**Manage Product:**

**Common Case: Product added successfully!**

A. Name: Managing products in the systems – can add new and update

F. Related use cases: Updating other products and adding users

G. Steps: Describe each step using a 2-column format

Steps:

|  |  |
| --- | --- |
| Actor | System |
| Choose command “Manages Product”  Main Screen: | Display “Manage Product” screen  “Add Product” screen: |
| Load Products which have already been inputed  Update the information which should be changed | Update the information in the system |
| Input data the click “Save” button | Hide “Manage Product” Screen and display “Add Product Successfully” screen: |
| Click “OK” Button | Display “Main” Screen |

**Exception: No Product ID**

|  |  |
| --- | --- |
| Actor | System |
| Choose command “Manage Product”  Main Screen: | Display “Manage Product” screen  “Add Product” screen: |
| Input data the click “Save” button | Hide “Manage Product” Screen and display “Product ID cannot be null!” screen: |
| Click “OK” Button | Return to “Main” Screen |

**Manage Customer:**

**Common Case: Customer added successfully!**

A. Name: Manage customers in the systems – can either add or change customers

F. Related use cases: Updating other customer information and adding purchases to customers

G. Steps: Describe each step using a 2-column format

Steps

|  |  |
| --- | --- |
| Actor | System |
| Choose command “Manages Customer”  Main Screen: | Display “Manage Customer” screen  “Manage Customer” screen: |
| Load Customer which have already been inputed  Update the information which should be changed | Update the information in the system |
| Input data the click “Save” button | Hide “Manage Customer” Screen and display “Add Product Successfully” screen: |
| Click “OK” Button | Display “Main” Screen |

**Exception: Null CustomerID!**

|  |  |
| --- | --- |
| Actor | System |
| Choose command “Manage Customer”  Main Screen: | Display “Manage Customer” screen  “Manage Customer” screen: |
| Input data the click “Save” button | Hide “Add Customer” Screen and display “CustomerID cannot be null” screen: |
| Click “OK” Button | Display “Main” Screen |

**Manage Purchase:**

**Common Case: Purchase added successfully!**

A. Name: Manage transactions in the systems – allow adding and updating

F. Related use cases: Updating other transactions and adding customers to purchase

G. Steps: Describe each step using a 2-column format

Steps:

|  |  |
| --- | --- |
| Actor | System |
| Choose command “Add Purchase”  Main Screen: | Display “Add Purchase” screen  “Add Purchase” screen: |
| Input data the click “Save” button | Hide “Save Product” Screen and display “Save Product Successfully” screen: |
| Load Product which have already been inputed  Update the information which should be changed | Update the information in the system |
| Click “OK” Button | Display “Main” Screen |

**Exception: Invalid customer ID!**

|  |  |
| --- | --- |
| Actor | System |
| 1.Choose command “Add Purchase”  Main Screen: | 1.Display “Add Purchase” screen  “Add Purchase” screen: |
| 2.Input data the click “Save” button | 2.Hide “Add Purchase” Screen and display “PurchaseID cannot be null! ” screen: |
| 3.Click “OK” Button | 3.Display “Main” Screen |

Data Access:

* We must use a Data Access layers to run the client using an offline server. We are able to connect the two using a common port and Sockets. By connecting the ports with load and save methods, we can load data from the database and then overwrite it in the database as well. The client requests a load and the server retrieves the information the client will then rewrite and save the data.

SQL for Data Base:

CREATE TABLE "Customers" (

"CustomerID" INTEGER,

"Name" TEXT,

"Address" TEXT,

"Phone" TEXT,

PRIMARY KEY("CustomerID")

);

CREATE TABLE "Products" (

"ProductID" INTEGER,

"Name" TEXT,

"Price" INTEGER,

"Quantity" INTEGER,

PRIMARY KEY("ProductID")

);

CREATE TABLE "Purchases" (

"PurchaseID" INTEGER,

"ProductID" INTEGER,

"CustomerID" INTEGER,

"Price" INTEGER,

"Quantity" INTEGER,

"Cost" INTEGER,

"Tax" INTEGER,

"Total" INTEGER,

"Date" TEXT

);

CREATE TABLE "Users" (

"Username" TEXT,

"Password" TEXT,

"Fullname" TEXT,

"Usertype" INTEGER,

PRIMARY KEY("Username")

)