CSD310 | Assignment 9.1

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**Team Members:**

Brennan Cheatwood

Kimberly Orozco

**Case Study: Bacchus Winery**

**Business Rules:**

1. Employees should log their work hours weekly.
2. Orders include, date, shipping date, and delivery status.
3. The winery employs multiple staff members, each assigned to a specific department (Finance, Marketing, Production, Distribution)
4. Each employee is identified by an ID, with details including name, job title, department, and work hours
5. Each department should have one manager.
6. Bacchus Winery produces four types of wine: Merlot, Cabernet, Chablis and Chardonnay.
7. Each supplier is identified by a Supplier ID, with details including name, contact info, and the types of supplies provided.

**Assumptions:**

1. Employee Management:
   1. Each employee is assigned to only one department.
   2. Employees can work multiple shifts within a quarter, but their total hours will be calculated quarterly.
   3. Employee roles and responsibilities do not overlap between departments.
2. Supply Management:
   1. Each supplier exclusively provides specific types of supplies (like, one for bottles and another for label paper).
   2. All supplies are delivered directly to the winery.
   3. Supply deliveries are tracked by their order date, expected delivery date, and actual delivery date.
3. Wine Production:
4. Each type of wine (Merlot, Cabernet, Chablis, Chardonnay) has a unique wine ID.
5. Wines are produced in batches, but the database will only track total production and distribution quantities.
6. The winery can only produce the four specific types of wine.

4. Distribution

1. Each distributor can order multiple types of wine.
2. Distributors are responsible for their own transportation and handling of wine orders.
3. Distribution orders are tracked by their order date, wine type, quantity and delivery status.

5. Tracking Inventory:

1. Supplies are tracked by type, quantity, supplier, and the dates of receipt.
2. Inventory quantities are updated when supplies are received or used in production.
3. Stan and Davis are responsible for placing supply orders.

6. Employee Time Tracking:

1. Employee work hours are recorded in hours per quarter.
2. Work hours include all tasks performed within their department.

7. Online Ordering System:

1. The system will let distributors see what’s in stock.
2. The system will show both expected and actual delivery dates for shipments.
3. The system will allow distributors to place orders and track their status.
4. Suppliers do not use the online system but are contacted manually for supply orders.

**ERD:**

