



### Business Rules/Specifications

The company in which I will create my database for is an e-commerce website called WebCo. WebCo specializes in selling electronics(phones, tablets, computers, smart watches, and routers. WebCo is an online only company and have distribution centers spread throughout the US(where they do their online business).

The business rules are as follows:

- Customers can create an order that has one product or many products. One/many products can belong to a single order.
- A distribution center located nearest to the customer is responsible for fulfilling the order; once a customer places an order, the distribution center grabs that product off the warehouse shelves and proceeds to package it. A single distribution center can handle many orders while many orders can be handled by a single distribution center.
- Once the D.C packages the order, they then create a shipping request to have the order shipped out to the customer. Many orders can belong to a single shipping request and a single shipping request can handle many orders.
- Once the shipping request is created, a transit report is generated by the transit team. The team moves the order's items from the "ready for pick up bucket" to the "in transit bucket." The transit team can handle many orders.
- Customer information is stored in its own table. Customer's address, billing information, and associated account order history are also stored in this table. Orders are stored in their own table with an order ID, and the products that are found in the order.
- Serial numbers are uniquely assigned to each and every product that is ordered. UPCs identify the product while serial numbers identify the unique product. The inventory team keeps track of stock of all items stored in a specific warehouse(D.C). Each warehouse has products but not all products will exist in a warehouse as it's dependent on location. Quantity, UPC, Item Name, and Warehouse code are tracked in inventory to find where that item exists.
- Items are tracked in four different "inventory buckets". Sellable - which is the stock that all customers shop from. Processing - which items that belong to orders(or have order numbers) will go into this inventory bucket which makes them inaccessible to customers who are shopping online. In-transit - the items are still inaccessible to customers but allow our transit team to update the status of where the item is(if delivered, still in route, etc.) The final bucket is returns - in which all items in this bucket are returned items that will be donated/sold off to another company that repackages and sells previously sold products.