Use Case

Name: Add new product into system (common case)

Steps:

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add product”   Main screen: | Display “Add Product” screen |
| 1. Input data, and click “Add” button | Hide “Add Product” Screen and display “Add Product Successfully” Alert |
| Click on “OK” button | Display main screen |

Name: Add new product into system (exception)

Steps:

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add product”   Main screen: | Display “Add Product” screen |
| 1. Input data with invalid ID, and click “Add” button | Hide “Add Product” Screen and display “ProductID is invalid” Alert |
| Click on “OK” button | Display main screen |

Name: Add new customer to system (common case)

Steps:

|  |  |
| --- | --- |
| 1. Choose command “Add Customer”   Main screen: | Display “Add Customer” screen |
| 1. Input data, and click “Add” button | Hide “Add Customer” Screen and display “Add Customer Successfully” Alert |
| Click on “OK” button | Display main screen |

Name: Add new customer to system (exception)

Steps:

|  |  |
| --- | --- |
| 1. Choose command “Add Customer”   Main screen: | Display “Add Customer” screen |
| 1. Input data with invalid customerID, and click “Add” button | Hide “Add Customer” Screen and display “Invalid customerid” Alert |
| Click on “OK” button | Display main screen |

Name: Add new purchase to system (Common)

Steps:

|  |  |
| --- | --- |
| 1. Choose command “Add Purchase”   Main screen: | Display “Add Purchase” screen |
| 1. Input data, and click “Add” button | Hide “Add Purchase” Screen and display “Add Purchase Successfully” Alert |
| Click on “OK” button | Display main screen |

Name: Add new purchase to system (Exception)

Steps:

|  |  |
| --- | --- |
| 1. Choose command “Add Purchase”   Main screen: | Display “Add Purchase” screen |
| 1. Input data with invalid purchaseID, and click “Add” button | Hide “Add Purchase” Screen and display “PurchaseID is invalid” Alert |
| Click on “OK” button | Display main screen |



3) Bold = primary key

Italicized = foreign key

Products:

- Barcode, name, **productid**, price, vendor, description

Customers:

- Name, address, **cutomerid**, phone

Relationship:

- Purchase: **purhcaseid**, *customerid*, *productid*, date, quantity, price, tax, total cost

4)

CREATE TABLE "Customers" (

"CustomerID" INTEGER NOT NULL,

"Name" TEXT DEFAULT 'Guest',

"Phone" TEXT,

"Address" TEXT,

PRIMARY KEY("CustomerID")

);

CREATE TABLE "Products" (

"Barcode" INTEGER,

"Name" TEXT,

"ProductID" INTEGER NOT NULL,

"Price" REAL,

"Quantity" INTEGER,

"VendorID" TEXT,

PRIMARY KEY("ProductID")

);

CREATE TABLE "Purchase" (

"purchaseID" INTEGER,

"customerID" INTEGER,

"productID" INTEGER,

"Date" TEXT,

"Quantity" INTEGER,

"Price" REAL,

"Tax Rate" REAL,

"Total Cost" REAL

PRIMARY KEY(“purchaseID”)

);

5)

INSERT INTO Customers (CustomerID, Name, Phone, Address, PaymentInfo)

VALUES:

(15, Tom, 3348789028, Auburn University, NULL),

(24, Bill, 3348782839, Auburn University, 8392910839343),

(78, Jessie, 6578937839, 123 Baker St, 89201848393939),

(983, Debbie, 8889876347, 456 Main St, 93839304848494),

(12, Shelly, 9990983421, 134 Bryant Ave, NULL);

INSERT INTO Products (Barcode, Name, ProductID, Price, Vendor, Description)

VALUES:

(0131313, Soap, 3232, 6.99, Dove, Hygiene product),

(1257389, Toothpaste, 6543, 2.99, Colgate, Hygiene product),

(0120249, Milk, 0122, 1.99, Trumoo, Dairy product),

(3323554, Bacon, 2124, 4.99, Jim’s Butcher Shop, Pork product),

(0123443, TV, 7839, 149.99, Samsung, Electronics: television set);

INSERT INTO Purchase (purchaseID, customerID, productID, Date, Quantity, Price, Tax Rate, Total Cost)

VALUES:

(1, 12, 3232, August 19, 2018, 1, 6.99, 0.09, 7.62),

(2, 12, 0122, August 19, 2018, 1, 1.99, 0.09, 2.17),

(3, 24, 0122, September 17, 2018, 1, 1.99, 0.09, 2.17),

(4, 78, 2124, September 24, 2018, 1, 4.99, 0.09, 5.44),

(5, 78, 7839, September 24, 2018, 1, 149.99, 0.09, 163.49),

(6, 983, 6543, October 10, 2018, 1, 2.99, 0.09, 3.26),

(7, 15, 3232, October 11, 2018, 1, 6.99, 0.09, 7.62),

(8, 15, 0122, October 11, 2018, 1, 1.99, 0.09, 2.17),

(9, 15, 2124, October 11, 2018, 1, 4.99, 0.09, 5.44),

(10, 15, 6543, October 11, 2019, 1, 2.99, 0.09, 3.26);