CSD310 | Assignment 9.1 May 11th, 2025

### **Team Members:**

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

#### 4. Distribution

- a. Each distributor can order multiple types of wine.
- b. Distributors are responsible for their own transportation and handling of wine orders.

c. Distribution orders are tracked by their order date, wine type, quantity and delivery status.

## 5. Tracking Inventory:

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

# 6. Employee Time Tracking:

- a. Employee work hours are recorded in hours per quarter.
- b. Work hours include all tasks performed within their department.

## 7. Online Ordering System:

- a. The system will let distributors see what's in stock.
- b. The system will show both expected and actual delivery dates for shipments.
- c. The system will allow distributors to place orders and track their status.
- d. Suppliers do not use the online system but are contacted manually for supply orders.

### **ERD**:

