

MSTIM 6342 SPF2
(Database Management for Business Analysis)
Final Project

Assignment Due Date: May 6 2022, 11:59 PM CST

Total 200 Points

ABC Distributors Inc. is a North American Company planning to Modernize its sales and distribution. They are planning to introduce an eCommerce platform in 2022. Three teams implement this project - the user experience team, middleware/API development team, and database management team.

- The User experience team will be responsible for implementing the front-end React/JavaScript application.
- The Middleware/API development team is responsible for integrating the external payment system and backend database.
- The Database Management team will be responsible for designing the backend system.

ABC Distributors Inc has already hired a program manager Tracy Smith and an application architect, Mr. Joe, for implementing this solution.

This entire project is managed by a project manager Tracy, who is responsible for the entire hiring and setting up the three teams.

Tracy decided to hire you as a Database Management Professional for implementing this backend system design and implementing the backend system.

Tracy and Joe have conducted three weeks of workshops sessions with the entire ABC Distribution company's Business leaders, Managers and Subject Matter Experts (SME) and captured all the business requirements and now the development phase is about to start.

Tracy and Joe put together the necessary highlevel requirements for you to implement. They will be available for weekly meeting in next 3 weeks.

Following are the database implementation high level requirements:

ABC Distributor want to manage all their Vendor, Product, Customer, Invoice, Customer Balance details in their new eCommerce Platform.

The system must be able to maintain the Product and Product category in this new platform. Product can be sold via eCommerce website as well as in their store.

Customer information including their address and contact details such as phone, email, fax must be maintained in this new platform.

Vendor information including their address and contact details such as phone, email, fax must be maintained in this new platform.

All product level purchase invoice and payment details must be maintained in the new platform.

The system will be further used across USA, Canada and Mexico in the ABC distributor local store in each locations and appropriate countries currencies must be used in each purchase and payments.

1. Identify and design all the entities required for this implementation and create database object using DDL scripts and enforce all constraints to maintain referential integrity.
2. Create all necessary insert, update, delete and select SQL statement for this implementation.

Following are the database tables identified as a baseline tables required for this implementation however, you can add additional tables as necessary and build the entire backend system.

1. Customer
2. Address
3. Invoice
4. Invoice Line Details
5. Account Transaction
6. Vendor
7. Product
8. Product Category
9. Country
10. State
11. City
12. Payment Received
13. Store Location