Project 2

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After the first implementation of the store management system (with a local database),

we want to redesign it using a client/server architecture. We can start by rewriting the

user stories:

- As a user, I want to add a new product or update a current product in the system.

- As a user, I want to add a new customer or update a current customer in the system.

- As a user, I want to add a new purchase or update a current purchase in the system.

1. Rewrite two common use cases for each user story. Sketch the screens the system should display in each use case.
   1. Add/update products

|  |  |
| --- | --- |
| 1. Click “add/update Products”   A screenshot of a cell phone  Description automatically generated | 1. Display “add/update Products” screen   A screenshot of a cell phone  Description automatically generated |
| 1. Type ProductID, then click “Load Product” button   A screenshot of a cell phone  Description automatically generated | 1. Load data of the product with the given ProductID   A screenshot of a cell phone  Description automatically generated |
| 1. Edit the information for the product and click “Save Product” button   A screenshot of a cell phone  Description automatically generated | 1. Hide “Manage Products” screen and display “Product Saved Successfully” message |
| 1. Click on “OK” button | 1. Display Main Screen |

* 1. Add/update customer

|  |  |
| --- | --- |
| 1. Click “Add/update customer”   A screenshot of a cell phone  Description automatically generated | 1. Display “Add/update Customers” screen   A screenshot of a cell phone  Description automatically generated |
| 1. Input a valid CustomerID, then click “Load Customer” button   A screenshot of a cell phone  Description automatically generated | 1. Load data for the customer with the specified CustomerID   A screenshot of a cell phone  Description automatically generated |
| 1. Edit the information for the customer and click “Save Customer” button   A screenshot of a cell phone  Description automatically generated | 1. Hide “Manage Customers” screen and display “Customer Saved Successfully” message |
| 1. Click on “OK” button | 1. Display Main Screen |

* 1. Add/update product

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. click “Add/update Purchases”   A screenshot of a cell phone  Description automatically generated | 1. Display “Manage Purchases” screen   A screenshot of a cell phone  Description automatically generated |
| 1. Input a valid PurchaseID, then click “Load Purchase” button   A screenshot of a cell phone  Description automatically generated | 1. Load data for the purchase with the specified PurchaseID   A screenshot of a cell phone  Description automatically generated |
| 1. Edit the information for the purchase and click “Save Purchase” button   A screenshot of a cell phone  Description automatically generated | 1. Hide “Manage Purchases” screen and display “Purchase Saved Successfully” message |
| 1. Click on “OK” button | 1. Display Main Screen |

**Database Design**

﻿ ﻿CREATE TABLE "Products" (

"ProductID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"Name" TEXT NOT NULL,

"Price" REAL NOT NULL,

"Quantity" REAL NOT NULL

)

﻿ ﻿CREATE TABLE "Customers" (

"CustomerID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"Name" TEXT NOT NULL,

"Phone" INTEGER,

"Address" TEXT

)

﻿ ﻿CREATE TABLE "Purchases" (

"PurchaseID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"ProductID" INTEGER NOT NULL,

"CustomerID" INTEGER NOT NULL,

"PurchaseDateTime" TEXT NOT NULL,

"Price" REAL NOT NULL,

"Quantity" REAL NOT NULL,

"Cost" REAL NOT NULL,

"Tax" REAL NOT NULL,

"TotalCost" REAL NOT NULL

)

**Inserting Data into Tables**

﻿INSERT INTO Products

VALUES

(1, '1% Milk', 3.49, 45),

(2, 'Unsalted Butter', 2.49, 100),

(3, 'Cheezits', 5.45, 20),

(4, 'Craft Button Kit', 2.25, 15),

(5, 'Pumpkin Carving Kit', 3.49, 15);

﻿INSERT INTO Customers

VALUES

(1, 'Miles Edgeworth', 3333333333, '123 Mulberry St'),

(2, 'Phoenix Wright', 1111112222, '123 Bulberry St'),

(3, 'Maya Fey', 1234567890, '123 Muffin Ln'),

(4, 'Mia Fey', NULL, NULL),

(5, 'Winston Payne', NULL, NULL);

INSERT INTO Purchases

VALUES

(1, 1, 1, '10-06-2019', 10.99, 4.25, 5.50, 2.50, 8.00),

(2, 1, 1, '10-07-2019', 2.99, 4.25, 5.50, 2.50, 8.00),

(3, 1, 1, '10-08-2019', 3.99, 4.25, 5.50, 2.50, 8.00),

(4, 1, 1, '10-09-2019', 3.99, 4.25, 5.50, 2.50, 8.00),

(5, 1, 1, '10-10-2019', 4.99, 4.25, 5.50, 2.50, 8.00),

(6, 1, 1, '10-11-2019', 5.99, 4.25, 5.50, 2.50, 8.00),

(7, 1, 1, '10-12-2019', 6.99, 4.25, 5.50, 2.50, 8.00),

(8, 1, 1, '10-13-2019', 7.99, 4.25, 5.50, 2.50, 8.00),

(9, 1, 1, '10-14-2019', 8.99, 4.25, 5.50, 2.50, 8.00),

(10, 1, 1, '10-15-2019', 9.99, 4.25, 5.50, 2.50, 8.00);