**Business Problem Documentation (Draft 1)**

**Business Problem**

“How can travelers find the best hotel and flight deals while optimizing for budget, location, and customer satisfaction?”

This problem addresses the need to provide several insights into hotel pricing, per night cost and hotel availability. This will ensure that travelers can make informed decisions.

**7 Business Questions**

1. **Which are the top 5 hotels in terms of customer ratings?**
2. **What is the average price per night of hotels in different cities?**
3. **Which hotels have the most number of reviews?**
4. **Which flight route offers the cheapest travel option?**
5. **What is the price trend of flights for a given destination?**
6. **Which hotels offer the best value for money (high rating but lower price)?**
7. **What is the average hotel rating per city?**

**SQL Queries (Need to be debugged)**

1. Top 5 hotels by Customer Ratings –

SELECT h.hotel\_name, r.rating

FROM h\_hotels h

JOIN h\_reviews r ON h.hotel\_id = r.hotel\_id

ORDER BY r.rating DESC

LIMIT 5;

1. Average Price per Night for Hotels in Different Cities –

SELECT h.hotel\_city, AVG(p.price\_per\_night) AS avg\_price

FROM h\_hotels h

JOIN h\_prices p ON h.hotel\_id = p.hotel\_id

GROUP BY h.hotel\_city;

1. Hotels with most reviews –

SELECT h.hotel\_name, COUNT(r.review\_id) AS total\_reviews

FROM h\_hotels h

JOIN h\_reviews r ON h.hotel\_id = r.hotel\_id

GROUP BY h.hotel\_name

ORDER BY total\_reviews DESC;

1. Cheapest flight route –

SELECT Destination, `Route from Origin`, `Route from Destination`, MIN(Price) AS cheapest\_price

FROM flightData

GROUP BY Destination, `Route from Origin`, `Route from Destination`

ORDER BY cheapest\_price ASC

LIMIT 1;

1. Flight price trends for a given destination –

SELECT Departure, Price

FROM flightData

WHERE Destination = 'Copenhagen'

ORDER BY Departure;

1. Hotels with best values (Low price and high ratings) –

SELECT h.hotel\_name, r.rating, p.price\_per\_night

FROM h\_hotels h

JOIN h\_reviews r ON h.hotel\_id = r.hotel\_id

JOIN h\_prices p ON h.hotel\_id = p.hotel\_id

WHERE r.rating > 80

ORDER BY (p.price\_per\_night / r.rating) ASC

LIMIT 5;

1. Average Hotel Rating Per City –

SELECT h.hotel\_city, AVG(r.rating) AS avg\_rating

FROM h\_hotels h

JOIN h\_reviews r ON h.hotel\_id = r.hotel\_id

GROUP BY h.hotel\_city

ORDER BY avg\_rating DESC;