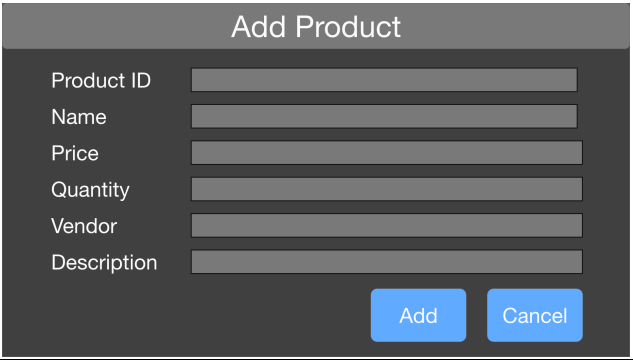
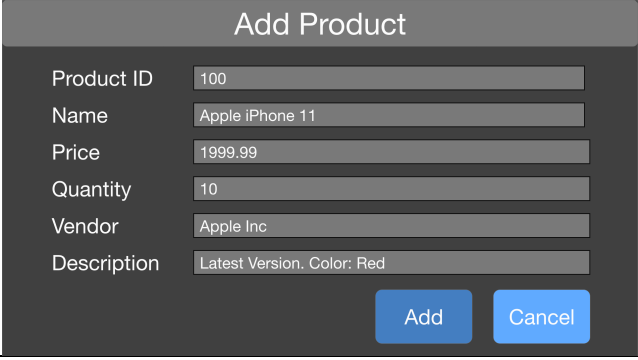
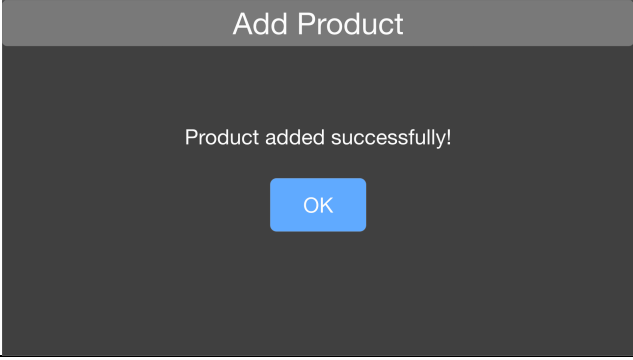


Project 1 Design

1. Common Case: As a user, I want to add a unique product into the system.

Actor	System
<p>Choose command 'Add Product'</p> 	<p>Display Add Product screen</p> 
<p>Fill in product information and click 'Add'</p> 	<p>Display confirmation screen</p> 
<p>Click OK to acknowledge confirmation</p> 	<p>Return to main screen</p> 

2. Unique Case: As a user, I want to unknowingly add a duplicate product into the system.

- All steps are the same, but a pop-up window will appear, alerting the user that they are attempting to add a duplicate product.

3. Common Case: As a user, I want to add a unique customer into the system.

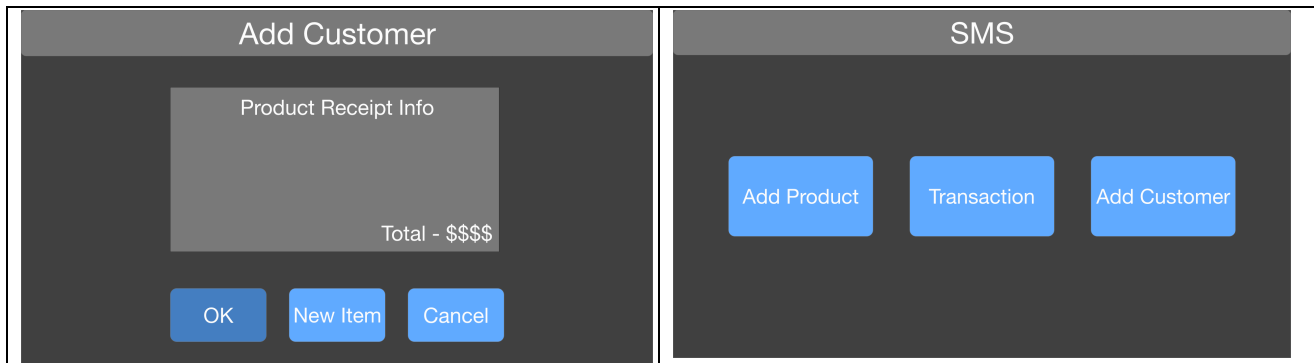
Actor	System
Choose command 'Add Customer'	Display Add Customer screen

<div>SMS</div> <div> Add Product Transaction Add Customer </div>	<div>Add Customer</div> <div> First Name Last Name Address Phone E-Mail </div> <div>Add Cancel</div>
<div>Fill in customer information and click 'Add'</div> <div>Add Customer</div> <div> First Name: Evan Last Name: Sheehan Address: 507 Callahan Drive, Auburn, AL 36830 Phone: 706-332-8736 E-Mail: res0038@auburn.edu </div> <div>Add Cancel</div>	<div>Display confirmation screen</div> <div>Add Customer</div> <div>Customer added successfully!</div> <div>OK</div>
<div>Click OK to acknowledge confirmation</div> <div>Add Customer</div> <div>Customer added successfully!</div> <div>OK</div>	<div>Return to main screen</div> <div>SMS</div> <div> Add Product Transaction Add Customer </div>

4. Unique Case: As a user, I want to unknowingly add a duplicate customer into the system.
 - a. All steps are the same, but a pop-up window will appear, alerting the user that they are attempting to add a duplicate customer.
5. Common Case: As a user, I want to record a unique purchase from a customer into the system.

Actor	System
Choose command 'Transaction'	Display CustomerID screen

<div><div>SMS</div><div><div>Add Product</div><div>Transaction</div><div>Add Customer</div></div></div>	<div><div>Transaction</div><div>Please enter the CustomerID</div><div><div></div></div><div>Enter</div></div>
Enter CustomerID and click 'Enter'	Display Transaction screen
<div><div>Transaction</div><div>Please enter the CustomerID</div><div><div>427</div></div><div>Enter</div></div>	<div><div>Transaction</div><div>ProductID</div><div><div></div></div><div>Quantity</div><div><div></div></div><div><div>New Item</div><div>Finish</div><div>Cancel</div></div></div>
Fill in transaction information and click 'Add Item' if customer is purchasing more than one item	Display refreshed Transaction screen
<div><div>Transaction</div><div>ProductID</div><div><div>78</div></div><div>Quantity</div><div><div>4</div></div><div><div>New Item</div><div>Finish</div><div>Cancel</div></div></div>	<div><div>Transaction</div><div>ProductID</div><div><div></div></div><div>Quantity</div><div><div></div></div><div><div>New Item</div><div>Finish</div><div>Cancel</div></div></div>
Click 'Finish' when finished adding items	Display confirmation screen
<div><div>Transaction</div><div>ProductID</div><div><div>36</div></div><div>Quantity</div><div><div>2</div></div><div><div>New Item</div><div>Finish</div><div>Cancel</div></div></div>	<div><div>Add Customer</div><div>Product Receipt Info</div><div><div></div></div><div>Total - \$\$\$\$</div><div><div>OK</div><div>New Item</div><div>Cancel</div></div></div>
Click OK to acknowledge confirmation	Return to main screen



6. Unique Case: As a user, I want to unknowingly add a duplicate purchaseID into the system.
 - a. All steps are the same, but a pop-up window will appear, alerting the user that they are attempting to add a duplicate purchase.

7. Design the database physically

```
CREATE TABLE "Customers" (
  "CustomerID" INTEGER NOT NULL,
  "Name"      TEXT,
  "Phone"     TEXT,
  "Address"   TEXT,
  PRIMARY KEY("CustomerID")
);
```

```
CREATE TABLE "Products" (
  "ProductID" INTEGER NOT NULL,
  "Name"      TEXT,
  "Price"     REAL,
  "Quantity"  REAL,
  PRIMARY KEY("ProductID")
);
```

```
CREATE TABLE "Purchase" (
  "PurchaseID" INTEGER NOT NULL,
  "CustomerID" INTEGER,
  "ProductID"  INTEGER,
  "Date"       TEXT,
  "Quantity"   INTEGER,
  "Price"      REAL,
  "Tax"        REAL,
  "Total Cost" REAL,
```

```
PRIMARY KEY("PurchaseID")  
);
```

5. Insert values

```
INSERT INTO Customers(CustomerID, Name, Phone, Address)  
VALUES  
(1, 'Penny', '7024832948', '132 Carman Rd'),  
(2, 'Evan', '7065739408', '1782 Midnight St'),  
(3, 'Tyler', '3345728632', '1323 Beel St'),  
(4, 'Scott', '3054832958', '45 St. Marcel St'),  
(5, 'Kyle', '3345554039', '7831 Ninth Avenue');
```

```
INSERT INTO Products  
VALUES  
(1, 'Apple', 1.99, 100),  
(2, 'Orange', 0.75, 200),  
(3, 'iPhone X', 899.99, 100),  
(4, 'Instant Pot 6Qt', 80.00, 50),  
(5, 'Screwdriver', 3.50, 100);
```

```
INSERT INTO Purchase  
VALUES  
(1, 1, 5, "October 10th, 2019", 1, 3.50, 0.09, 3.82)  
(2, 1, 4, "October 10th, 2019", 1, 80.00, 0.09, 87.20)  
(3, 2, 1, "October 10th, 2019", 3, 1.99, 0.09, 6.50)  
(4, 2, 2, "October 13th, 2019", 3, 0.75, 0.09, 2.45)  
(5, 3, 5, "October 13th, 2019", 1, 3.50, 0.09, 3.82)  
(6, 3, 4, "October 14th, 2019", 1, 80.00, 0.09, 87.20)  
(7, 4, 1, "October 25th, 2019", 3, 1.99, 0.09, 6.50)  
(8, 4, 2, "October 25th, 2019", 3, 0.75, 0.09, 2.45)  
(9, 5, 5, "October 27th, 2019", 1, 80.00, 0.09, 87.20)  
(10, 5, 3, "October 27th, 2019", 1, 899.99, 0.09, 980.98)
```