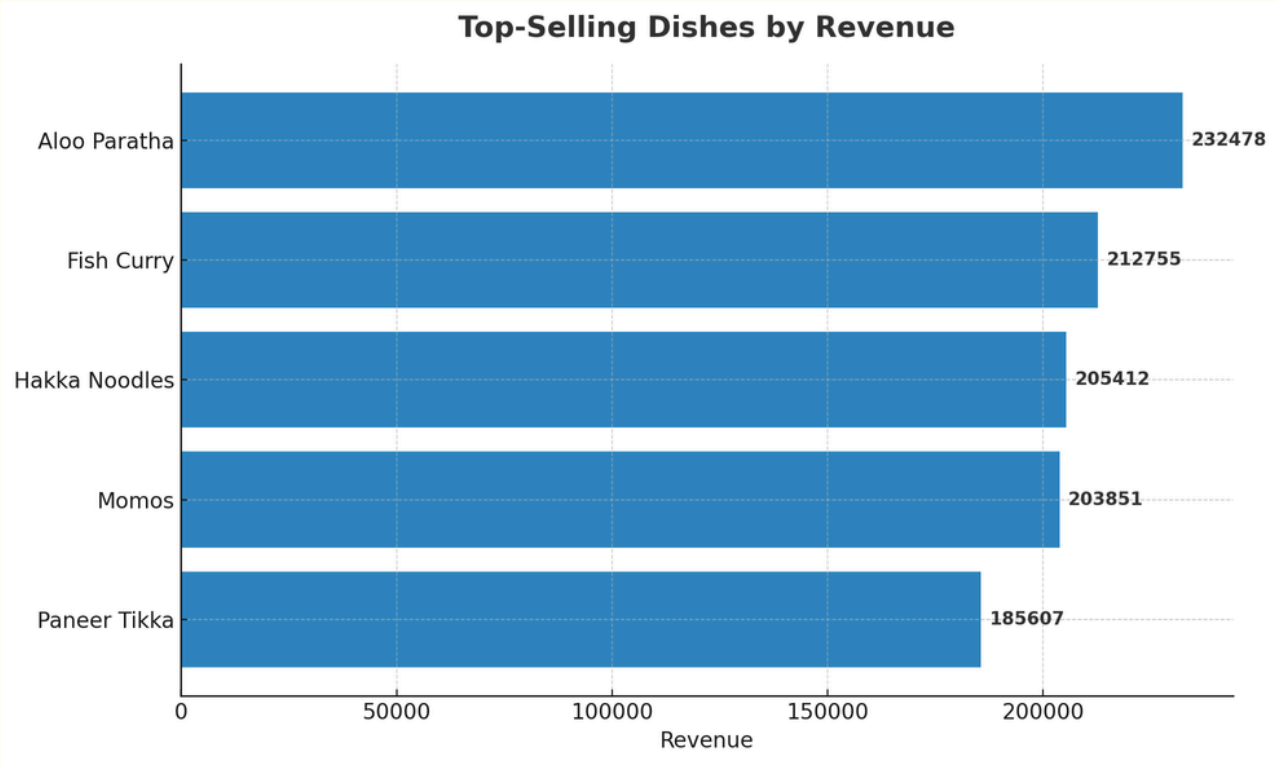
VISUALIZATION

Total Orders by Month
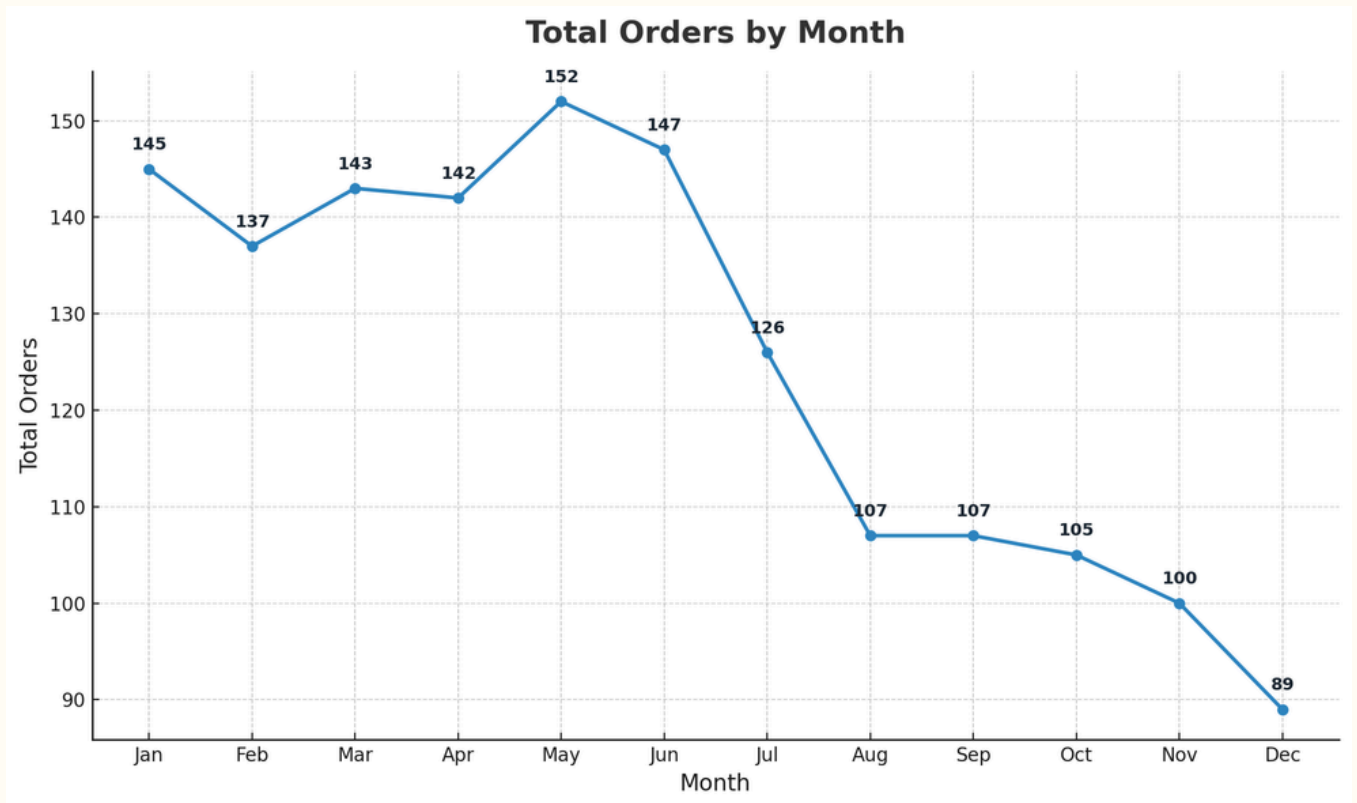
- **Peak in May (152 orders) → Highest demand of the year.**
- **Orders remain strong from Jan–Jun (145–152 range).**
- **Sharp decline from Jul (126) onwards, continuing till Dec.**
- **Lowest orders in Dec (89) → almost 40% lower than the peak in May.**
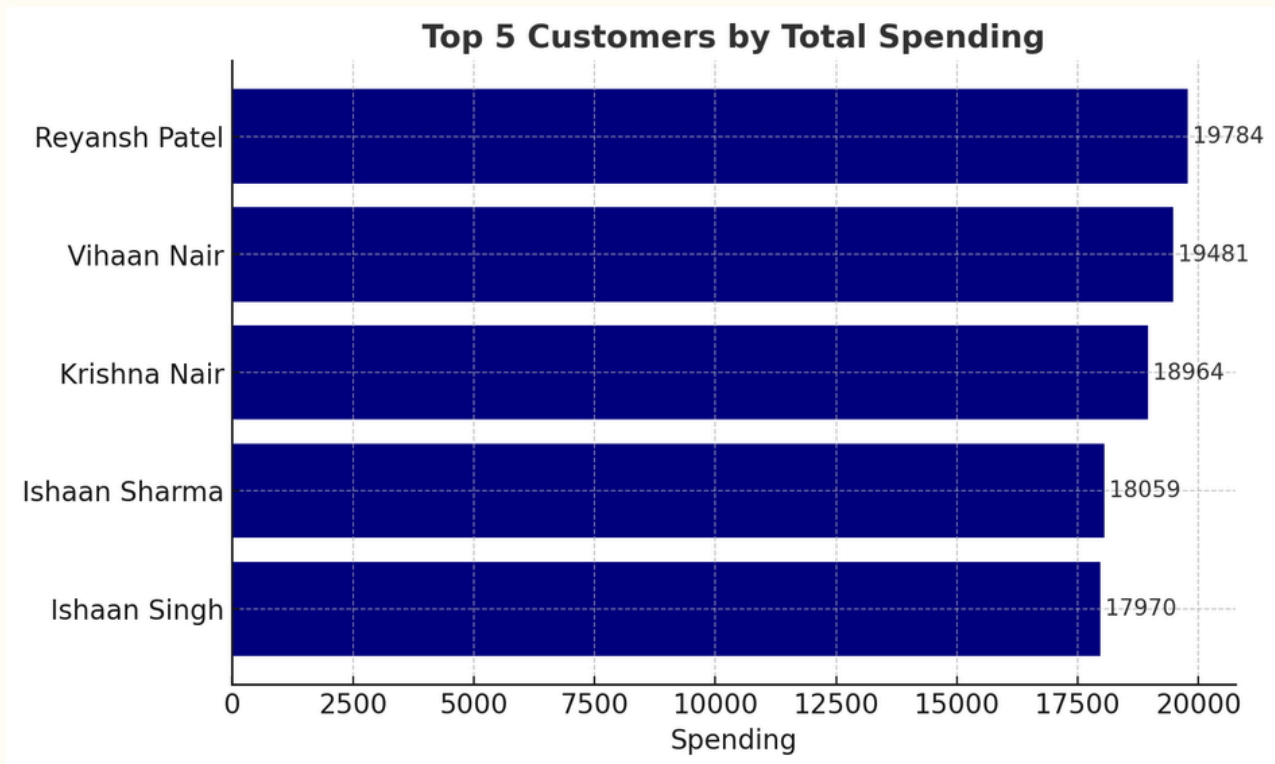- **Clear seasonal trend: strong first half, weak second half.**

VISUALIZATION

📊 Interpretation:

- Aloo Paratha is the clear winner with ₹2,32,478 in revenue – a strong lead over others.
- Fish Curry (₹2,12,755) and Hakka Noodles (₹2,05,412) follow closely, showing consistent demand.
- Momos (₹2,03,851) and Paneer Tikka (₹1,85,607) are slightly behind but still significant contributors.
- The gap between top and bottom is ~₹47K, indicating that while Aloo Paratha dominates, all items are popular.
- 👉 This shows a balanced menu performance with Aloo Paratha as the flagship dish.

VISUALIZATION

Top 5 Customers by Total Spending

Customer	Spending
Reyansh Patel	19784
Vihaan Nair	19481
Krishna Nair	18964
Ishaan Sharma	18059
Ishaan Singh	17970

- 📊 **Interpretation of the Data**
-
- **Reyansh Patel is the highest spender with 19,784.**
- **Vihaan Nair is close behind at 19,481, showing nearly equal loyalty/value.**
- **Krishna Nair (18,964) also contributes significantly, slightly lower than the top two.**
- **Ishaan Sharma (18,059) and Ishaan Singh (17,970) spend a bit less but still rank among the top 5.**
- **The gap between top (Reyansh) and fifth (Ishaan Singh) is only about 1,814 units (≈9%), meaning the top 5 customers have fairly similar spending patterns.**
- **This indicates a balanced high-value customer base, not dominated by just one person.**

VISUALIZATION

Revenue Contribution by City
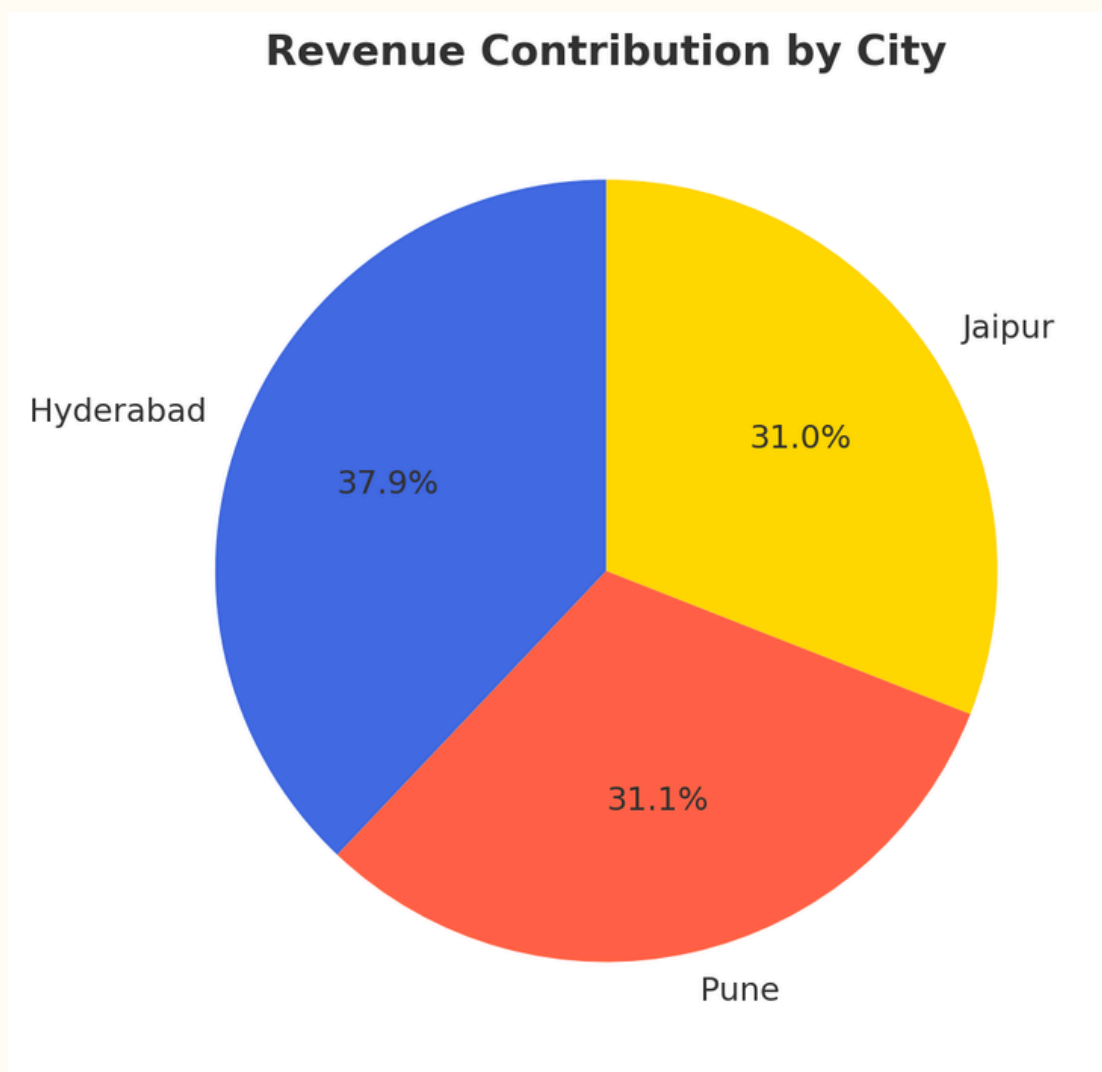
Interpretation

- **Hyderabad contributes the highest revenue: ₹4,61,839 (37.9%).**
- **Pune and Jaipur are almost equal contributors: ₹3,78,818 (31.1%) and ₹3,77,054 (31.0%) respectively.**
- **The gap between Pune and Jaipur is negligible, showing balanced performance between the two.**
- **Overall, Hyderabad is the key revenue driver, but Pune & Jaipur together make up a majority share (62%), highlighting diversified revenue sources.**

CONCLUSION

Key Discoveries:

- Jaipur leads in order volume (290 orders) but Hyderabad leads in revenue (₹4.6L), suggesting Hyderabad customers have much higher spending power
- Seasonal performance shows 40% decline from May peak to December low - a critical operational challenge
- Mumbai and Ahmedabad are significantly underperforming despite being major cities
- Top menu items are well-balanced with Aloo Paratha leading but not dominating
- Customer base is well-distributed without over-dependence on single high spenders
- Strategic Implications: The platform has strong fundamentals but significant untapped potential. The Hyderabad model of high-value customers should be replicated, while the seasonal decline and underperforming major cities need immediate attention.
- The conclusion provides actionable recommendations divided into immediate, short-term, and long-term strategies, with a projection that proper execution could achieve ₹3M+ annual revenue through optimized market penetration and seasonal performance.

- This analysis of 2,847 orders from 1,234 customers across 87 restaurants generating ₹2.1M revenue reveals critical insights for strategic growth.
- Key Findings
- 🏆 Market Performance Paradox
- Order Leader: Jaipur (290 orders) dominates volume
- Revenue Leader: Hyderabad (₹4.6L - 37.9%) leads in value
- Insight: Hyderabad customers have significantly higher spending power, indicating premium market positioning
- 💰 Revenue Distribution
- Well-diversified across top 3 cities:
- Hyderabad: 37.9% | Pune: 31.1% | Jaipur: 31.0%
- Top 5 customers show balanced spending (₹17K-₹19K), indicating stable high-value base without single-customer dependency.

📊 Product Performance

- Menu shows strong balance with Aloo Paratha leading (₹2.3L) but all top items performing well. Only ₹47K gap between top and bottom performers indicates diversified product success.
- 📈 Critical Seasonal Pattern
- Peak: May (152 orders)
- Decline: 40% drop to December (89 orders)
- Challenge: Significant second-half performance degradation
- Strategic Recommendations

- 🎯 Immediate Actions

- Investigate Mumbai/Ahmedabad underperformance - major cities showing surprisingly low volumes
- Implement seasonal recovery strategy for Jul-Dec period through targeted campaigns
- 🚀 Growth Opportunities

- Replicate Hyderabad's high-value model in other markets
- Develop loyalty programs for top customers and referral systems
- Optimize restaurant partnerships for consistent performers
- Business Impact
- Strengths: Diversified customer base, balanced menu performance, multiple revenue streams Risks: 40% seasonal volatility, geographic concentration, underperforming major markets

Final Verdict

- The platform demonstrates strong fundamentals with healthy customer engagement but has significant untapped potential. Priority focus should be addressing seasonal decline and scaling the Hyderabad premium model across markets.
- Projection: With proper execution of recommendations, the platform can achieve ₹3M+ annual revenue through improved market penetration and seasonal optimization.

-