Mr. Smith is the owner of a grocery store. He has a computer and a scale. He will buy a barcode reader. He currently manages goods in his store using Excel. Each kind of goods (e.g. bread, beef, apple…) has the following information: name, barcode number, number of available units, price per unit, provider name, and provider contact information. He currently checks out his customers' orders using a hand-held calculator and writes down the receipts manually. He inputs and updates the information of the goods in his store directly to the Excel spreadsheet. He wants you to develop a software application for store management

Here are the user stories you want to support in Iteration 1:

1. As a user, I want to check out an order in store for a customer

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

3. As a user, I want to update information (e.g., price, available quantity) of a current product in the system.
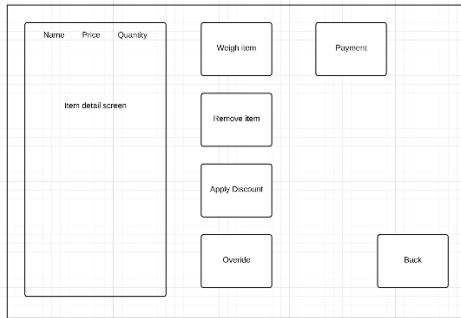
Task: Write a detailed use case for each user story. At each step, you should provide a prototyped screen sketching how the system might look and work.

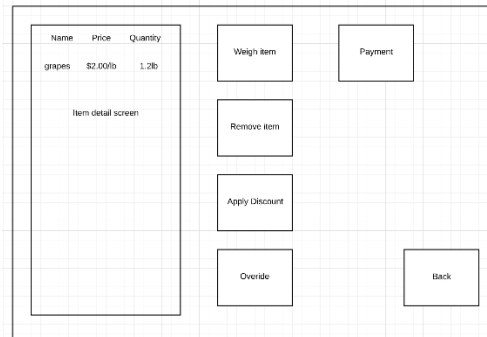1. As a user, I want to check out an order in store for a customer.
- Name: Checking out an order in store
- Actor: Cashier
- Goals: A cashier will begin checking out a customer in store by scanning/weighing each item and that item's information will automatically be transferred to the computer through the new software application. The system will prompt the cashier for methods of payment, cancelling an item, or any other situation for meeting the needs of the checkout situation.
- Pre-conditions: The cashier has the computer on and the application running. The cashier has the scale and barcode reader in working condition. The cashier has logged into the system with their cashier ID. There is a customer in the checkout line ready with items to be scanned in for checkout.
- Summary: The cashier will begin scanning/weighing every good that the customer would like to checkout. Once scanned, the system will recognize what the item is and display a brief description of the item on the screen in chronological order. This process will continue until all items have been scanned in. The cashier will select to finalize the checkout transaction and then choose the payment type. The payment will be processed and then a receipt with be printed that details all of the items that were purchased.
- Steps:

Step 1: Scan the customer's item	Step 2: Item is added to item detail screen
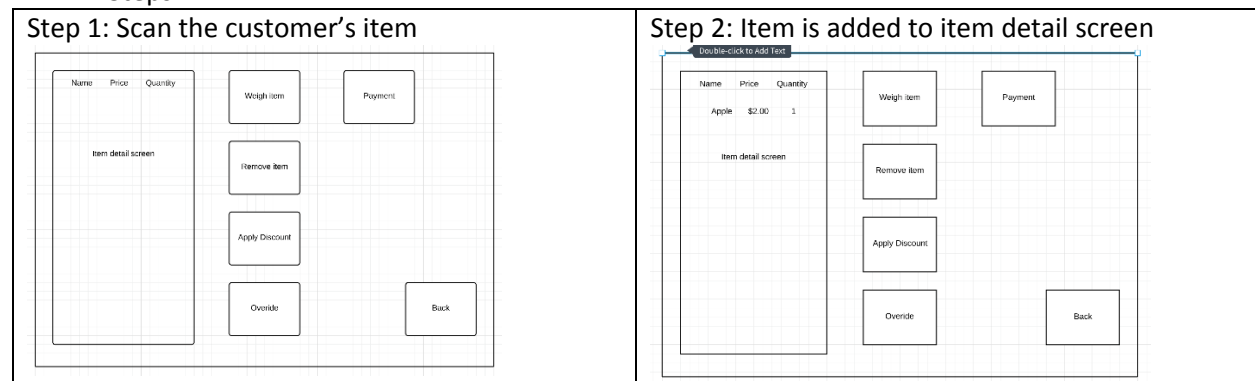
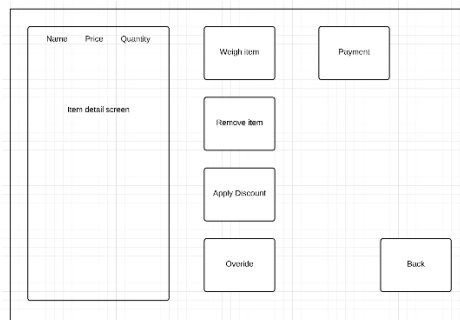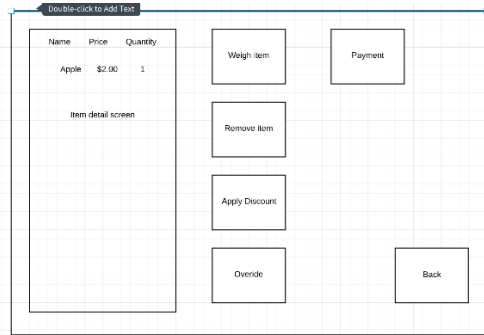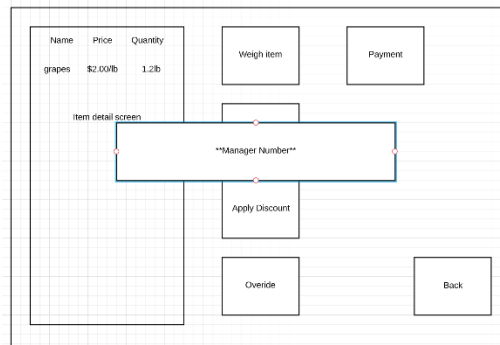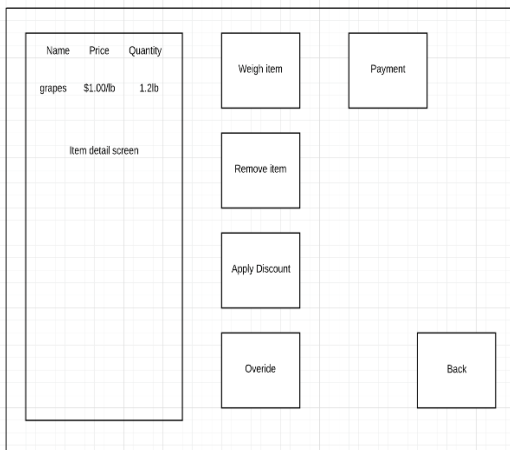|	
Step 3.1: If item needs to be weighed, the user scans the item then puts the item on the scale and selects "weigh item" button. Name Price Quantity Item detail screen Weigh item Payment Remove item Apply Discount Override Back	Step 3.2: The item ID, weight, and adjusted price are added to the item detail screen. Name Price Quantity grapes $2.00/lb 1.2lb Item detail screen Weigh item Payment Remove item Apply Discount Override Back
Step 4.1: Steps 1 through 3 are repeated for all items.	Step 4.2: Steps 1 through 3 are repeated for all items.
Step 5.1: if item needs to be removed, user selects items to be removed and then selects "remove item" button. Double-click to Add Text Name Price Quantity Apple $2.00 1 Item detail screen Weigh item Payment Remove item Apply Discount Override Back	Step 5.2: Items are removed from item detail screen. Name Price Quantity Item detail screen Weigh item Payment Remove item Apply Discount Override Back
Step 6.1: If item price needs to be adjusted/ user selects "override" button. Double-click to Add Text Name Price Quantity Apple $2.00 1 Item detail screen Weigh item Payment Remove item Apply Discount Override Back	Step 6.2: User is prompted for manger number Name Price Quantity grapes $2.00/lb 1.2lb Item detail screen Weigh item Payment **Manager Number** Apply Discount Override Back
Step 6.3: Manager number is inputted Name Price Quantity grapes $2.00/lb 1.2lb Item detail screen Weigh item Payment ~~~~~~~~~~~~~~~~~| Apply Discount Override Back	Step 6.4: User is shown the override screen Name Price Quantity grapes $2.00/lb 1.2lb Item detail screen **enter price** Apply Back
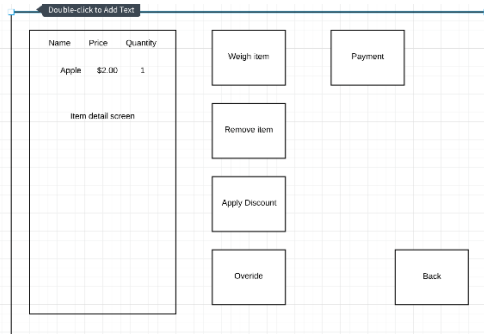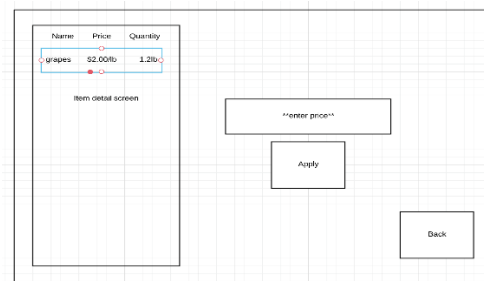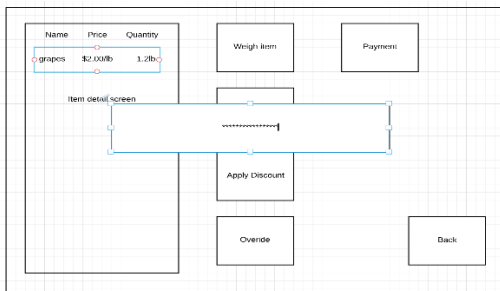
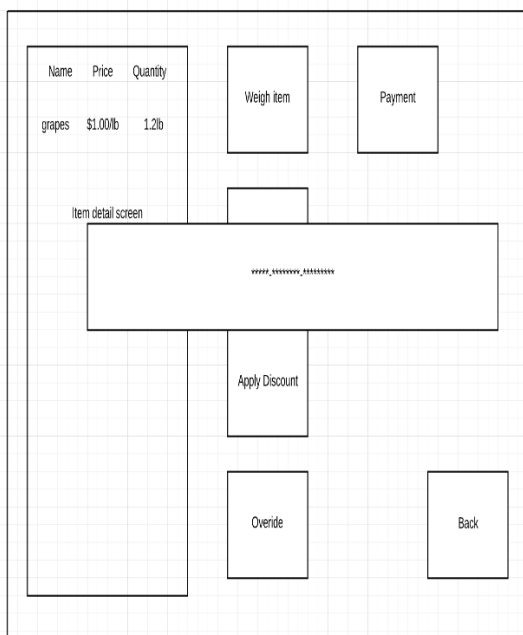| Step 6.5: User selects item to be overridden/ inputs new price	Step 6.6: The price is changed on the item detail screen. The user is shown the checkout screen
Name Price Quantity grapes $2.00/lb 1.2lb Item detail screen 1.00 Apply Back	Name Price Quantity grapes $1.00/lb 1.2lb Item detail screen Weigh item Payment Remove item Apply Discount Overide Back
Step 7.1: If discount needs to be applied the user presses "apply discount" button	Step 7.2: The user is prompted to scan discount code
Name Price Quantity grapes $1.00/lb 1.2lb Item detail screen Weigh item Payment Remove item Apply Discount Overide Back	Name Price Quantity grapes $1.00/lb 1.2lb Item detail screen Weigh item Payment Scan Discount Code Apply Discount Overide Back
Step 7.3 The user scans discount code	7.5 The system applies corresponding discount/ the user is shown the checkout screen
Name Price Quantity grapes $1.00/lb 1.2lb Weigh item Payment Item detail screen ***** ********* ********* Apply Discount Overide Back	Name Price Quantity grapes $1.00/lb 1.2lb Item detail screen Weigh item Payment Remove item Apply Discount Overide Back
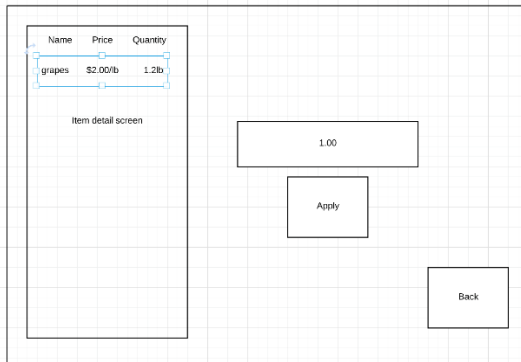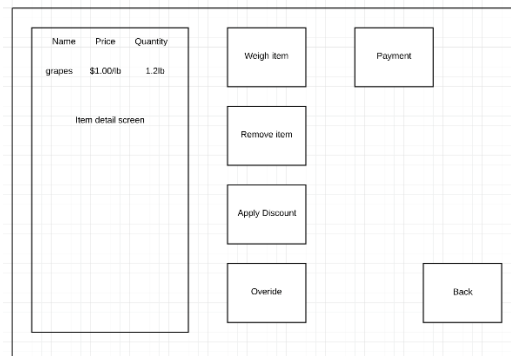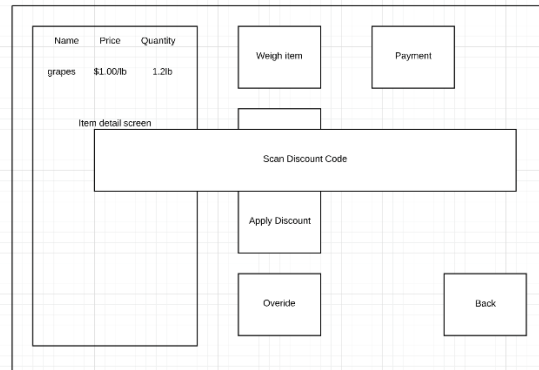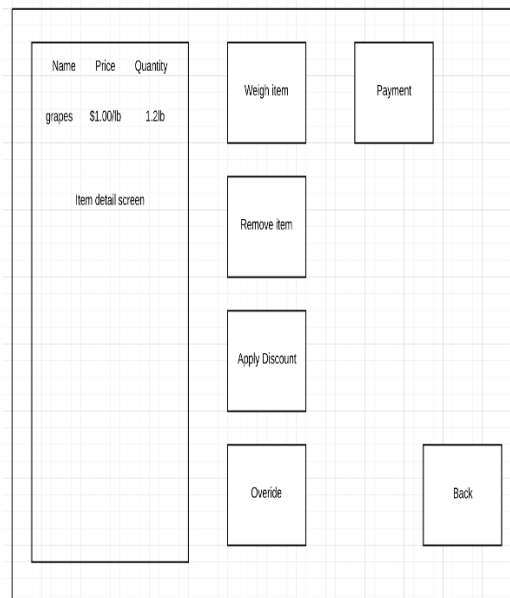
Step 8: The user selects the "Payment" button

Name	Price	Quantity
grapes	$1.00/lb	1.2lb

Item detail screen

- Weigh item
- Payment
- Remove item
- Apply Discount
- Overide
- Back

Step 9: The user is shown the payment screen

Name	Price	Quantity

Item detail screen

- Cash
- Credit / Debit
- Gift Card
- Finish
- Back

Step 10.1: If cash, the user selects the "cash" button

Name	Price	Quantity

Item detail screen

- Cash
- Credit / Debit
- Gift Card
- Finish
- Back

Step 10.2: The user is shown the cash payment screen

Name	Price	Quantity

Item detail screen

- **Amount to apply**
- Apply
- Back

Step 10.3: The user inputs the amount of cash to apply

Name	Price	Quantity

Item detail screen

- **Amount to apply**
- Apply
- Back

Step 10.4: The user is returned to the payment screen

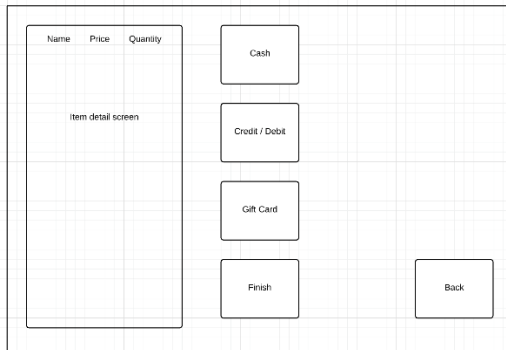| Name	Price	Quantity

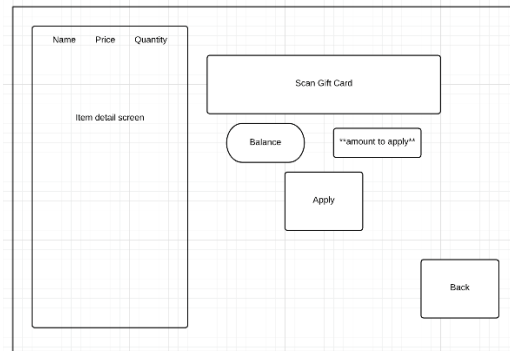Item detail screen

- Cash
- Credit / Debit
- Gift Card
- Finish
- Back

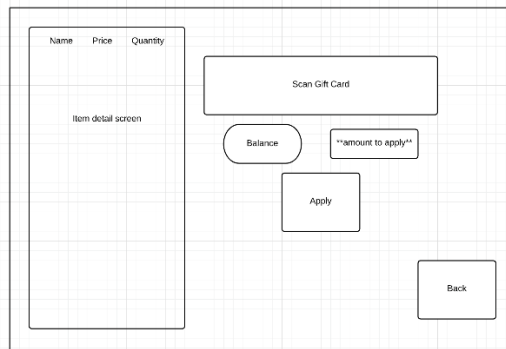| Step 11.1: If gift card , the user selects the "gift card" button	Step 11.2: The user is shown the gift card screen
Name Price Quantity Item detail screen Cash Credit / Debit Gift Card Finish Back	Name Price Quantity Item detail screen Scan Gift Card Balance **amount to apply** Apply Back
Step 11.3: The user scans the gift card to be used	Step 11.4: The gift card is looked up and the balance is shown to the user
Name Price Quantity Item detail screen Scan Gift Card Balance **amount to apply** Apply Back	Name Price Quantity Item detail screen Scan Gift Card Balance **amount to apply** Apply Back
Step 11.5: The user enters the amount to apply from the gift card/ hits "apply" button	Step 11.6: The amount to be applied is deducted from gift card and applied to total, the transaction is also shown on the item detail screen. The user is returned to the payment screen.
Name Price Quantity Item detail screen Scan Gift Card Balance **amount to apply** Apply Back	Name Price Quantity Item detail screen Cash Credit / Debit Gift Card Finish Back
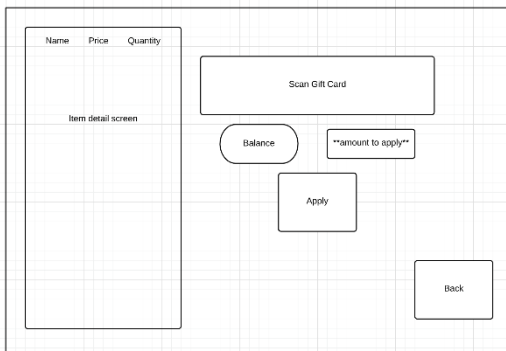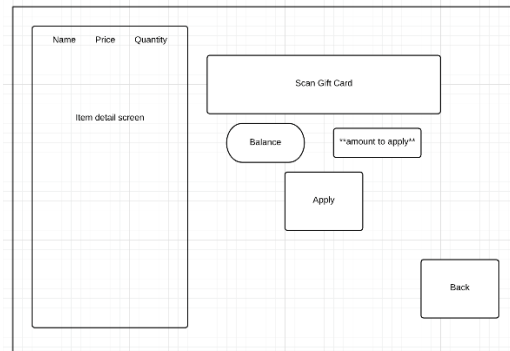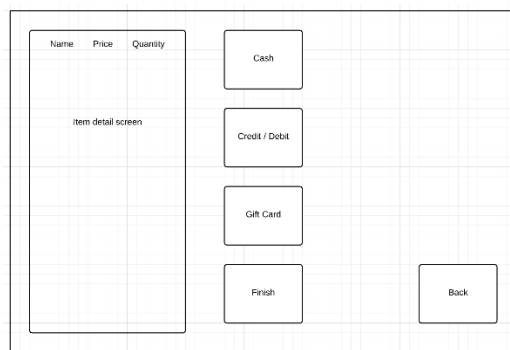
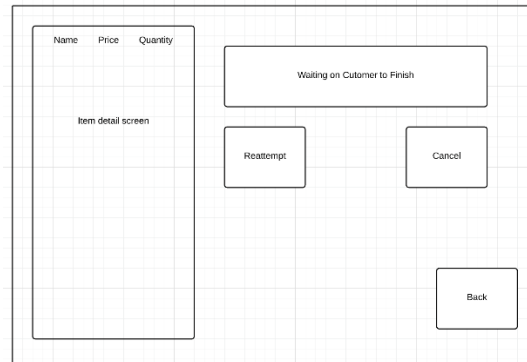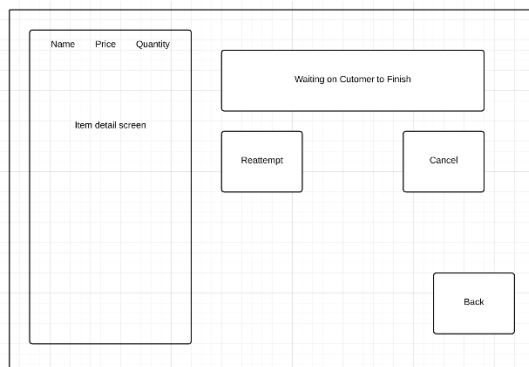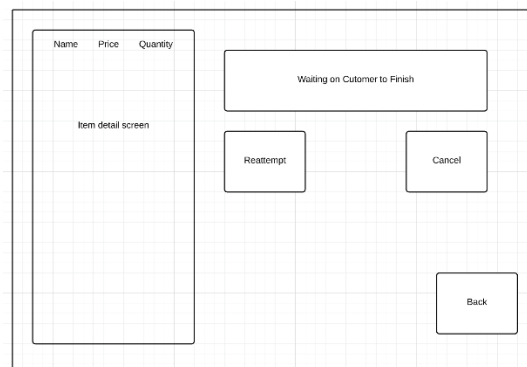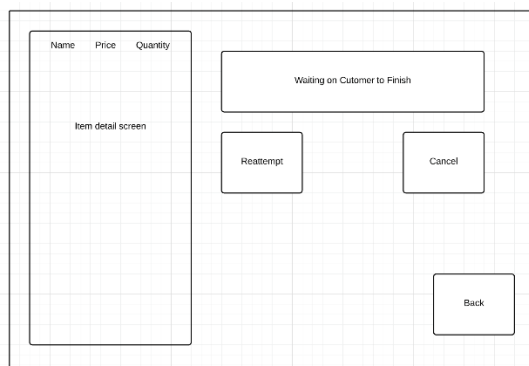|	
Step 12.1: If card, the user selects "credit/debit" button Name Price Quantity Cash Item detail screen Credit / Debit Gift Card Finish Back	Step 12.2: The user is shown the credit/debit screen. The customer is then prompted to carry out their transaction on the pin pad. Once completed the amount applied to the card is applied to the total. And the user is returned to the payment screen. Name Price Quantity Waiting on Cutomer to Finish Item detail screen Reattempt Cancel Back
Step 12.3.1: If the transaction needs to be restarted, the user selects the "reattempt" Name Price Quantity Waiting on Cutomer to Finish Item detail screen Reattempt Cancel Back	Step 12.3.2: The system reattempts the process and the user is returned to step 12.2 Name Price Quantity Waiting on Cutomer to Finish Item detail screen Reattempt Cancel Back
Step 12.3.2: If the transaction needs to be cancelled, the user selects the "cancel" button Name Price Quantity Waiting on Cutomer to Finish Item detail screen Reattempt Cancel Back	Step 12.3.3: The user is returned to the payment screen. Name Price Quantity Waiting on Cutomer to Finish Item detail screen Reattempt Cancel Back
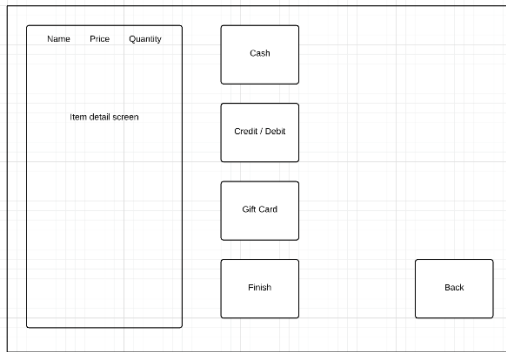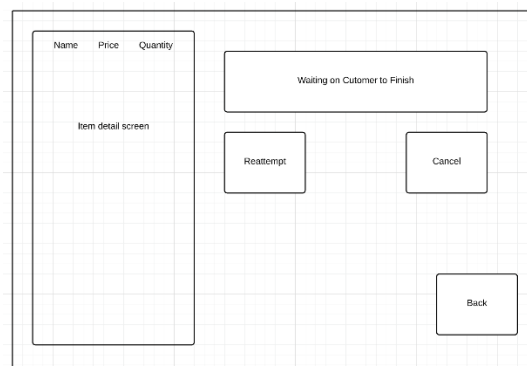
Step 13: The user is ready to finalize checkout, the user selects the "finish" button	Step 14: The items on the item detail screen are deducted from their corresponding inventories. The completed transaction is stored in memory. A receipt is printed. The user is returned to the checkout screen.
Name Price Quantity Item detail screen Cash Credit / Debit Gift Card Finish Back	Name Price Quantity Item detail screen Weigh Item Payment Remove Item Apply Discount Override Back
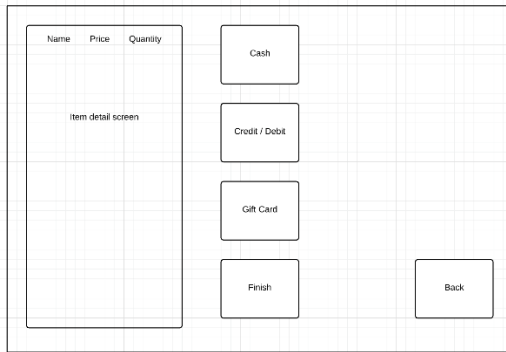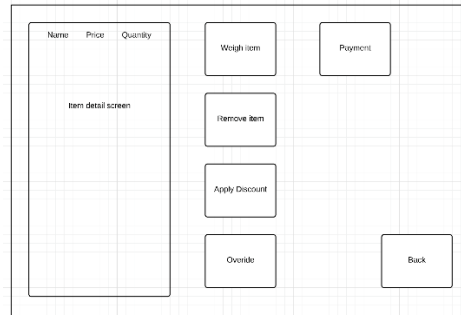
- Post-conditions: The checkout is complete and the store inventory has been updated automatically in the system to account for the items that were just sold. The cashier is still logged into the system for preparation to checkout the next customer.

2. As a user, I want to add a new product into the system.
- Name: Adding a new product
- Actor: Manager
- Goals: A manager has a need to add an additional product into the system whenever there is a new product on the market or one has simply not been added yet. Adding it to the system will store the item permanent into the database so it will not have to be added again. A manager will log into their account within the system and manually enter the item's information because they will not be able to scan/weigh the item (the system does not recognize it yet). The manager will upload the item into the system so that during future checkouts if a customer buys the item then the system will recognize the item's details.
- Pre-conditions: The manager is logged into the system. The item they are trying to add into the system is not already present within the system.
- Summary: The manager has a need to add a new item into the system so that for future checkouts it will be recognizable by the system scanning method. The manager is logged in and selects the option to add a new item to the system. The new entry screen will open and the manager will enter in the item details to the system fields. The manager will save the new item in the system so that it will not have to be re-added again. Now, this new item will be recognizable through the barcode scanning method when checking out a customer.
- Steps:

Step 1: Choose "Add New Product" Button	Step 2: Display Product Repository Screen
Manager ID # Add New Product Manage Products	Manager ID # Name Price Quantity Search Add **Product Listings** Back

Step 3.1: To search for item, select "Search" and begin typing an item name.	Step 4.1: Display updated Product Repository Screen
Manager ID # Name Price Quantity Apples Add **Product Listings** Back	Manager ID # Showing Results for "Apples" Apples Add | Name	Price	Quantity
Green Apples	$2.00	200+
Red Apples	$2.00	200+
Sliced Apples	$3.50	100+	 Back

Step 5: Choose "Add" Button	Step 6: Display "Adding Product" Screen
Manager ID # Name Price Quantity Search Add **Product Listings** Back	Manager ID # **Adding Product: "Product"** **Name:** **Product ID:** **Manufacturer:** **Price:** **Other Notes:** Back

Step 7: Type in text to the fields of the product and choose apply.	Step 8: Verify added product (that it has not been added previously) and show accepted or denied screen
Manager ID # **Adding Product: "Product"** **Name:** Product **Product ID:** Product0551452 **Manufacturer:** Product LLC **Price:** $10.99 **Other Notes:** **Apply** Back	Manager ID # **Product: "Product"** **Successfully Added!** Back Manager ID # **Product: "Product"** **Not Added, "Product" Exists in the system already.** Back

Step 9: Repeat Steps 5 & 7 for any additional products.	Step 10: Repeat Steps 6 & 8 for any additional products.

Manager ID #

Name   Price   Quantity

Search

Add

Product Listings

Back

Manager ID #

Product: "Product"

Successfully Added!

Back

- Post-conditions: The manager has successfully made a new entry into the system. They are still logged in so they can choose to add another item during this system or exit. The new product is now recognizable by the system for whenever it is scanned in next. Now, the product's details will appear just like every other product when it is scanned.

3. As a user, I want to update information of a current product in the system.
- Name: Updating a product
- Actor: Manager
- Goals: A manager will need to update information of a product from time to time. Possibly the manufacturer has changed name/address or the product is out of stock. In order for the system to reflect these changes upon checkout, the manager will locate the item in the system and choose to edit the appropriate fields that need to be changed. The goal here is to successfully make edits to an already present item in the system so that for future transactions the new information is displayed and the old information is discarded.
- Pre-conditions: The manager is logged into the system. The item they are trying to update is already located within the system.
- Summary: In addition to being able to upload a new item into the system, the manager may need to simply update an item that is already recognized by the system. The manager may want to make changes to price, distributor, availability, or other things. They will select the item they wish to update and then select the fields that need changes made to them. The manager will choose to save the changes made so that the item will be recognized with the updates next time it is scanned during checkout.
- Steps:

Step 1: Choose "Manage Products" Button

Manager ID #

Add New Product

Manage Products

Step 2: Display Product Repository Screen

Manager ID #

Name   Price   Quantity

Search

Product Listings

Back

Step 3: Select to search for an item.

Manager ID #

Name   Price   Quantity

Apples

Product Listings

Back

Step 4: Display updated Product Repository Screen

Manager ID #   Showing Results for "Apples"

Apples

Name	Price	Quantity
Green Apples	**$2.00**	**200+**
Red Apples	**$2.00**	**200+**
Sliced Apples	**$3.50**	**100+**

Back

Step 5: Select desired item from product list.

Manager ID #   Showing Results for "Apples"

Apples

Name	Price	Quantity
Green Apples	**$2.00**	**200+**
Red Apples	**$2.00**	**200+**
Sliced Apples	**$3.50**	**100+**

Back

Step 6: Display specific item Screen

Manager ID #

Product: "Green Apples"

Green Apples

Name: Green Apples

Product ID: 555964875

Manufacturer: Apples LLC

Price: $2.00

Other Notes: Fresh From the Garden

Apply   Back

Step 7: Make necessary changes and select "Apply".

Manager ID #

Product: "Green Apples"

Green Apples

Name: Green Apples

Product ID: 555964875

Manufacturer: Apples LLC

Price: $2.99

Other Notes: Fresh From Kentucky

Apply   Back

Step 8: Re-Display Product Repository Screen

Manager ID #

Name   Price   Quantity

Search

Product Listings

Back

- Post-conditions: The manager has successfully made updates to an already existing item in the system. They are till logged in so they can choose to make changes to another item during this system or exit. The product now has new details and the old details have been discarded. Next time the item is scanned, the new entry details will be associated with the item.