Use Case Formalization

# Create Manufacturer Catalog

createManufacturerCatalog

input:

ManufacturerID (uint)

CatalogID (uint)

FulfillerLocationID (uint)

Status (int)

Output:

createManufacturerCatalogResponse (complx)

# Define Fulfillers

createFulfiller

input:

createFulfillerRequest

Name (string)

ManufacturerID (uint)

RetailerID (unit) (what is this?)

output:

createFillerReturn (int)

SQL:

# Define Store Locations

createFulfillmentLocation

input:

CreateFulfillmentLocationRequest

FullfillerID (uint)

ManufacturerLocationID (uint)

RetailerLocationID (uint)

ExternaLocationID (string)

LocationName (string)

TypeID (uint)

Latitude (double)

Longitude (double)

Status (int - 1 or 2)

CountryCode (string)

Output:

CreateFulfillmentLocationReturn (int)

# Define Store BIns

createBin

Input:

CreateBinRequest

BinID (uint)

FulfillerLocationID (uint)

BinTypeID (uint)

BinStatusID (uint)

Name (string)

Output:

CreateBinResponse

CreateBinReturn (uint)

# Bulk Inventory Update

adjustInventory

Input:

AdjustInventorySoapIn

LocationName (string)

Items (array AdjustItems)

items (AdjustItem)

PartNumber (string)

UPC (string)

LocationUPC (string)

BinID (int)

Quantity (int)

Output:

AdjustInevntorySoapOut

AdjustResponse (string)

# Trickle Inventory Update

RefreshInventory:

Input:

RefreshInventorySoapIn

LocationName (string)

Items (array RefreshItem)

items (AdjustItem)

PartNumber (string)

UPC (string)

LocationUPC (string)

BinID (int)

Quantity (int)

LTD (double)

Floor (int)

SafetyStock (int)

Output:

RefreshResponse (string)

# Get Inventory

*getInventory*

Input:

InventoryRequest

Catalog - nillable; type ManufacturerCatalog

ManufacturerID type positiveInteger

CatalogID type positiveInteger

Quantities - nillable; type ArrayOf\_impl\_ItemQuantity

items - unbounded; type ItemQuantity

PartNumber - nillable; type string

UPC - nillable; type string

LocationUPC - nillable; type string

Quantity type int

LocationNames - nillable; type ArrayOfLocationNames

LocationNames - optional, unbounded; type string

Location - nillable; type RequestLocation

Unit - nillable; type string

Radius - nillable; type positiveInteger

PostalCode - nillable; type string

Latitude - nillable; type double

Longitude - nillable; type double

CountryCode - nillable; type string

Type - nillable; type InventoryRequestType - type string with restriction - enum { 'ALL', 'PARTIAL', 'ANY', 'ALL\_STORES' }

Limit type int

IgnoreSafetyStock - nillable; type boolean

IncludeNegativeInventory - nillable; type boolean

OrderByLTD type boolean

Output:

getInventoryReturn - unbounded; type InventoryResponse

LocationName - nillable; type string

CatalogID type int

ManufacturerID type int

OnHand - nillable; type int

Available - nillable; type int

PartNumber - nillable; type string

UPC - nillable; type string

LocationUPC - nillable; type string

LTD - nillable; type double

Floor - nillable; type int

SafetyStock - nillable; type int

STHEnabled - nillable; type boolean

RestockEnabled - nillable; type boolean

PickupEnabled - nillable; type boolean

CountryCode - nillable; type string

Distance - nillable; type double

# Allocate Inventory

*allocateInventory*

Input:

request type UpdateRequest

FulfillerLocationCatalog type FulfillmentLocationCatalog

ManufacturerCatalog - nillable; type ManufacturerCatalog

ManufacturerID type positiveInteger

CatalogID type positiveInteger

FulfillerLocationID type positiveInteger

ManufacturerLocation - nillable; type ManufacturerLocation

ManufacturerID type positiveInteger

ManufacturerLocationID type positiveInteger

RetailerLocation - nillable; type RetailerLocation

RetailerID type positiveInteger

RetailerLocationID type positiveInteger

Items type ArrayOf\_impl\_UpdateItem

items - optional, unbounded; type UpdateItem

PartNumber - nillable; type string

UPC - nillable; type string

LocationUPC - nillable; type string

Quantity type int

OrderID type positiveInteger

OrderItemID type positiveInteger

ShipmentID type positiveInteger

FulfillerLocationID - nillable; type positiveInteger

Output:

AllocateInventoryResponse (?)

# De-allocate Inventory

*deallocateInventory*

request type UpdateRequest

FulfillerLocationCatalog type FulfillmentLocationCatalog

ManufacturerCatalog - nillable; type ManufacturerCatalog

ManufacturerID type positiveInteger

CatalogID type positiveInteger

FulfillerLocationID type positiveInteger

ManufacturerLocation - nillable; type ManufacturerLocation

ManufacturerID type positiveInteger

ManufacturerLocationID type positiveInteger

RetailerLocation - nillable; type RetailerLocation

RetailerID type positiveInteger

RetailerLocationID type positiveInteger

Items type ArrayOf\_impl\_UpdateItem

items - optional, unbounded; type UpdateItem

PartNumber - nillable; type string

UPC - nillable; type string

LocationUPC - nillable; type string

Quantity type int

OrderID type positiveInteger

OrderItemID type positiveInteger

ShipmentID type positiveInteger

FulfillerLocationID - nillable; type positiveInteger

Output:

(DeallocateInventoryResponse)