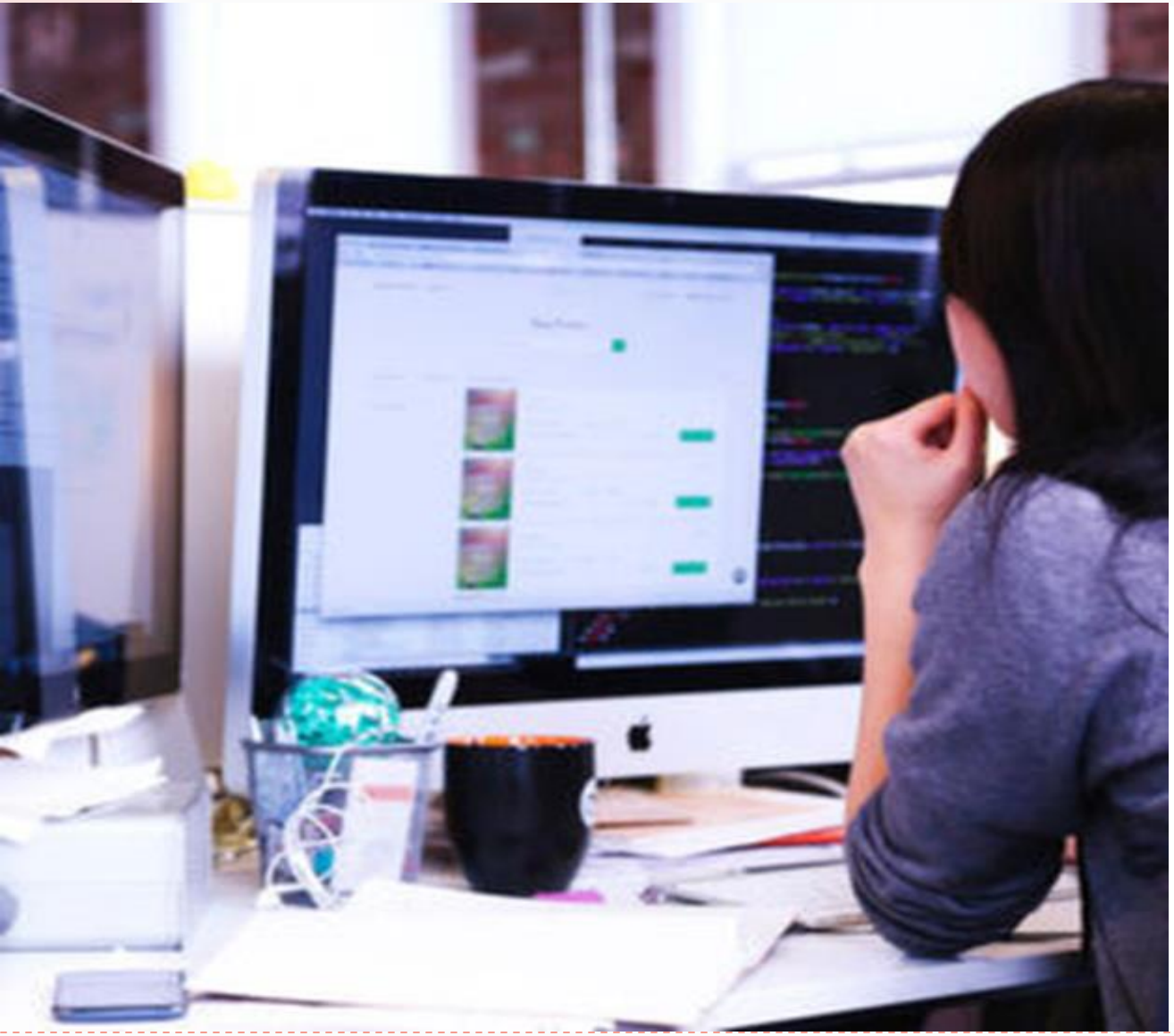
Bacchus Winery

Group Beta



Group Beta

Team Members:

Darlene Batts

Michele Brand

Lidia Goris

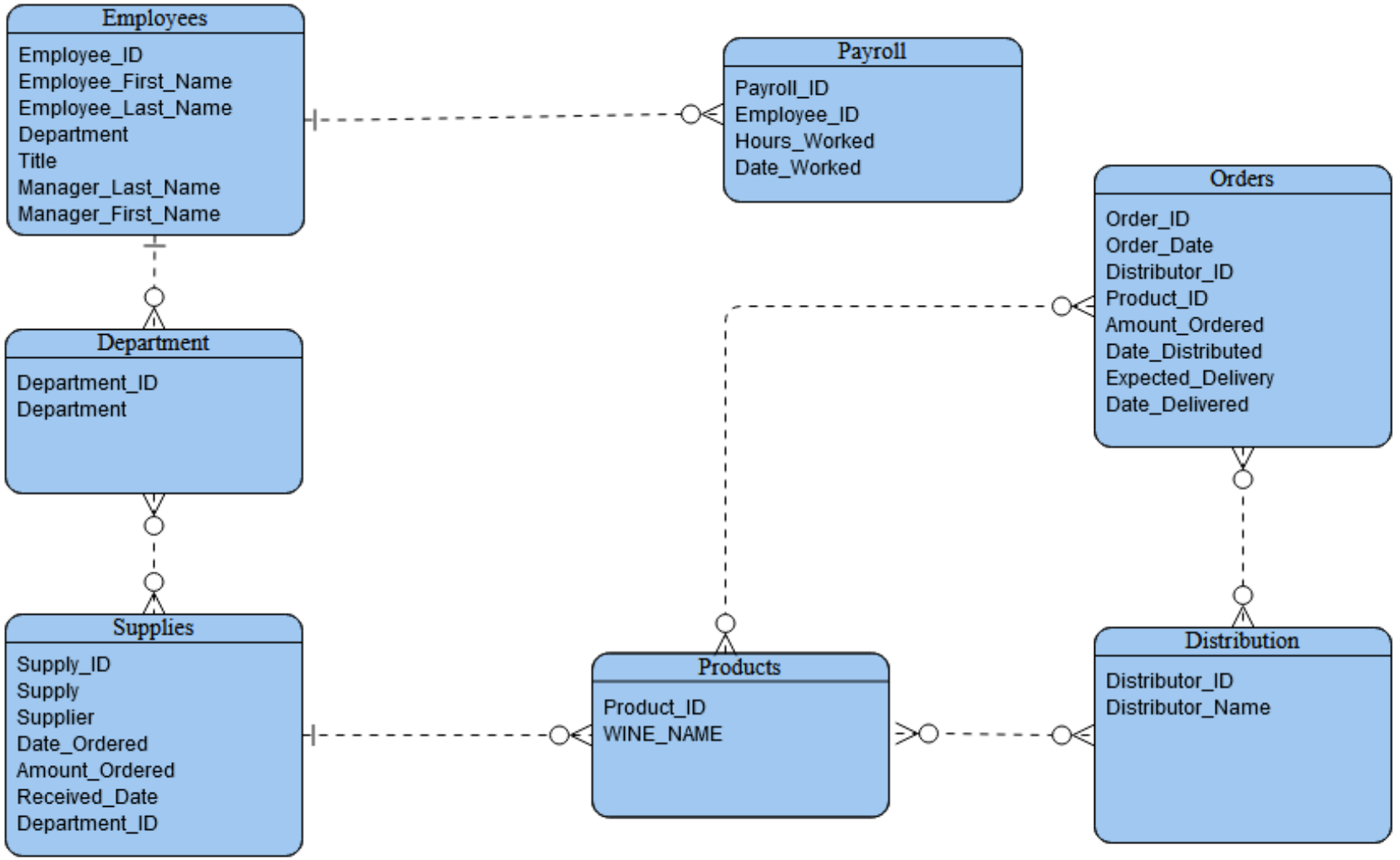
Aubrey Reed

Case Study

Bacchus Winery

Stan and Davis Bacchus inherited their winery from their father, George, and want to improve the business with new methods. They kept the existing personnel including Janet, Roz, Bob, Henry, and Maria. The winery produces four types of wine and sources supplies from three different suppliers. Stan and Davis want to find a more efficient way of keeping track of inventory and ordering supplies, as well as implementing online ordering and shipment tracking for distributors. They also need information for the yearly business snapshot, including **orders**, **distribution**, and **employee time**.

Bacchus Winery ERD



Bacchus Winery

Reports Requested

Reports needed:

- Employee hours worked for each quarter
- Orders by month
- Distribution company delivery and tracking

Python Script for Reports

```
# Group BETA
# Members:  Darlene Batts, Michele Brand, Lidia Goris, Aubrey Reed
# Milestone Case Study Project

import mysql.connector


mydb = mysql.connector.connect(
  host="127.0.0.1",
  user="bacchus_admin",
  password="password123",
  database="bacchus"
)


cursor = mydb.cursor()
```

Python Script for Reports (Cont'd)

```
#Get Quarter Report for 2022

qtr1 = "SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-1-1' AND '2022-3-31'"
cursor.execute(qtr1)
qtr1Hours = cursor.fetchone()
print("Total Employee Hours for 1st quarter: {}".format(qtr1Hours[0]))

qtr2="SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-04-01' AND '2022-06-30'"
cursor.execute(qtr2)
qtr2Hours = cursor.fetchone()
print("Total Employee Hours for 2nd quarter: {}".format(qtr2Hours[0]))

qtr3="SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-06-30' AND '2022-09-30'"
cursor.execute(qtr3)
qtr3Hours = cursor.fetchone()
print("Total Employee Hours for 3rd quarter: {}".format(qtr1Hours[0]))

qtr4="SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-09-28' AND '2022-12-31'"
cursor.execute(qtr4)
qtr4Hours = cursor.fetchone()
print("Total Employee Hours for 4th quarter: {}".format(qtr1Hours[0]))
```

Python Script for Reports (Cont'd)

```
# Distributors carry which wines
Merlot = "SELECT Distributor_Name \
FROM DISTRIBUTION, PRODUCTS, ORDERS \
WHERE ORDERS.Product_ID = PRODUCTS.Product_ID \
AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID \
AND PRODUCTS.WINE_NAME = 'Merlot' \
GROUP BY DISTRIBUTION.Distributor_Name"

cursor.execute(Merlot)
MerlotDists = cursor.fetchall()
for MerlotDist in MerlotDists:
        print("Distributors that carry Merlot: {}".format(MerlotDist[0]))

Cabernet = "SELECT Distributor_Name \
FROM DISTRIBUTION, PRODUCTS, ORDERS \
WHERE ORDERS.Product_ID = PRODUCTS.Product_ID \
AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID \
AND PRODUCTS.WINE_NAME = 'Cabernet' \
GROUP BY DISTRIBUTION.Distributor_Name"

cursor.execute(Cabernet)
CabernetDists = cursor.fetchall()
for CabernetDist in CabernetDists:
        print("Distributors that carry Cabernet: {}".format(CabernetDist[0]))
```

```
Chardonnay = "SELECT Distributor_Name \
FROM DISTRIBUTION, PRODUCTS, ORDERS \
WHERE ORDERS.Product_ID = PRODUCTS.Product_ID \
AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID \
AND PRODUCTS.WINE_NAME = 'Chardonnay' \
GROUP BY DISTRIBUTION.Distributor_Name"

cursor.execute(Chardonnay)
ChardonnayDists = cursor.fetchall()
for ChardonnayDist in ChardonnayDists:
        print("Distributors that carry Chardonnay: {}".format(ChardonnayDist[0]))

Chablis = "SELECT Distributor_Name \
FROM DISTRIBUTION, PRODUCTS, ORDERS \
WHERE ORDERS.Product_ID = PRODUCTS.Product_ID \
AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID \
AND PRODUCTS.WINE_NAME = 'Chablis' \
GROUP BY DISTRIBUTION.Distributor_Name"

cursor.execute(Chablis)
ChablisDists = cursor.fetchall()
for ChablisDist in ChablisDists:
        print("Distributors that carry Chablis: {}".format(ChablisDist[0]))
```

Report 1 – Distributors

Distributors that carry Merlot

```
mysql> SELECT Distributor_Name FROM DISTRIBUTION, PRODUCTS, ORDERS
    -> WHERE ORDERS.Product_ID = PRODUCTS.Product_ID
    -> AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID
    -> AND PRODUCTS.WINE_NAME = 'Merlot'
    -> GROUP BY DISTRIBUTION.Distributor_Name;
+--------------------+
| Distributor_Name   |
+--------------------+
| RJ Distributors    |
| Over21 Wine Dis.   |
| Wine Fairies, Inc. |
+--------------------+
```

Distributors that carry Chardonnay

```
mysql> SELECT Distributor_Name FROM DISTRIBUTION, PRODUCTS, ORDERS
    -> WHERE ORDERS.Product_ID = PRODUCTS.Product_ID
    -> AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID
    -> AND PRODUCTS.WINE_NAME = 'Chardonnay'
    -> GROUP BY DISTRIBUTION.Distributor_Name;
+--------------------+
| Distributor_Name   |
+--------------------+
| Wine Fairies, Inc. |
| RJ Distributors    |
| Over21 Wine Dis.   |
+--------------------+
```

Distributors that carry Cabernet

```
mysql> SELECT Distributor_Name FROM DISTRIBUTION, PRODUCTS, ORDERS
    -> WHERE ORDERS.Product_ID = PRODUCTS.Product_ID
    -> AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID
    -> AND PRODUCTS.WINE_NAME = 'Cabernet'
    -> GROUP BY DISTRIBUTION.Distributor_Name;
+--------------------+
| Distributor_Name   |
+--------------------+
| Over21 Wine Dis.   |
| Wine Fairies, Inc. |
| RJ Distributors    |
+--------------------+
```

Distributors that carry Chablis

```
mysql> SELECT Distributor_Name
    -> FROM DISTRIBUTION, PRODUCTS, ORDERS WHERE ORDERS.Product_ID = PRODUCTS.Product_ID
    -> AND DISTRIBUTION.Distributor_ID = ORDERS.Distributor_ID
    -> AND PRODUCTS.WINE_NAME = 'Chablis'
    -> GROUP BY DISTRIBUTION.Distributor_Name;
+--------------------+
| Distributor_Name   |
+--------------------+
| RJ Distributors    |
| Over21 Wine Dis.   |
| Wine Fairies, Inc. |
+--------------------+
```


Bacchus Winery

Report 2 – Sales (Month by Month)

```
mysql> SELECT MONTH(Order_Date) AS Month,Amount_Ordered, Date_Distributed, Expected_Delivery,Date_Delivered FROM Orders ORDER BY Month;
+-------+----------------+------------------+-------------------+----------------+
| Month | Amount_Ordered | Date_Distributed | Expected_Delivery | Date_Delivered |
+-------+----------------+------------------+-------------------+----------------+
|     9 |             50 | 2022-10-11       | 2022-10-17        | 2022-10-18     |
|     9 |             35 | 2022-10-06       | 2022-10-12        | 2022-10-13     |
|     9 |             30 | 2022-10-01       | 2022-10-07        | 2022-10-08     |
|    10 |             50 | 2022-11-10       | 2022-11-18        | 2022-11-17     |
|    10 |             45 | 2022-11-05       | 2022-11-13        | 2022-11-12     |
|    10 |             25 | 2022-10-31       | 2022-11-05        | 2022-11-07     |
|    11 |             50 | 2022-12-10       | 2022-12-15        | 2022-12-17     |
|    11 |             35 | 2022-12-05       | 2022-12-10        | 2022-12-12     |
|    11 |             25 | 2022-11-30       | 2022-12-06        | 2022-12-07     |
|    11 |             25 | 2022-11-30       | 2022-12-06        | 2022-12-07     |
|    11 |             50 | 2022-12-14       | 2022-12-20        | 2022-12-21     |
|    11 |             30 | 2022-12-14       | 2022-12-20        | 2022-12-21     |
|    11 |             25 | 2022-12-14       | 2022-12-22        | 2022-12-21     |
|    11 |             50 | 2022-12-18       | 2022-12-23        | 2022-12-25     |
|    11 |             25 | 2022-12-18       | 2022-12-23        | 2022-12-25     |
|    11 |             50 | 2022-12-18       | 2022-12-23        | 2022-12-25     |
|    11 |             25 | 2022-12-18       | 2022-12-23        | 2022-12-25     |
|    11 |            100 | 2022-12-20       | 2022-12-26        | 2022-12-27     |
|    11 |            100 | 2022-12-20       | 2022-12-26        | 2022-12-27     |
|    11 |            100 | 2022-12-20       | 2022-12-28        | 2022-12-27     |
|    11 |            100 | 2022-12-20       | 2022-12-26        | 2022-12-27     |
|    11 |             50 | 2022-12-30       | 2023-01-05        | 2023-01-06     |
|    11 |             40 | 2022-12-30       | 2023-01-05        | 2023-01-06     |
|    11 |             40 | 2022-12-30       | 2023-01-05        | 2023-01-06     |
|    12 |             50 | 2022-12-30       | 2023-01-05        | 2023-01-06     |
|    12 |             50 | 2022-12-30       | 2023-01-05        | 2023-01-06     |
|    12 |             50 | 2022-12-30       | 2023-01-07        | 2023-01-06     |
|    12 |             50 | 2023-01-14       | 2023-01-19        | 2023-01-21     |
|    12 |             45 | 2023-01-14       | 2023-01-19        | 2023-01-21     |
|    12 |             45 | 2023-01-14       | 2023-01-19        | 2023-01-21     |
|    12 |             45 | 2023-01-29       | 2023-02-04        | 2023-02-05     |
|    12 |             25 | 2023-01-29       | 2023-02-04        | 2023-02-05     |
|    12 |             25 | 2023-01-29       | 2023-02-04        | 2023-02-05     |
+-------+----------------+------------------+-------------------+----------------+
```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Report 3 – Employee Time

First Quarter of 2022

```
mysql> SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-1-1' AND '2022-3-31';
+------------------+
| SUM(Hours_Worked) |
+------------------+
|              652 |
+------------------+
```

Second Quarter of 2022

```
mysql> SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-04-01' AND '2022-06-30';
+------------------+
| SUM(Hours_Worked) |
+------------------+
|              360 |
+------------------+
```

Third Quarter of 2022

```
mysql> SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-06-30' AND '2022-09-30';
+------------------+
| SUM(Hours_Worked) |
+------------------+
|              374 |
+------------------+
```

Fourth Quarter of 2022

```
mysql> SELECT SUM(Hours_Worked) FROM payroll WHERE Date_Worked BETWEEN '2022-09-28' AND '2022-12-31';
+------------------+
| SUM(Hours_Worked) |
+------------------+
|              212 |
+------------------+
```


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Assumptions

- Distributors can carry multiple wines.
- Orders can be placed for all distributors.
- Employees did not always work 8 hours a day.

Thank You

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