## **ER DIAGRAM EXPLANATION**

**CUSTOMER-** represents shop customer

**Customer\_id** is the primary key. Personal information isn't used as the primary key due to lack of uniqueness and possibility of duplication, even with an intersection of multiple personal identifiers.

Customer\_name used to personalize shopping experience.

**ORDER-** represents order placed by customer

**Order\_id** is the primary key. Date/time isn't used nor any other identifier due to the possibility of two identical orders occurring in the same exact time.

**Customer\_id** is the foreign key. It connects customer to their order.

Date- used to keep track of when order was placed to ensure that shipping occurs in a timely manner.

**Product\_Id** is the foreign key that connects order to products.

CC num-customers billing info

Shipping address-indicates where order is shipped to.

Tracking\_number- gives both the user and employee the ability to track the order once shipped

Order\_Status indicates status of order. Shipped or Processing

Total\_Cost- total cost of the order

Notes- can be left blank! Notes set by employees about an order

PRODUCTS- represents products sold by store and bought by the customer

**Product\_ID** is the primary key. Name can't be used because two products could have the same name but different sizes/colors/ etc.

Product\_name is the name of the product.

Product\_in\_stock is the quantity of the product

Product Cost is the cost of the product(for the customer)

## Relationships-

has- is a binary many to many relationship between **Order** and **Products**. It keeps track of what products constitute an order, as well as the effect an order has on product inventory. An Order can have many products and an instance of a product may exist in many orders. **Has** has a relationship attribute-quantity that keeps track of the quantity of a product that is in an order.

**pays for-** is a binary 1 to many relationship between Customer and Order. It keeps track of what order belongs to what customer.