**Alpha Team**

Daniel Graham

Aidan Jacoby

Stephanie Ramos

Case Study: *Bacchus Case Study*

***Milestone 1***

Business Rules:

1. Employee is linked to one Department, Departments (Finance, Marketing, Production, Distribution) can have many employees.
2. Employees will have many work hour entries, but work hour entries only reference one employee.
3. Work hours are recorded by quarter, each timesheet must include year, quarter and hours worked.
4. Supply orders can have many entries, but each supplier can only provide specific supplies.
5. Each supply order must have expected vs actual delivery date for performance tracking.
6. Delivery performance is tracked monthly to monitor on-time vs. late deliveries.
7. Wine can be distributed by many distributors, and a distributor and distribute many wines.
8. Wine distribution records must link one wine order to one distributor with order date, shipment date, shipment status and quantity.
9. A distributor can place many wine orders, but each order is tied to only one distributor.
10. Each order can include one or more wine types, and each wine can appear in multiple orders.
11. A wine order must have at least one wine listed in the order line items.
12. A wine order line item includes the wine, the quantity ordered, and is linked to a specific order

Assumptions:

1. Each employee only works in one department such as Finance, Marketing, Production, or Distribution.
2. The winery only produces and sells four wine varieties: Merlot, Cabernet, Chablis, and Chardonnay.
3. No outside grapes are used; all wine is produced using grapes grown on-site.
4. Supplier 1 provides bottles and corks, Supplier 2 provides labels and boxes, and Supplier 3 provides vats and tubing.
5. Each supply item is sourced from a single supplier.
6. There is currently no formal computer system in place to track operations, but the company wants to implement one.
7. Monthly delivery performance reports are not currently in place but are needed to monitor late shipments.
8. Employee work hours are not currently tracked in a formal system but will be recorded quarterly going forward.
9. The company does not currently offer an online ordering or shipment tracking system, but it is a desired feature.
10. Distributors can place a single order that includes multiple wine types and track order status.

ERD:

A diagram of a supply chain

AI-generated content may be incorrect.