

## Project 1 Design

### Use Cases:

- 1.a.) As a user, I want to add a new Product to the system.
- 1.b.) As a user, I want to add a new Product to the system without a name.
- 2.a.) As a user, I want to add a new customer into the system.
- 2.b.) As a user, I want to add an existing customer into the system.
- 3.a.) As a user, I want to add a purchase from a customer into the system.
- 3.b.) As a user, I want to add a purchase from a customer that is not in the system.

### Screens:

Name: Adding a new product into the system

Steps:

Actor	System
<p>1. Choose command "Add Product"</p> <p>Main screen:</p> <p style="text-align: center;"><b>Store Management System</b></p> <p><u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u></p>	<p>2. Display "Add Product"</p> <p>"Add Product" screen:</p> <p><b>Add Product:</b> Product ID: Name: Price: Quantity: Vendor: Description:</p> <p style="text-align: right;"><u>[Add]</u>   <u>[Cancel]</u></p>
<p>3. Input data and click "Add" button</p> <p>"Add Product" screen with data</p> <p><b>Add Product:</b> Product ID: 100 Name: Apple iPhone 11 Price: 1999.99 Quantity: 10 Vendor: Apple Inc. Description: Latest version. Color: Red.</p> <p style="text-align: right;"><u>[Add]</u>   <u>[Cancel]</u></p>	<p>4. Hide "Add Product" screen and display "Add product successfully" screen</p> <p>"Product added" screen:</p> <p style="text-align: center;"><b>Product added successfully!</b></p> <p style="text-align: right;"><u>[Ok]</u></p>

5. Click on “Ok” button	6. Display “Main” screen  Main screen:  <div style="text-align: center;"> <b>Store Management System</b>   <u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u> </div>
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Name: Adding a new customer into the system  
Steps:

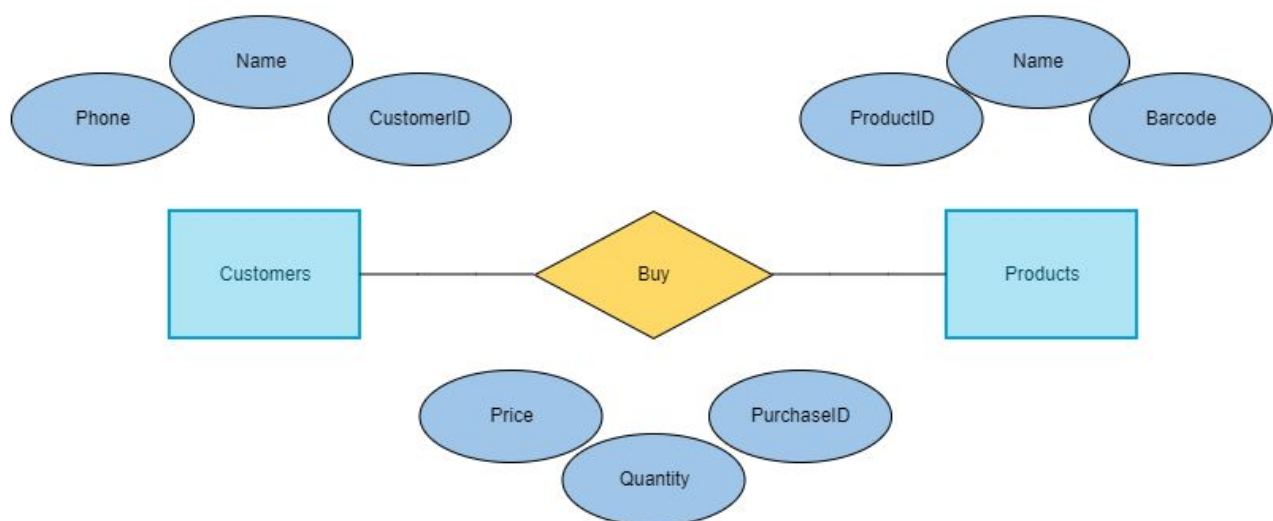
Actor	System
1. Choose command “Add Customer”  Main screen:  <div style="text-align: center;"> <b>Store Management System</b>   <u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u> </div>	2. Display “Add Customer”  “Add Customer” screen:  <b>Add Customer:</b> Customer ID: Name: Address: Phone: Payment info:  <div style="text-align: center;"> <u>[Add]</u>   <u>[Cancel]</u> </div>
3. Input data and click “Add” button  “Add Customer” screen with data  <b>Add Customer:</b> Customer ID: 101 Name: Bob Jones Address: 123 Auburn Ln Phone: 123-223-1234 Payment info: visa 1234  <div style="text-align: center;"> <u>[Add]</u>   <u>[Cancel]</u> </div>	4. Hide “Add Customer” screen and display “Add Customer successfully” screen  “Customer added” screen:  <div style="text-align: center;"> <b>Customer added successfully!</b>   <u>[Ok]</u> </div>

5. Click on “Ok” button	6. Display “Main” screen  Main screen:  <div style="text-align: center;"> <b>Store Management System</b>   <u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u> </div>
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Name: Adding a new purchase into the system  
Steps:

Actor	System
1. Choose command “Add Purchase”  Main screen:  <div style="text-align: center;"> <b>Store Management System</b>   <u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u> </div>	2. Display “Add Purchase”  “Add Purchase” screen:  <b>Add Purchase:</b> Purchase ID: Customer ID: Product ID: Quantity: Price: Total cost: Tax: Time: Date:  <div style="text-align: right;"> <u>[Add]</u>   <u>[Cancel]</u> </div>

<p>3. Input data and click “Add” button</p> <p>“Add Purchase” screen with data</p> <p><b>Add Purchase:</b>  Purchase ID:  Customer ID:  Product ID:  Quantity:  Price:  Total cost:  Tax:  Time:  Date:</p> <p><u>[Add]</u>    <u>[Cancel]</u></p>	<p>4. Hide “Add Purchase” screen and display  “Add Purchase successfully” screen</p> <p>“Purchase added” screen:</p> <p><b>Purchase added successfully!</b></p> <p><u>[Ok]</u></p>
<p>5. Click on “Ok” button</p>	<p>6. Display “Main” screen</p> <p>Main screen:</p> <p><b>Store Management System</b></p> <p><u>[Add Product]</u>   <u>[Add Customer]</u>   <u>[Add purchase]</u></p>



Products(productID,Barcode, name, expiration date, price, quantity, supplier)

Customers(customerID, Name, address, phone, payment info)

Purchase(purchaseID, customerID, productID, date, time, quantity, price, tax, total cost)

[Customers]	----- {Buy} -----	[Products]
-customerID	-PurchaseID	-productID
-Name	-Quantity	-name
-address	-Price	-barcode
-Phone	-Total cost	-expiration date
-Payment info	-Tax	-price
	-Time	-quantity
	-Date	-supplier
	-CustomerID	
	-ProductID	

```
CREATE TABLE "Products" (  
  "ProductID" INTEGER NOT NULL,  
  "Name" TEXT,  
  "Barcode" INTEGER,  
  "ExpirationDate" INTEGER,  
  "Price" REAL,  
  "Quantity" INTEGER,  
  "Supplier" TEXT,  
  PRIMARY KEY("ProductID")  
);  
INSERT INTO "main"."Products" VALUES('101','iPhone  
10','10010111','9022021','1999.99','10','Apple Inc.');
```

```
CREATE TABLE "Customers" (  
  "CustomerID" INTEGER NOT NULL,  
  "Name" TEXT,  
  "Address" TEXT,  
  "Phone" INTEGER,  
  "PaymentInfo" NUMERIC,  
  PRIMARY KEY("CustomerID")  
);  
INSERT INTO "main"."Customers" VALUES('1','Dalton Skinner','101 Auburn In','5555555555',");
```

```
CREATE TABLE "Purchase" (  
  "PurchaseID" INTEGER NOT NULL,  
  "CustomerID" INTEGER,  
  "ProductID" INTEGER,  
  "Quantity" INTEGER,  
  "Price" REAL,  
  "TotalCost" NUMERIC,  
  "Tax" INTEGER,  
  "Time" REAL,  
  "Date" INTEGER,  
  PRIMARY KEY("PurchaseID")  
);  
INSERT INTO "main"."Purchase"  
VALUES('1','1','101','1','1999.99','2025.25','58.26','1528.0','2082020');
```