**Entities:**

* **Product**
  + Part number: Primary key in the product table. Unique identifier for each given part entry.
  + Name: Name of part to be displayed in the store.
  + Description: Short item description of product and any applicable marketing copy.
  + Price: Cost to customer for one unit of product
  + Quantity available: Amount of product available in the warehouse, ready to ship. Hidden from customer view.
* **Cart**
  + Cart ID: Primary key for cart table. Unique identifier for an instance of a cart filled by the user.
  + Quantity requested: Quantity requested by a user to be fulfilled in an order.
* **Order**
  + Order ID: Primary key for the order table. Unique identifier for each instance a user pushes a cart with payment info to be processed.
  + Notes: Internal entry in the order table for employees to leave comments regarding order.
  + Date: Timestamp that the cart was pushed to be processed.
  + Price: Price captured at time of sale of a given product.
  + Quantity: Quantity fulfilled of a given product.
  + Status: Where customer’s order is currently in the system. “Ordered, processing, shipped, on hold, cancelled”
  + Tracking information: Field for employee to enter tracking information after shipping products to user.
* **Payment**
  + Payment ID: Primary key for payment table. Unique identifier for each instance of payment associated with a given order.
  + Credit card information: Credit card number and verification code (CVV)
  + Payment amount: Total cost to be charged to card (Subtotal + Tax + Shipping – Discounts)
* **User**
  + User ID: Primary key for each entry of a customer or employee.
  + Notes: Comments on customer entries. Notes for things like VIP customer, problem customer, has a favorite customer service agent, etc.
  + Name: Name to be displayed on account and shipping labels.
  + Billing address: Physical address for payment processing.
  + Shipping address: Ship to address for product.
  + Phone: Mobile phone to contact user.
  + Email: Email address to contact user.
* Employee
  + Role: Attribute for each given employee in the Employee table. Describes job title or specialty.

**Relationships in diagram:**

**Added to**: This is a ternary relationship between the Product, User, and Cart entity. A user adds products to a cart and places an order using all this information.

**Generates**: This is a 4-ary relationship between Cart, User, and Orders. A user has a cart pre-populated with products and generates an order with this information.

**Has:** This is a binary relationship between Users and Orders. This describes any user’s order history.

**Ships**: This is a binary one-to-one relationship between Employees and Orders. This represents an employee gathering the information on an order, fulfilling the request, and shipping it to the user.

**Views**: This is a binary one-to-many relationship between Employees and Orders. This represents the ability of any employee to view and manage and user’s orders.