Avery Hyman 903713261

Project 1

As a user, I want to add a new product into the system.

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Product”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Product” screen   “Add Product” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert product info then click “Add” button   “Add Product” screen  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Product” screen and display “Add Product Successfully” screen   “Add Product Successfully” screen: |
| 1. Click on “Ok” button | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

As a user, when I add a product into the system with the same ProductID as another product an error should return.

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Product”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Product” screen   “Add Product” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert product info then click “Add” button   “Add Product” screen  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Product” screen and display “Add Product failed” screen   “Add Product failed” screen: |
| 1. Click on “Ok” button | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

As a user, I want to add a new customer into the system.

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Customer”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Customer” screen   “Add Customer” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert customer info then click “Add” button   “Add Customer” screen  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Customer” screen and display “Add Customer Successfully” screen   “Add Customer Successfully” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Click on “Ok” button   A screenshot of a cell phone  Description automatically generated | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

As a user, I want to add a new customer into the system with the same CustomerID as someone else an error should occur.

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Customer”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Customer” screen   “Add Customer” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert customer info then click “Add” button   “Add Customer” screen  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Customer” screen and display “Add Customer Successfully” screen   “Add Customer Successfully” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Click on “Ok” button   A screenshot of a cell phone  Description automatically generated | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

As a user, I want to record a purchase from a customer into the system.

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Order”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Order” screen   “Add Order” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert customer info then click “Add” button   “Add Order” screen:  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Order” screen and display “Add Order Successfully” screen   “Add Order Successfully” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Click on “Ok” button   A screenshot of a cell phone  Description automatically generated | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

As a user, I want to record a purchase from a customer into the system, and if I .

|  |  |
| --- | --- |
| **Actor** | **System** |
| 1. Choose command “Add Order”   Main Screen:  A screenshot of a cell phone  Description automatically generated | 1. Display “Add Order” screen   “Add Order” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Insert customer info then click “Add” button   “Add Order” screen:  A screenshot of a cell phone  Description automatically generated | 1. Hide “Add Order” screen and display “Add Order Successfully” screen   “Add Order Successfully” screen:  A screenshot of a cell phone  Description automatically generated |
| 1. Click on “Ok” button   A screenshot of a cell phone  Description automatically generated | 1. Display “Main menu” Screen   “Main menu” screen:  A screenshot of a cell phone  Description automatically generated |

Design the database physically using SQL, i.e., write SQL code to create the tables for those relations.

﻿CREATE TABLE "Customers" (

"CustomerId" INTEGER NOT NULL,

"Name" VARCHAR(50),

"Phone" VARCHAR(50),

"Address" VARCHAR(50),

PRIMARY KEY("CustomerId")

);

﻿ ﻿CREATE TABLE "Products" (

"ProductId" INTEGER NOT NULL,

"Name" VARCHAR(50),

"Price" DOUBLE,

"Quantity" DOUBLE,

PRIMARY KEY("ProductId")

);

﻿ ﻿CREATE TABLE "Purchases" (

"PurchaseId" INTEGER NOT NULL,

"ProductId" INTEGER NOT NULL,

"CustomerId" INTEGER NOT NULL,

"Quantity" INTEGER,

"Price" DOUBLE,

"Cost" DOUBLE,

"Tax" DOUBLE,

"Total" DOUBLE,

"Date" VARCHAR(50),

FOREIGN KEY("ProductId") REFERENCES "Products"("ProductId"),

PRIMARY KEY("PurchaseId"),

FOREIGN KEY("CustomerId") REFERENCES "Customers"("CustomerId")

);

Data is in data base file