



Cheaper By the Dozen (CBTD) sells **Products** (that have a **Manufacturer** and Product **Category**) at deeply discounted prices. The more you buy the more you save.

Each **Product** has a *retail list price*, a *unit price* (for 1-5 items), a *discounted price* (for 6-11 items), and a *deeply discounted price* when you purchase more than a dozen (12 or more) of the same item.

Each product also has a product name, an *image*, *UPC code*, product size, and *description*, along with a single *manufacturer* and single *product category*, and *modified date*.

A **Manufacturer** simply has a *manufacturer name* and *modified date*.

A **Category** has a *name*, *display order*, and *modified date*.

Products are displayed and sorted on a webpage based on Category.

Product details are displayed on a separate screen to provide more information about the product.

Products can be added to a temporary **Shopping Cart** (established after a **Customer** registers for an **Account** and/or Logs into an existing account).

A **Shopping Cart** item contains the *ProductID*, *Quantity*, *CustomerID*, and *ItemCartPrice* (which varies depending on the quantity of the item added to the cart). Remember, the more you buy, the more you save.

Upon checkout, the **Shopping Cart** items transition to permanent **OrderDetails** (containing the *ProductID*, *Quantity*, *CustomerID*, and *ItemPrice*) which roll up to an **OrderHeader** (containing the *CustomerID*, *OrderDate*, *ShippingDate*, *OrderTotal*, *OrderStatus*, *PaymentStatus*, *TrackingNumber*, *Carrier*, *PaymentDate*, *PaymentProcessingID*, *PhoneNumber*, *StreetAddress*, *City*, *State*, *PostalCode*, and *ShipToName*)

User and Roles

Admin

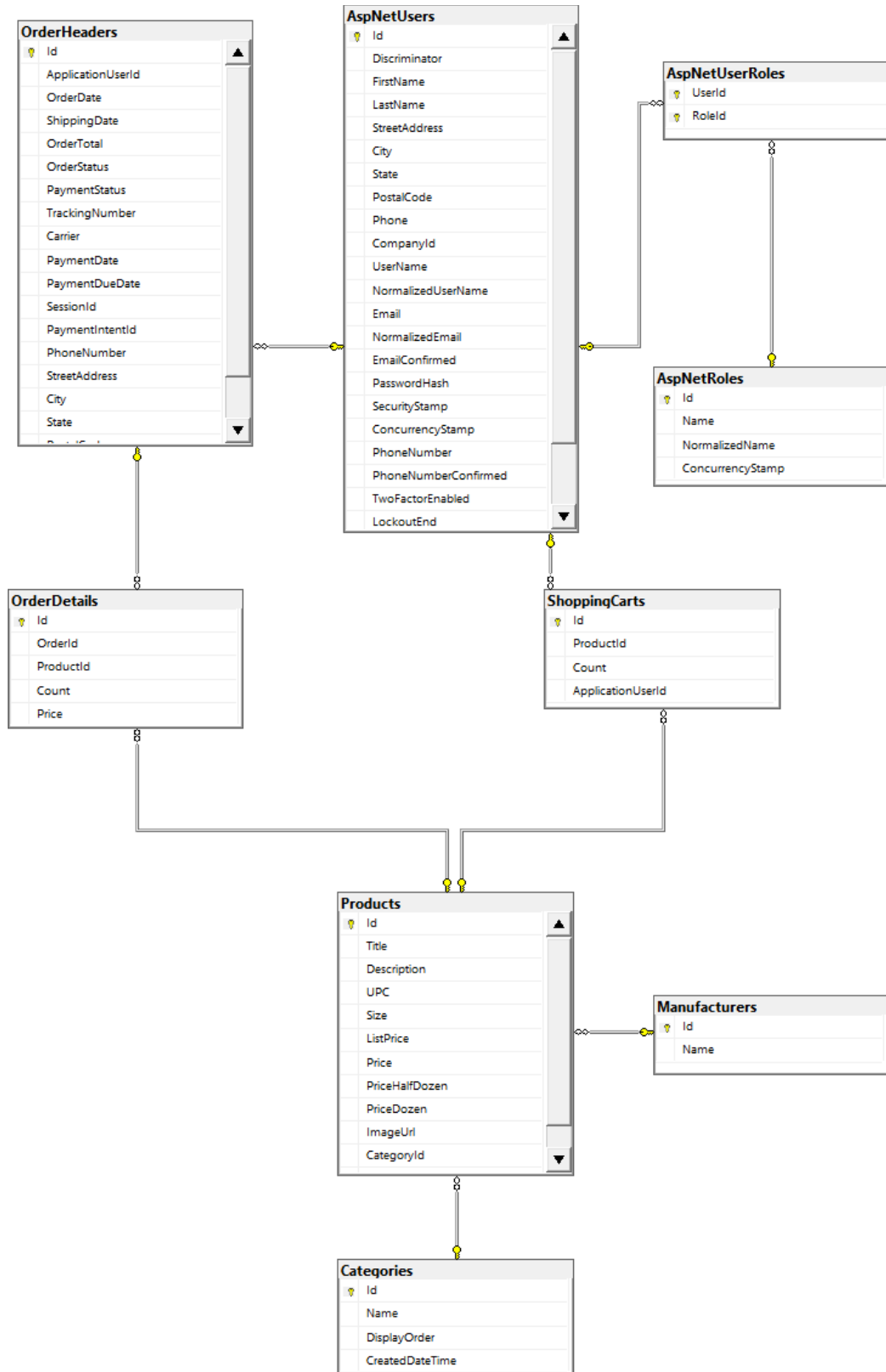
- Create, Read, Update, and Delete **Categories**
- Create, Read, Update, and Delete **Manufacturers**
- Create, Read, Update, and Delete **Products**
- Search and Manage Orders by OrderHeader Status (InProgress, Completed, PaymentPending, Payment Approved)
- Update **OrderHeader** (*OrderStatus*, *ShippingDate*, *Tracking Number*)

Public (not logged in)

- Browse and search various Products by Category and/or Manufacturer (FIGURE 1)
- View details of Products (including bulk pricing, detailed descriptions, and larger image) (FIGURE 2)

Customer (logged in after registering a new account)

- All Public Features plus
 - Add Product(s) to Shopping Cart
 - Update Product Quantity in Cart
 - Remove Products from Cart
 - Check out
 - Enter Shipping Address Details
 - Pay by Credit Card (third-party payment processor)
 - Obtain an order confirmation and tracking number by automated e-mail
 - View orders (historical and current)
 - Reset / Forgot Password



DATABASE ERD

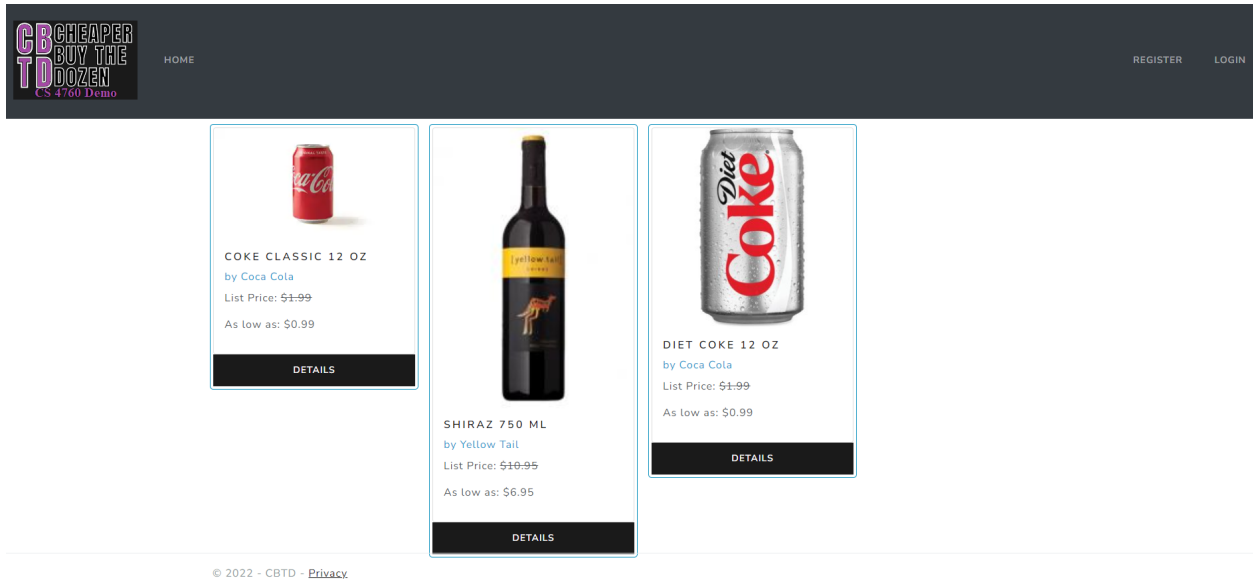


FIGURE 1 - HOME PAGE with PRODUCTS for Sale

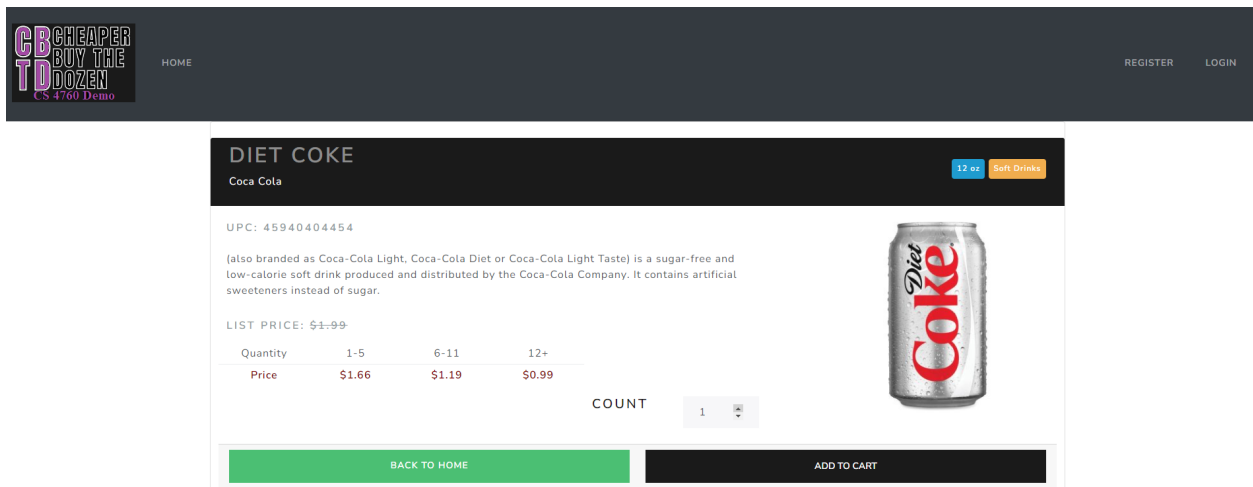


FIGURE 2 - PRODUCT DETAILS PAGE

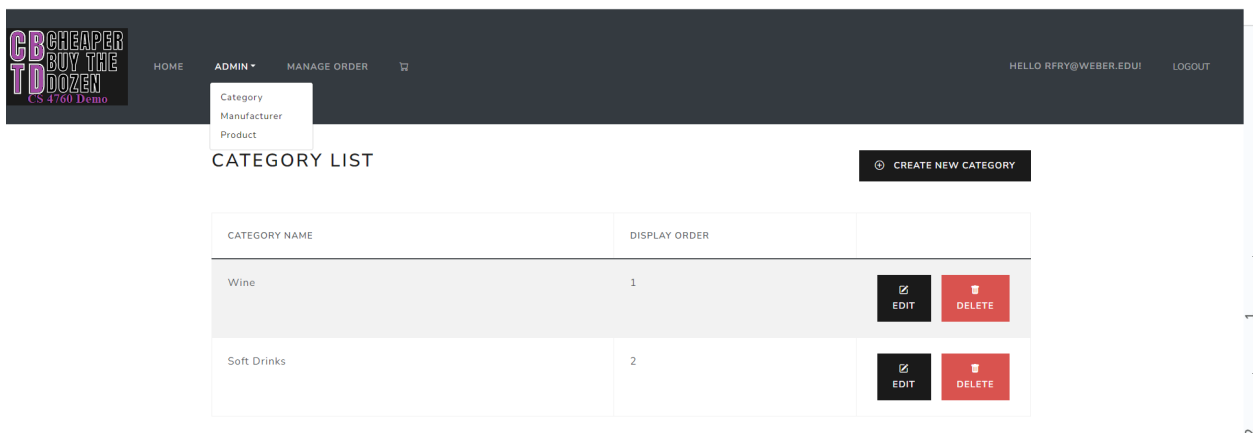


FIGURE 3A - ADMIN INTERFACE FOR CREATE, UPDATE, DELETE CATEGORY



CREATE CATEGORY

Category Name

The Category Name field is required.

Display Order

The Display Order field is required.

CREATE BACK TO LIST

FIGURE 3B - CREATE CATEGORY (with Validation)

EDIT CATEGORY

Category Name

Wine

Display Order

1

UPDATE BACK TO LIST

FIGURE 3C - EDIT CATEGORY