

Entity List

- Customer
 - CustomerID (PK)
- Inventory
 - ModelID
 - DecalID
 - OnHand
- Back Order
 - Order ID (PK)
 - Customer ID (FK)
 - Model
 - Decal
- Fine Magazine Subscription
- RC Customer List
- Product
 - Minimum
 - Model ID (PK)
 - Manufacturer ID (FK)
- Invoice
 - InvoiceID (PK)
 - Customer ID (FK)
- Shopping Cart(?)/Transaction
 - Product
 - CustomerID
- Manufacturer
 - ManufacturerID (PK)
 - Product
 - Website

Business Rules

Customer & Invoice

1. A customer may generate many invoices.
2. Each invoice is generated by only one customer.
3. Some customers have not (yet) generated an invoice.

Customer & Shopping Cart/Transaction

1. A customer can have one shopping cart
2. Each transaction is created by one customer

Customer & Invoice

1. Each shopping cart creates one invoice
2. Each invoice comes from one shopping cart

Shopping Cart/Transaction & Backorder

1. A shopping cart can create zero to many backorders
2. Each backorder is created by one shopping cart

Product & Inventory

1. An inventory has multiple products

Manufacturers & Product

1. Each product has a manufacturer
2. A manufacturer can have 0 to many products

Transaction - a completed purchase that results in an Invoice. The database will use an Invoice entity to represent this.

Product - identified by its characteristics (e.g., model name, scale) and is the main unit of inventory.

Backorder - A backorder is created when a customer makes a transaction on a not in stock product

Order - The system will track sufficient details about a distinct Product to determine when its inventory reaches the minimum quantity on hand, triggering an automatic Order.

Customer - Potential Client for the Company. They do not need to have made a purchase to be in this database.

Prospect - Prospects are potential customers for RC models. Prospect information, obtained from FineScale Modeler, is stored in the Prospect entity. When a prospect makes a purchase, their information is moved to the Customer entity.

Customer credit card details and bank communications are handled by external systems (CC Bank) and are not stored in the core RC_ Models database.