

Entity

Product

ID - auto generated unique identifier
Name - Product name for customer facing display
Quantity - Current quantity in stock
RQuantity - Amount of current stock that has been sold
Price - Price of product
Description - Description of product

Customer

ID - Auto generated unique identifier
FName - Customer first name
LName - Customer last name
Email - Customer preferred email for login or communication
Address - Saved delivery address
City - Address City
State - Address State
ZIP - Address zip code
Card - Foreign key to Card, customer saved payment method

Card

ID - Card number, unique identifier
FName - Card holder first name
LName - Card holder last name
Month - Expiration date month
Year - Expiration date year
CVV - Card verification number
Address - Billing Address
City - Address city
State - Address state
ZIP - Address zip code

OrderLine

ID - Auto generated unique identifier
CID - ID of purchasing customer
PID - ID of product being purchased
Status - Check whether order is in shopping cart or submitted
Quantity - Quantity of product ordered

Customer_Order

ID - Order ID, auto generated unique identifier, can be used to look up submitted orders
OID - OrderLine ID of associated OrderLines
Status - Current status of order, eq. processing, processed, shipped, outstanding
Date - Estimated delivery date for customer communication
Note - Any customer or employee added notes on order

Relationships

Saved

Between Card and Customer

Customers saved payment information, each card will belong to one customer, each customer will have one saved payment method

Cart

Between Customer and OrderLine

When a customer adds a product to their shopping cart

A customer can have many OrderLines in their cart, each orderline will belong to one customer

Contains

Between OrderLine and Product

What Product exists in the OrderLine of a Customers cart

Each Orderline will contain one product, each product can be a part of many OrderLines

Submit

Between OrderLine and Customer_Order

When a customer submits an order to be processed

Each Customer_Order can contain multiple OrderLines, each OrderLine will belong to only one Customer_Order