Entities:

Product

- o <u>Part number</u>: Primary key in the product table. Unique identifier for each given part entry.
- o Name: Name of part to be displayed in the store.
- Description: Short item description of product and any applicable marketing copy.
- o 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.
- o Image: Represents image hosted on the local file system to display on the product page
- Type: One of three types of item for sale: armor, medicine, and food.

Armor

o Armor class: Represents the type of protection being offered by a certain armor.

• Medicine

• Treatment type: The type of medication offered: surgical, wound treatment, and painkillers.

Food

Food type: Represents either food or drink.

Orders

- 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.
- O Date: Timestamp that the cart was pushed to be processed.
- o 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.
- o User ID: Represents the ID of the user who placed the order.

Order Details

- o Price: The price for a single row of one product ordered.
- o QTY Ordered: The quantity requested of a single product.
- o Item ID: The part number of a single ordered item.

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.
- o Billing address: Physical address for payment processing.
- Shipping address: Ship to address for product.
- o Phone: Mobile phone to contact user.
- Email: Email address to contact user.

Relationships in diagram:

Generates: This is a 4-ary relationship between Product, User, Orders, and Order details. A user requests products, which are added to a session-variable driven cart. Those products then become an a single order and its order details.

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

Captures: This is a ternary one-to-one relationship between User, Orders, and Payment. This represents the capture of a payment method upon a user placing an order.