USE CASE DIAGRAMS

Adding a new product into the system (common)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add product”   Main Screen: | 1. Display “Add Product” screen   “Add Product” screen: |
| 1. Input data then click “Add” button   “Add Product” screen with data: | 1. Hide “Add Product” screen and display “Added Product Success: screen.   Success screen: |
| 1. Click on “OK” button | 1. Display “Main” screen |

Adding a new product into the system (exception)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add product”   Main Screen: | 1. Display “Add Product” screen   “Add Product” screen: |
| 1. Input data then click “Cancel” button   “Add Product” screen with data: | 1. Display “Main” screen |

Adding a new customer into the system (common)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add Customer”   Main Screen: | 1. Display “Add Customer” screen   “Add Customer” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Input data then click “Add” button   “Add Customer” screen with data:  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Customer” screen and display “Added Customer Success: screen.   Success screen: |
| 1. Click on “OK” button | 1. Display “Main” screen |

Adding a new customer into the system (exception)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add Customer”   Main Screen: | 1. Display “Add Customer” screen   “Add Customer” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Input data then click “Cancel” button   “Add Customer” screen with data:  A screenshot of a cell phone  Description automatically generated | 1. Display “Main” screen |

Recording a purchase from a customer (common)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add Purchase”   Main Screen: | 1. Display “Add Purchase” screen   “Add Purchase” screen:  A screenshot of a social media post  Description automatically generated |
| 1. Input data then click “Add” button   “Add Purchase” screen with data:  A screenshot of a social media post  Description automatically generated | 1. Hide “Add Purchase” screen and display “Added Purchase Success: screen.   Success screen: |
| 1. Click on “OK” button | 1. Display “Main” screen |

Recording a purchase from a customer (exception)

|  |  |
| --- | --- |
| Actor | System |
| 1. Choose command “Add Purchase”   Main Screen: | 1. Display “Add Purchase” screen   “Add Purchase” screen:  A screenshot of a social media post  Description automatically generated |
| 1. Input data then click “Cancel” button   “Add Purchase” screen with data:  A screenshot of a social media post  Description automatically generated | 1. Display “Main” screen |

ENTITY RELATIONSHIP DIAGRAMS

Products(**productid**, name, price, quantity, vendor, description)

Customers(**customerid**, name, address, phone, payment info)

Purchase(**purchaseid**, customerid, productid, date time, quantity, price, tax, total cost)

Customers

Products

Purchase

DATABASE DESIGN

![A screenshot of a cell phone

Description automatically generated]()

TABLE CREATION

﻿﻿CREATE TABLE "Customers" (

"CustomerID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"Name" TEXT,

"Address" TEXT,

"Phone" TEXT,

"Payment Info" TEXT

);

﻿CREATE TABLE "Products" (

"ProductID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"Name" TEXT,

"Price" REAL,

"Quantity" INTEGER,

"Vendor" TEXT,

"Description" TEXT

);

﻿CREATE TABLE "Purchase" (

"PurchaseID" INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT UNIQUE,

"CustomerID" INTEGER,

"ProductID" INTEGER,

"Date Time" INTEGER,

"Quantity" INTEGER,

"Price" REAL,

"Tax" REAL,

"Total Cost" REAL

);

INSERTS

INSERT INTO "main"."Customers"("CustomerID","Name","Address","Phone","Payment Info") VALUES (1,"Tristan Scott","123 Sesame Street","1234567890","Visa #5555555555"), (2,"Susan Pearce","222 Baker Street", "18885555555", "Mastercard #12344323"), (3,"Larry Smith","454 West Street","1234332112","Visa #1111111111"), (4,"Mary Smith","991 East Street","8675309","Visa #222222222"), (5,"Gerry White","867 Auburn Street","8888888888","Visa #100023202");

INSERT INTO main.Products ("ProductID", "Name", "Price", "Quantity", "Vendor", "Description") VALUES (1, "Apple iPhone", 1999.00, 10, "Apple Inc.", "Latest model."), (2, "Google Pixel", 1500.00, 20, "Google Inc.", "Latest model, 10GB"), (3, "Samsung Galaxy", 999.00, 25, "Samsung", "Previous model."), (4, "Asus Laptop", 500.00, 5, "Asustek", "Upgraded edition"), (5, "Xbox One", 300.00, 10, "Microsoft Corp.", "1TB HDD.");

INSERT INTO "main"."Purchase" ("PurchaseID", "CustomerID", "ProductID", "Date TIme", "Quantity", "Price", "Tax", "Total Cost") VALUES (1, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00), (2, 3, 4, 12324234213, 2, 2999.99, 199.00, 3000.00), (3, 2, 1, 123123124213, 2, 1999.99, 9.00, 2000.00), (4, 5, 2, 1234321213, 2, 9.99, .90, 10.00), (5, 3, 2, 12312313, 2, 99.99, 9.00, 100.00), (6, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00), (7, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00), (8, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00), (9, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00), (10, 1, 1, 1234213, 2, 999.99, 99.00, 1000.00);