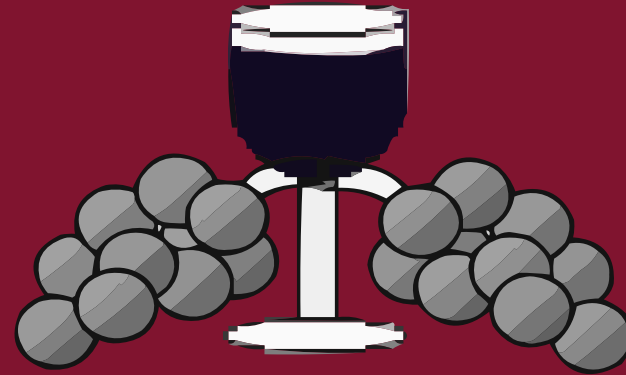




Bacchus Winery



Success Driven by Data

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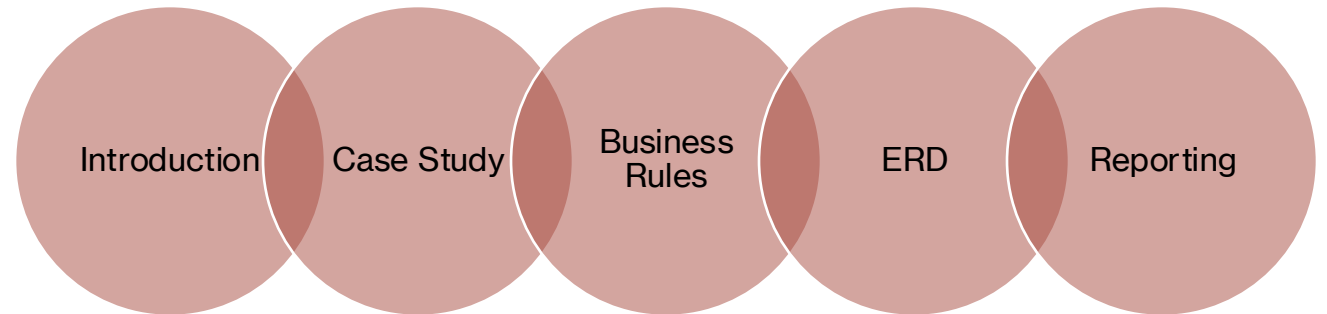
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Winery Database Solutions

Streamline Your Operations and Boost Sales





Introduction

- As members of the red team, we are excited to present our findings for the Bacchus case study. We offer a fresh prospective to database management in small to medium businesses.
- We propose a database strategy that will bring your sales to the next level!

Case Study

- The Bacchus brothers inherited their winery and aim to modernize operations for better products and customer service.
- Retained existing staff across finance, marketing, production, and distribution.
- Current supply inventory tracking and ordering are inefficient, and distribution relies on manual processes.
- Need a business snapshot to identify problem areas and improve efficiency
 - Supplier delivery times
 - Sales by distributor and Wine
 - Employee hours worked per quarter.
- Bacchus is exploring online solutions for supply ordering and distributor order/tracking.

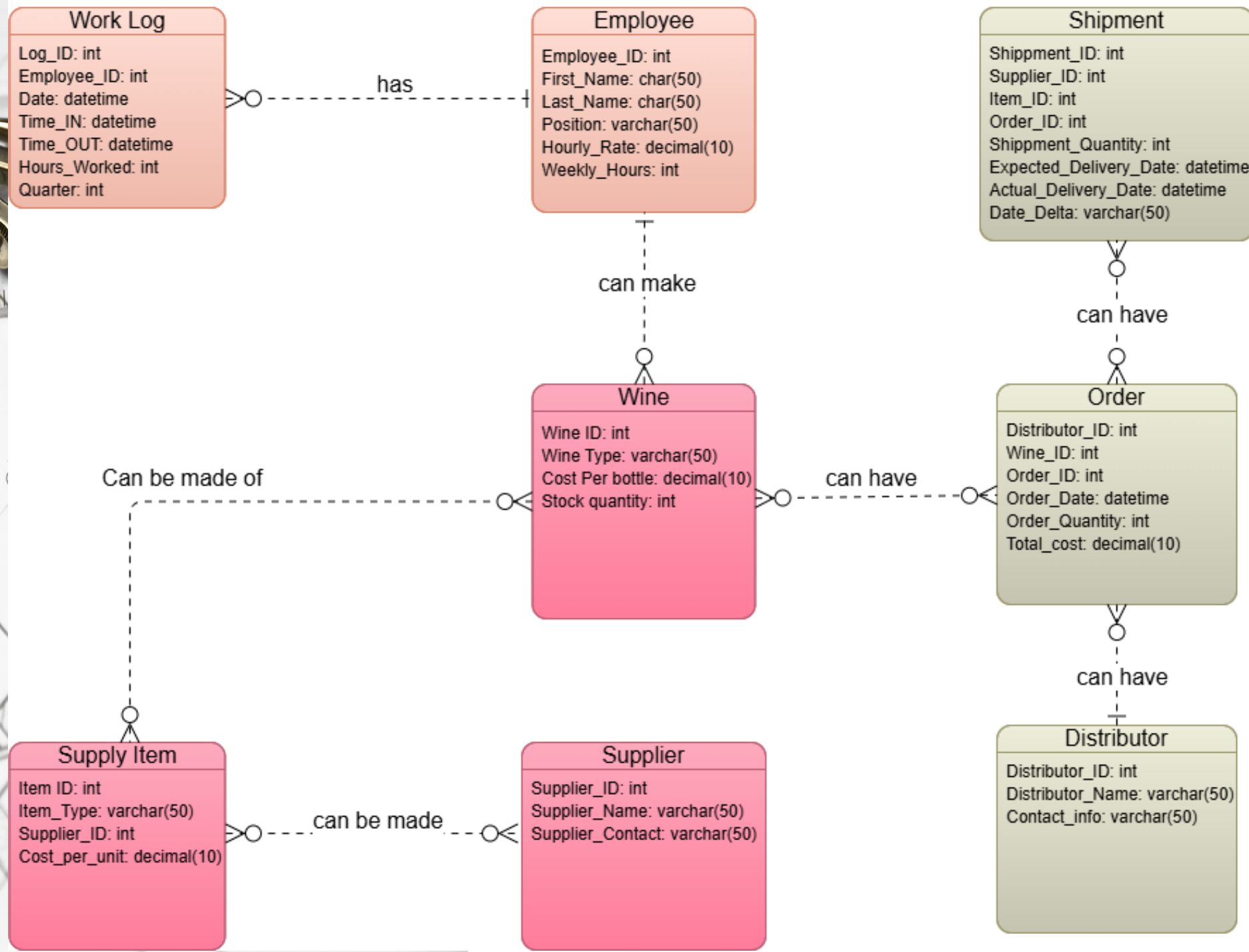


Business Rules and Assumptions



- The system should record the number of hours worked by the employee per quarter.
- Track expected and actual delivery dates per shipment.
- Various items are used to make wine, like bottles, labels, corks, and vats.
- All suppliers, employees, distributors, and products should have their own ID.
- 4 different types of wine produced.
- The winery uses different distributors.
- Quantity of bottles sold each month by type and the cost of each bottle.
- Track shipments to distributors.
- Distributors can order online, with real-time inventory.
- Track materials purchased from suppliers.
- Assume websites are operational for distribution.
- Assume all employees are 40 hours and paid hourly.
- Employee schedule times; In and Out times
- Online inventory sales update in real-time to project in-stock quantities.

Entity Relationship Diagram



Report #2A

Distribution

- Stay in the know of which wines each distributor sells.
- Expand wine types to current distributors

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=== Distributor-Wine Mapping ===
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Distributor ID	Distributor Name	Wine ID	Wine Type
1	Wine Distributors Inc.	1	Cabernet
2	Vineyard Supplies	2	Chablis
3	Global Wines Ltd.	3	Merlot
4	Premium Vintners	4	Chardonnay
5	Local Wine Co.	4	Chardonnay
6	Elite Distributors	1	Cabernet





Report #2B

Sales

- Understand your best sellers.
- Keep the right inventory levels.

=== Wine Sales Analysis ===

Wine ID	Wine Type	Expected Stock	Total Sold	Sell-Through Rate (%)
2	Chablis	150	25	16.6667
1	Cabernet	100	50	50
3	Merlot	80	60	75
4	Chardonnay	60	60	100



Report #3

Supply Chain

- How many shipments per supplier are received per month.
- Are your suppliers delivering on time?

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=== Supplier Delivery Performance (Month-by-Month) ===
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Supplier ID	Supplier Name	Year	Month	Avg Delivery Delay (days)	Late Shipments	Total Shipments
2	Cork Suppliers	2025	1	13	1	1
1	Bottle Makers	2025	1	1	1	1
3	Label Printers Co.	2025	2	-1	0	1
4	Glass Works	2025	2	-1	0	1
6	Barrel Makers	2025	3	30	1	1
5	Packaging Solutions	2025	3	-1	0	1