**Business Rules**

**Product**: The name, description, and price, and category of a product inventoried and/or sold.

* Each product record may be referenced by one or more inventory records; each inventory record must reference one and only one product record
* Each product record must reference one and only one category record; each category record may be associated with one or more product records

**Category**: The list of possible categories.

* Each category record may be referenced by one or more product records; each product record must reference only one category record

**Inventory**: A specific instance of a product held in inventory, associated with a seller, and also defining a quantity and a condition

* Each inventory record must reference one and only one product record; each product record may reference one or more inventory records
* Each inventory record must reference one and only one seller record; each seller record may reference one or more inventory records
* Each inventory record must reference one and only one condition record; each condition record may be referenced by one or more inventory records
* Each inventory record may be referenced by one or more order detail records; each order detail record must reference one and only one inventory record

**Seller:**The first name, last name and user\_id of a user that is selling products.

* Each seller record may be referenced by one or more inventory records; each inventory record must reference one and only one seller record

**Condition**: The list of possible product conditions.

* Each condition record may reference one or more inventory records; each inventory record must be referenced by one and only one condition record

**Customer**: The username, email address and physical address of a user that is buying products.

* Each customer record must reference one or more address records (with one always being default); each address record may be referenced by one or more customers
* Each customer record may be referenced by one or more order records; each order record must reference one and only one customer record

**Address**: A full physical address for a customer.

* Each address record may be referenced by one or more customers; each customer record must reference one or more address records (with one always being default);
* Each address record may be referenced by one or more package records; each package record must reference one and only one address record

**Order**: A list of inventory items and associated quantities being purchased by a customer, plus the selection of shipping type.

* Each order record must reference one and only one customer record; each customer record may be referenced by one or more order records
* Each order record must reference one and only one shipping type record; each shipping type record may be referenced by one or more order records
* Each order record must reference one or more order detail records; each order detail record must be referenced by one and only one order record
* Each order record may be referenced by one and only one package record; each package record must reference one and only one order record

**Order Detail**: A line item for an order containing the inventory id and quantity of inventory items assigned to an order.

* Each order detail record must be referenced by one and only one order record; each order record must reference one or more order detail records
* Each order detail record must reference one and only one inventory record; each inventory record may be referenced by one or more order detail records

**Shipping Type**: The list of possible shipping types.

* Each shipping type record may be referenced by one or more order records; each order record must reference one and only one shipping type record

**Package:**A record of a unique package id and delivery address for an order.

* Each package record must reference one and only one address record; each address record may be referenced by one or more package records
* Each package record must reference one and only one order record; each order record may be referenced by one and only one package record

**ERD Diagram**

Diagram, schematic

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**CREATION OF TABLES**

Table INVENTORY

**Table

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Table ADDRESS

Table

Description automatically generated

Table CATEGORY

Graphical user interface, application

Description automatically generated

Table CONDITION

Graphical user interface, application

Description automatically generated

Table CONSUMER

Application

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Table CONSUMER\_ADDRESS\_BRIDGE

Graphical user interface, application

Description automatically generated

Table ORDER\_DETAIL

Application

Description automatically generated

Table ORDERS

A picture containing table

Description automatically generated

Table PACKAGE

Application

Description automatically generated with medium confidence

Table PRODUCT

Graphical user interface, application

Description automatically generated with medium confidence

Table SELLER

Graphical user interface, application

Description automatically generated

Table SHIPPING\_TYPE

Graphical user interface, text, application, email

Description automatically generated

**CREATION OF STORED PROCEDURES**

ADD PROCEDURE ADD\_CONSUMERGraphical user interface, application

Description automatically generated

ADD PROCEDURE ADD\_INVENTORY

Graphical user interface, text, application, email

Description automatically generated

ADD PROCEDURE ADD\_SELLERGraphical user interface, text, application

Description automatically generated

**USE OF STORED PROCEDURES**

Text

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Application

Description automatically generated with medium confidence

Graphical user interface, text, application

Description automatically generated

**ADDING CONSTRAINTS**

A picture containing table

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Graphical user interface, application

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Graphical user interface, application

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Application

Description automatically generated with medium confidenceGraphical user interface

Description automatically generated with medium confidenceApplication, table

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Application

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Description automatically generatedApplication

Description automatically generated with medium confidenceTable

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**SQL QUERY**

**Graphical user interface, text, application, email

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**Graphical user interface, application

Description automatically generated**Graphical user interface, text, application, email

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**ASPECT 4**

Graphical user interface, application

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Text

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Graphical user interface, text, application, email

Description automatically generated

**ASPECT 5**

Graphical user interface, application, Word

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Graphical user interface, text, application

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Table

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