



# **Barcode Reader Database and Inventory System**

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# System Description

- Our project will keep track of a store's inventory
- Admin Can Update Inventory Product Amounts, Update Product Price, Add New Products, Or Delete Existing Products
- Inventory Clerk Can Update Inventory Product Amounts or Lookup Unit Price
- Git: <https://github.com/adaPlu/Barcode-Reader-CSE111>

# Use-case Details

## Admin and Inventory Clerk Use Cases:

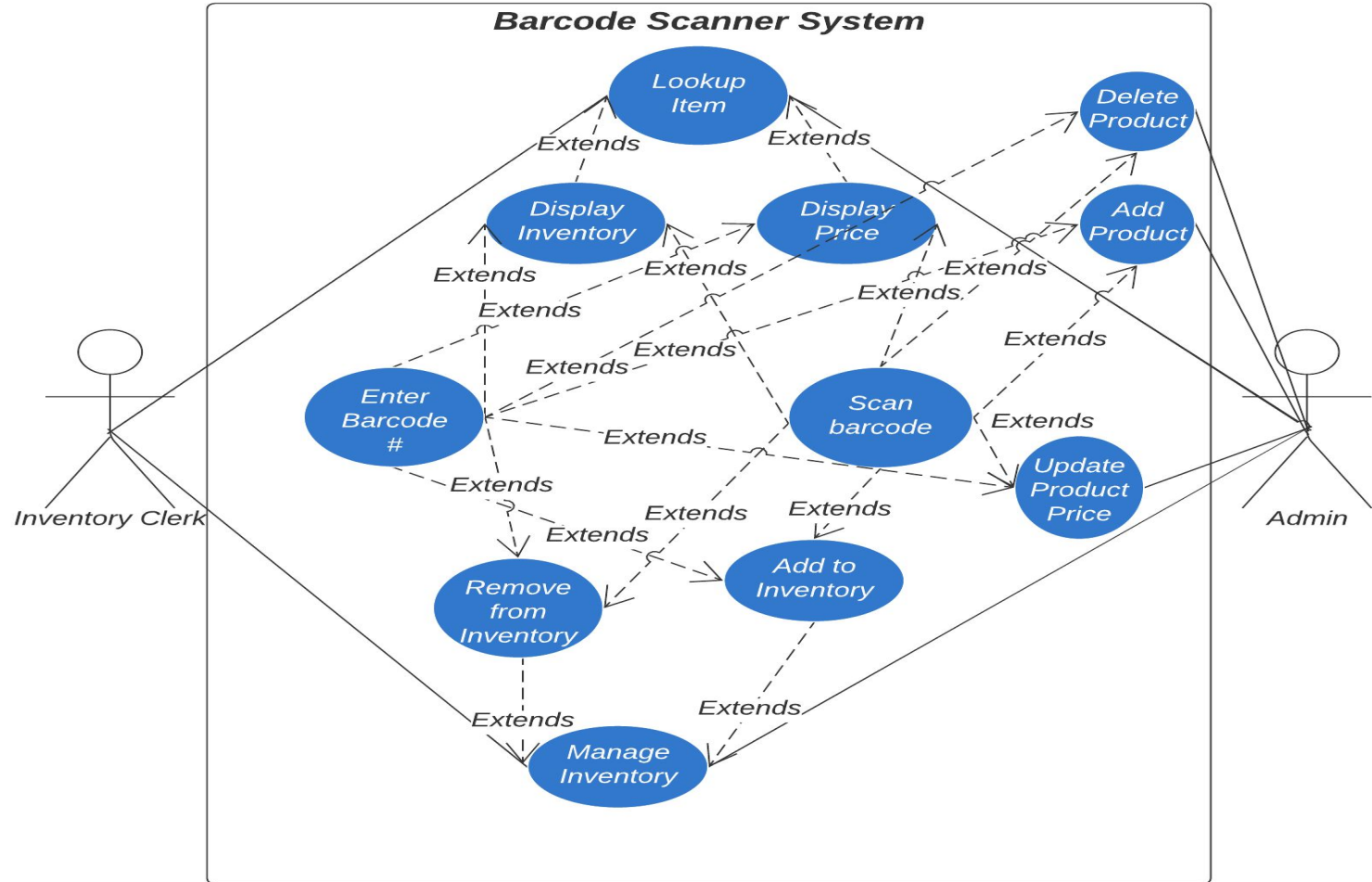
- Look Up Item
  - Entry Condition: Click Look Up Item
  - Scan Item
  - Select Price or Inventory
  - Display Price or Inventory From Database
  - Exit Condition: Click Exit
- Manage Inventory
  - Entry Condition: Click Manage Inventory
  - Scan Item
  - Select Add or Remove
  - Enter Amount to be Added or Removed
  - Edit Inventory Amount in Database
  - Exit Condition: Click Done
- Scanning
  - Entry Condition: Manage Inventory Scan/Look Up Item Scan
  - Scan Item
  - Exit Condition: Item Scanned

# Use-Case Details Cont.

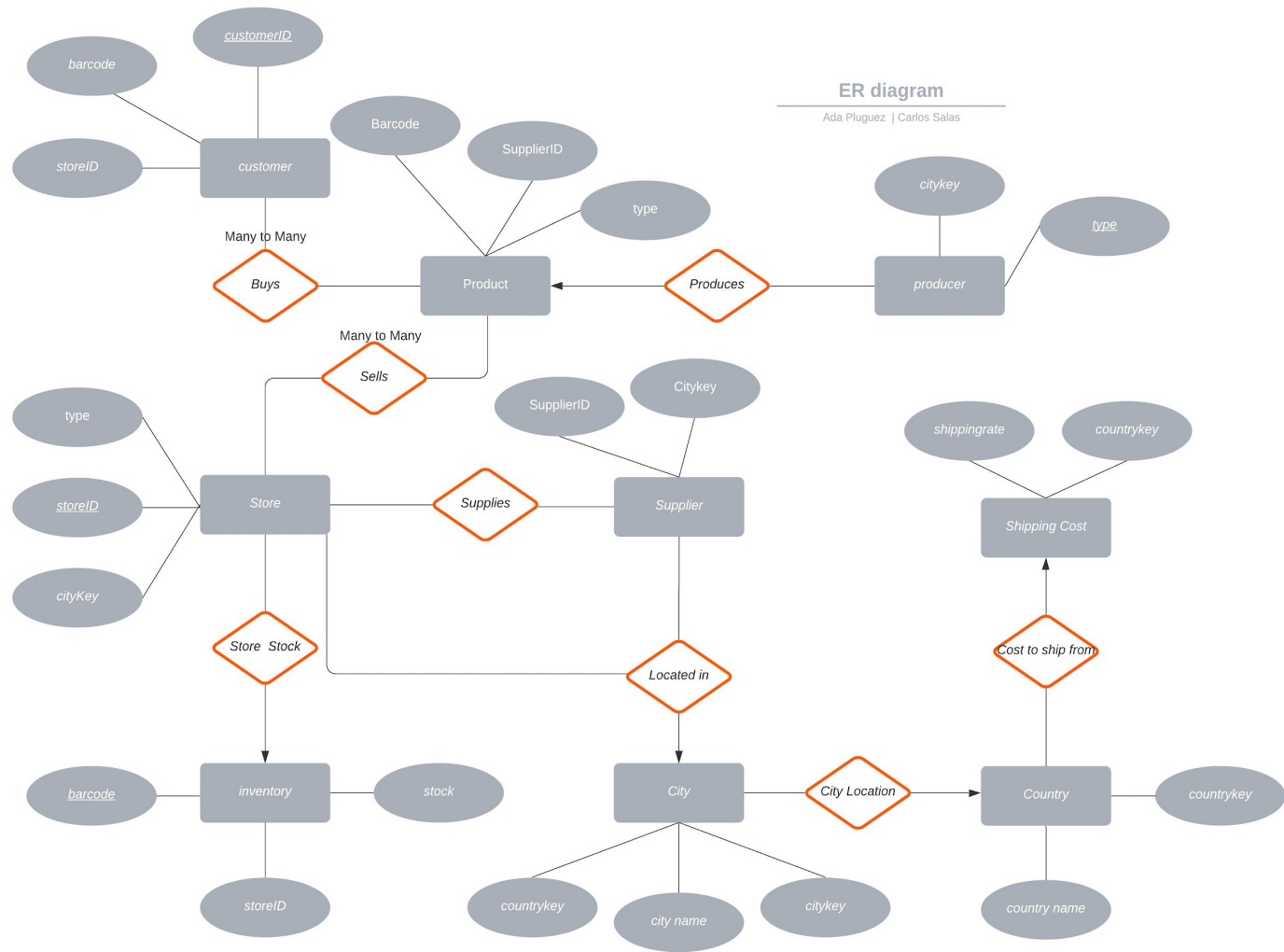
## Admin Only Use Cases:

- Update Price
  - Entry Condition: Click Update Price
  - Scan Item or Enter bar Code
  - Enter New Price
  - Change Price in Database
  - Exit Condition: Click Done
- Add Product
  - Entry Condition: Click Add Product
  - Scan Item or Enter Barcode
  - Enter Product Type
  - Enter SupplierID
  - Enter Amount of Product Received
  - Add Product to Database
  - Exit Condition: Click Done
- Remove Product
  - Entry Condition: Click Remove Product
  - Scan Item or Enter Barcode
  - Remove Product From Database
  - Exit Condition: Click Done

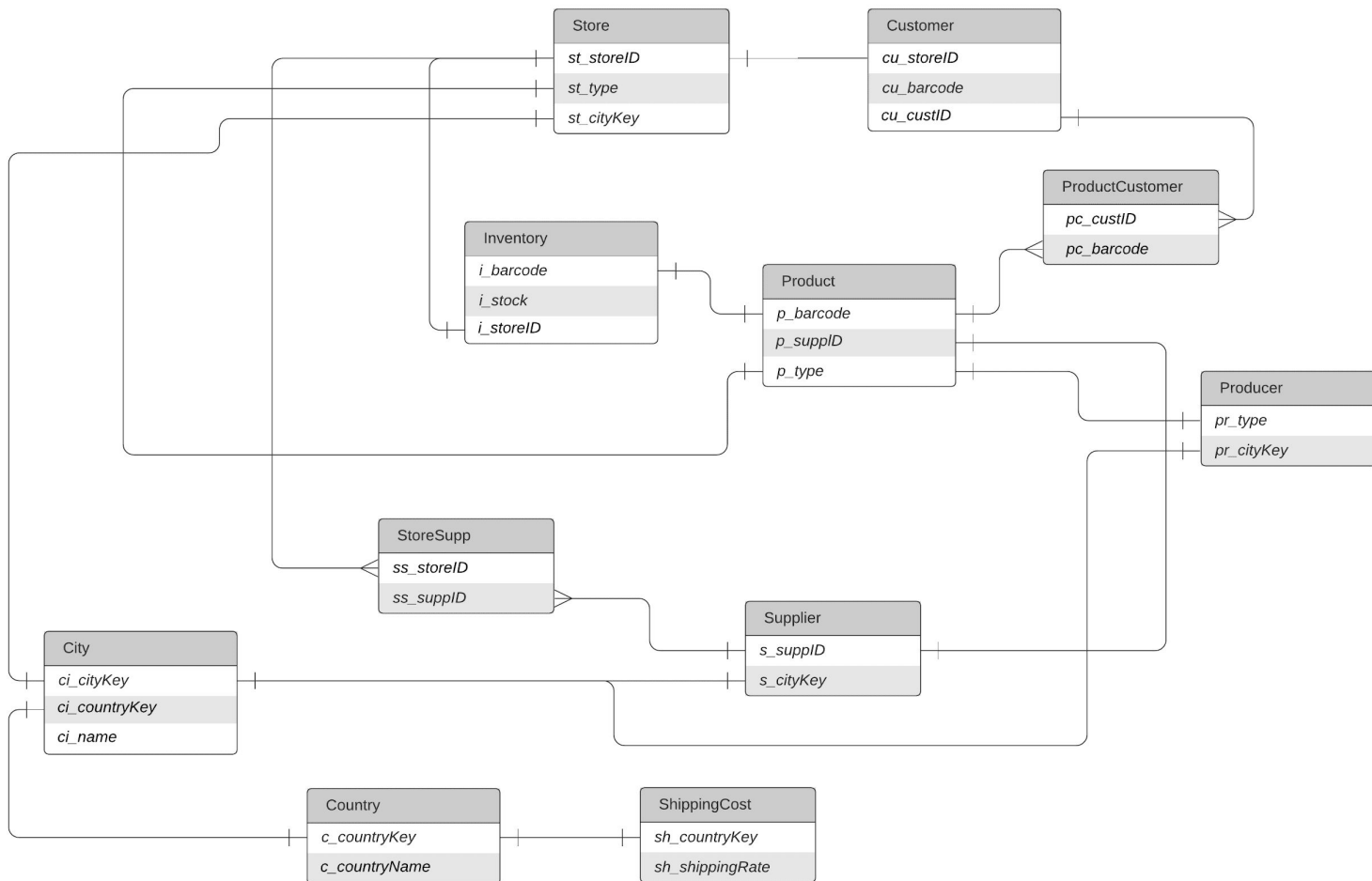
# Use-case Diagram



# E/R Diagram



# Relational Schema



# Tables

## Inventory

- i\_barcode INT
- i\_stock INT
- i\_storeID INT

## Producer

- pr\_type VARCHAR
- pr\_cityKey INT
- pr\_shippingRateKey INT

## Supplier

- s\_supplierID INT
- s\_cityKey INT
- s\_shippingRateKey INT

## Product

- p\_barcode INT
- p\_supplierID INT
- p\_type VARCHAR

## Customer

- cu\_storeID INT
- cu\_barcode INT
- cu\_customerID INT

## Store

- st\_storeID INT
- st\_cityKey INT
- st\_type VARCHAR

## Shipping Cost

- sh\_countryKey INT
- sh\_shippingRate DECIMAL

## Country

- c\_countryKey INT
- c\_name VARCHAR

## City

- ci\_cityKey INT
- ci\_countryKey INT
- ci\_name VARCHAR

## StoreSupp

- stu\_storeID INT
- stu\_supplID INT

## ProductCustomer

- pc\_custID INT
- pc\_barcode INT





**Thank You**