BREAKPOINT CODING EXERCISE

Creating Business Objects

PHASE SIX: Order Processing Application

You have helped your client lay all the groundwork for a successful business. You have created an application to survey their customers, track their expenses, and capture inventory. Now it's time for the big league. You have been contracted to create an order processing system for their business. How well you do on this will determine whether or not they continue to work with you. The strange thing, however, is that your client wants very little user interaction. They only want the bare minimum user interface to test the functionality of the application. They explicitly stated that the user interface is "throwaway" and they will not pay for you to spend time on a quality interface.

Client Requirements:

The application should allow your client to do the following:

Customer Management

- o Store necessary information regarding the customer
  - Customer ID – Generate a GUID
  - Name (Full Name and Nickname)
  - Shipping Address
  - Billing Address
  - Total Number of Purchases
  - Total Amount Spent
- o Provide the following functionality
  - Increase the number of purchase by a provided amount
  - Increast the amount spent by a provided amount

Inventory Management

- Store necessary information about the inventory
  - Inventory ID – Generate a GUID
  - Inventory Type
    - Must be: Oddity, Sculpture, Artwork, or Alien Artifact
    - Use an ENUM to restrict the inventory type
  - Item Name
  - Item Cost
  - Number in Inventory
  - Sale Price
- Provide the following functionality
  - Determine the total profit if all items are sold
  - Reduce the inventory when any are sold

Order Management

- Store necessary information about the Order
  - Order ID – Generate a GUID for the ID
  - Order Date
  - Customer ID
  - Collection of Inventory ID and Number Purchased
- Provide the following functionality
  - Provide the Total Cost for the order
  - Provide the Total Profit made from the order.

In addition to this functionality, the client has requested the following:

- A very rudimentory user interface that provides the following
  - Adding a customer
  - Adding inventory items
  - Creating an order for a customer with inventory items.
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