

OUTLAND ADVENTURE CASE
STUDY PRESENTATION
CSD310 – 11.2 ASSIGNMENT



GROUP INTRODUCTION

Meet Our Team:

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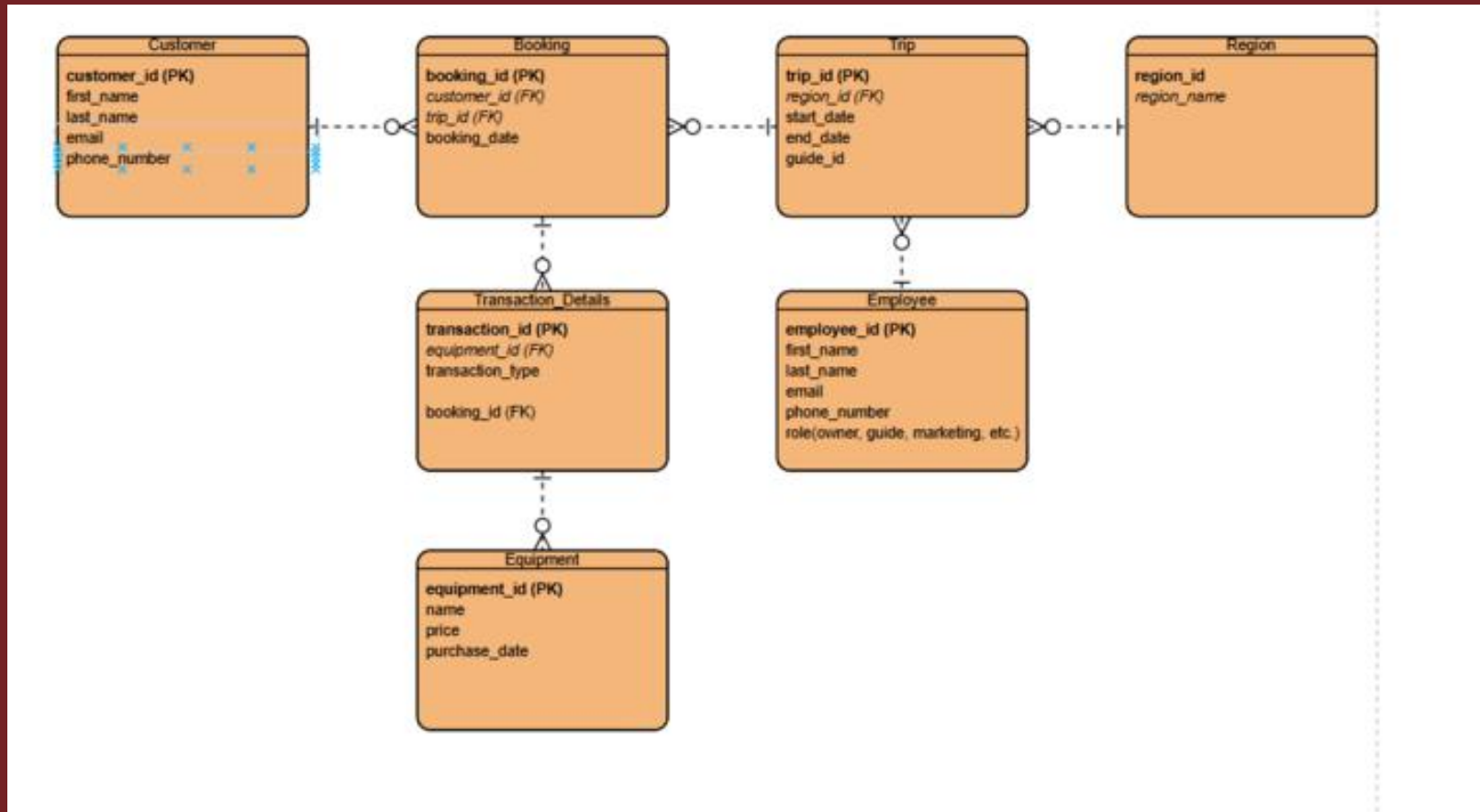


CASE STUDY OVERVIEW

OUTLAND ADVENTURE: BUSINESS

- Founded by Blythe Timmerson and Jim Ford, outdoor enthusiast
- Initially part-time, but grew into a full-time adventure travel business
- Services: guided hiking/camping trips, gear sales & rentals
- Staff includes guides, marketing specialist, inventory manager, and new eCommerce developer

OUTLAND ADVENTURE: FINAL ERD



KEY GOALS

- Optimize operations
- Improve decision-making with data
- Analyze sales, trends, and inventory

KEY BUSINESS QUESTIONS

Outland Adventure asked us to help answer:

1. Are equipment sales worth continuing?
2. Are bookings declining in any specific region?
3. Are there aging inventory items needing replacement?

EQUIPMENT SALES VS RENTALS – REPORT 1

Question: Do enough customers buy equipment to keep sales going?

What we measure:

- Total equipment sold vs rented
- Revenue from each

Assumptions: each transaction record included the type (sale/rental) and associated cost



REPORT 1 – SAMPLE OUTPUT

Insight: While rentals are more frequent, sales generate higher revenue. Maintaining both models is advisable.

```
5 import mysql.connector
6
7 # Connect to MySQL
8 conn = mysql.connector.connect(
9     host='localhost',
10    user='root',
11    password='Starship12!',
12    database='outland_adventures'
13 )
14 cursor = conn.cursor()
15
16 print("Equipment Sales vs Rentals")
17 print("-" * 55)
18
19 query = """
20 SELECT
21     CONCAT(UPPER(LEFT(transaction_type, 1)), LOWER(SUBSTRING(transaction_type, 2))) AS transaction_type,
22     COUNT(*) AS total_transactions,
23     SUM(e.price) AS total_revenue
24 FROM Transaction_Details T
25 JOIN Equipment e ON T.equipment_id = e.equipment_id
26 GROUP BY transaction_type;
27 """
28
29 cursor.execute(query)
30 results = cursor.fetchall()
31
32 print("Transaction Type | Total Transactions | Total Revenue")
33 print("-" * 55)
34
35 for row in results:
36     print(f"{row[0]:<16} | {row[1]:<18} | ${row[2]:.2f}")
37
38 print("-" * 55)
39
40 cursor.close()
41 conn.close()
```

```
● tlh@MacBook-Pro-2 Module-11 % python3 question1.py
Equipment Sales vs Rentals
```

```
=====
Transaction Type | Total Transactions | Total Revenue
=====
Rental           | 3                 | $485.00
Sale             | 2                 | $270.00
=====
```

BOOKING TRENDS BY REGION— REPORT 2

Question: Is there a downward trend in bookings in Africa, Asia, or Southern Europe?

What we measure:

- Annual bookings grouped by region and year

Assumptions: Bookings data contains region and date of trip



REPORT 2 – SAMPLE OUTPUT

Insight: Southern Europe is experiencing a clear decline. Consider reducing trips or increasing marketing there.

```
11:11 bravo team_question_2.py /
5 import mysql.connector
6
7 # Connect to MySQL
8 conn = mysql.connector.connect(
9     host='localhost',
10    user='root',
11    password='Starship12!',
12    database='outland_adventures'
13 )
14 cursor = conn.cursor()
15
16 print("Booking Trends by Region")
17 print("-" * 55)
18
19 query = """
20 SELECT
21     t.region,
22     YEAR(b.booking_date) AS year,
23     COUNT(*) AS total_bookings
24 FROM Booking b
25 JOIN Trip t ON b.trip_id = t.trip_id
26 GROUP BY t.region, year
27 ORDER BY t.region, year;
28 """
29
30 cursor.execute(query)
31 results = cursor.fetchall()
32
33 print("Region          | Year | Total Bookings")
34 print("-" * 55)
35
36 for row in results:
37     print(f"{row[0]:<16} | {row[1]} | {row[2]}")
38
39 print("-" * 55)
40
41 cursor.close()
```

```
tlh@MacBook-Pro-2 Module-11 % python3 question_2.py
Booking Trends by Region
```

Region	Year	Total Bookings
Africa	2024	1
Asia	2024	2
Southern Europe	2024	2

AGING INVENTORY – REPORT 3



Question: Are there inventory items over 5 years old?

What we measure:

- Equipment purchase date
- Current item age

Assumptions: The database includes each item's purchase date and unique ID.

REPORT 3 – SAMPLE OUTPUT



Insight: Several items exceed 5 years. Recommend replacement for safety and quality.

```
6 import mysql.connector
7
8 # Connect to MySQL
9 conn = mysql.connector.connect(
10     host='localhost',
11     user='root',
12     password='Starship12!',
13     database='outland_adventures'
14 )
15 cursor = conn.cursor()
16
17 print("Equipment Older Than 5 Years")
18 print("-" * 55)
19
20 query = """
21 SELECT
22     name,
23     purchase_date,
24     TIMESTAMPDIFF(YEAR, purchase_date, CURDATE()) AS age_years
25 FROM Equipment
26 WHERE TIMESTAMPDIFF(YEAR, purchase_date, CURDATE()) > 5;
27 """
28
29 cursor.execute(query)
30 results = cursor.fetchall()
31
32 print("Equipment Name      | Purchase Date | Age (Years)")
33 print("-" * 55)
34
35 for row in results:
36     print(f"{row[0]:<20} | {row[1]} | {row[2]}")
37
38 print("-" * 55)
39
40 cursor.close()
41 conn.close()
42
```

Equipment Older Than 5 Years		
Equipment Name	Purchase Date	Age (Years)
Mountain Tent	2015-05-10	10
Handheld GPS	2018-02-15	7
Camping Stove	2016-12-05	8

THANK YOU



Bravo Team - CSD310 - 11.2 Assignment