Name: Mike Gore

Project: Marketplace (Group 31)

Requirements: Use Case 1.9 used for the diagrams, and is based on user requirement UR-09, "As a seller, I want to be able to set a temporary sales price for one of my items."
Use Case UC-1.8 is based on requirement UR-08, "As a seller, I want to be able to put my product up for sale.".
Use Case UC-1.10 is based on requirement UR-10, "As an administrator, I would like to be able to set temporary sales prices for a category of items on our site.".
Use Case UC-1.11 is based on requirement UR-11, "As a site administrator, I would like to be able to process returns that users ship back to us.".

Use Case Document(s): Diagrams based on Use Case 1.9 (listed first). Use Cases 1.8, 1.10, and 1.11 below.

Use Case ID:	UC-1.9		Created by:	Mike Gore
Use Case Name:	Set item sale		Date Created:	3/7/2017
Description:	Seller wants to set a sale on an item for a specific amount of time, starting today.			

Pre-Condition:	Seller has logged in to the site (UC-1.6) and is at the Seller Interface. (UC-1.12)		
Post-Condition:	Item will be on sale at the given discount for specified time (unless a greater discount is available from a different Sale).		
Frequency of Use:	Potentially frequent: whenever sellers want to set a sale.		
Flow of Event:		Actor action	System response
	1	From seller interface, search for item.	
	2	Click "Add sale" button associated with desired item.	Load "Add Sale" interface. Show list of current sales scheduled for both the Item and its Category.
	3	Enter sales parameters: percentage discount, starting date (today), and ending date.	Compare sales parameters to existing item and category sales. If valid, returns an okay to the user, shows the dates the sale will be active, and presents a save button for the sale.
	4	Click "Save".	Store information in the Item's list of Item sales, which is stored in the database and later loaded on demand. System compares existing Sales items

			and immediately sets the price according to the greatest discount.
Exceptions:		1. In step 3, compare the new sale being created to previously-created sales for this item and this category. If this sale will never represent the greatest discount during its duration, the sale should not be stored in the database, and an error message is presented to the seller.	
Developer notes:			

Use Case ID:	UC-1.8		**Created by:**	Mike Gore
Use Case Name:	Add item for sale		**Date Created:**	3/7/2017
Description:	Seller wants to add a new item to sell on the site.			

Pre-Condition:		Seller has logged in to the site (UC-1.6) and is at the Seller Interface. (UC-1.12)	
Post-Condition:		Item is available on the site for purchase.	
Frequency of Use:		Depends on site scale; used whenever a seller has a new item to offer for sale.	
Flow of Event:		**Actor action**	**System response**
	1	Click the "Add Item" button in the seller interface.	Load "New Item" page.
	2	Enter item info, including name, category, and default price.	Save item info, and create unique id
	3	Enter quantity in inventory.	Set inventory
	4	Upload image of the item.	Store image
	5	Click "Finish".	Item is available for sale on the website at the default price.
	6		
Exceptions:		1. Possible exception if seller is adding an item identical to one sold by another seller, in which case they should be able to use the same item listing.	
Developer notes:			

Use Case ID:	UC-1.10		Created by:	Mike Gore
Use Case Name:	Set category sale		Date Created:	3/7/2017
Description:	An administrator wants to set a sale site-wide for a specific category for a specific amount of time.			

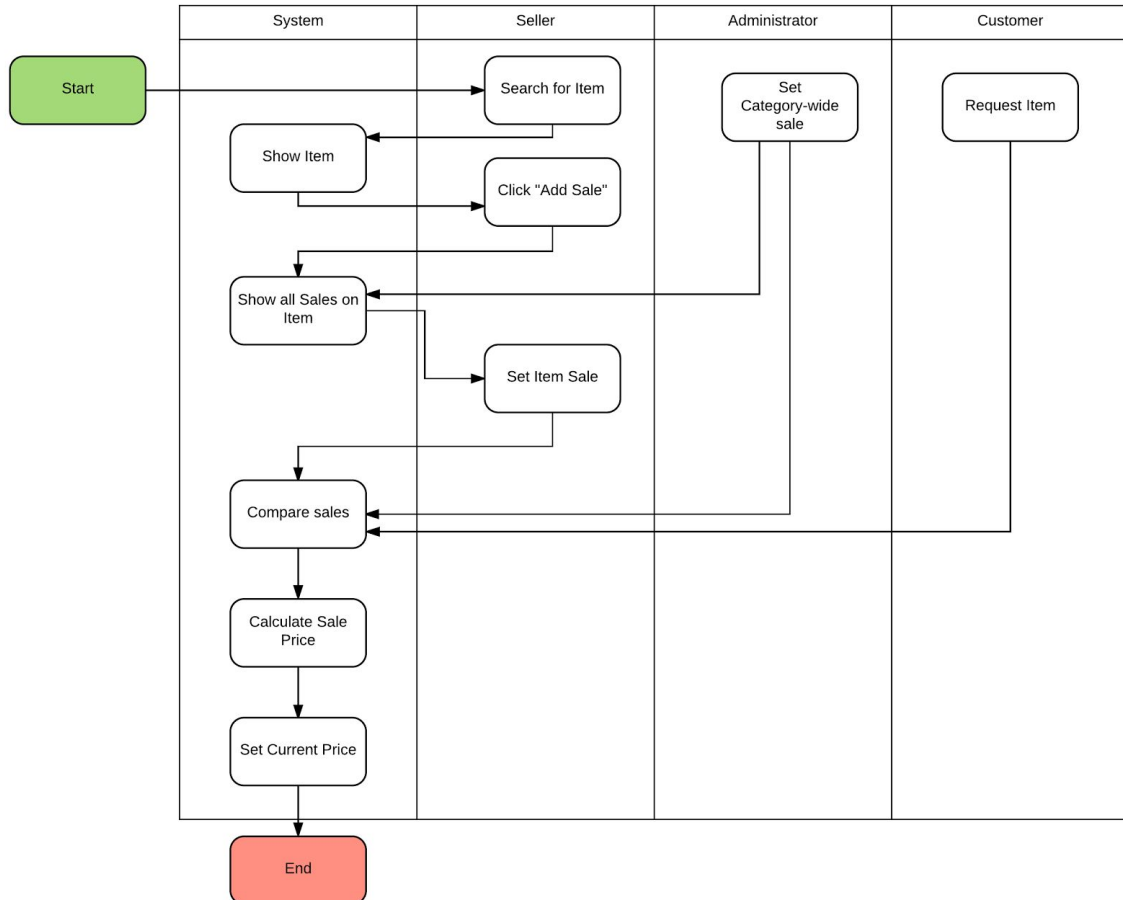| Pre-Condition:	An administrator is logged in and viewing the Administrator interface		
Post-Condition:	Sale is set for multiple items site-wide, and sets the active price when it is the best sale.		
Frequency of Use:	Occasional, sales may be set around holidays and other events.		
Flow of Event:		Actor action	System response
	1	Administrator clicks on, "Activate category sale".	System loads list of categories.
	2	Administrator clicks on desired category.	System loads "New Category Sale" interface.
	3	Administrator enters desired parameters for sale (start date, end date, and discount percentage).	System compares sale parameters to existing sales on the category. Presuming this represents some unique event (i.e., isn't a smaller discount than an existing sale or set of sales and doesn't lie completely within their sales dates), creates the Sale in the database.
	4		Later, on Item lookup, system loads category sale and any relevant Item sales and discounts the item by the `desired percentage, if it offers the greatest possible discount to the customer.
	5		
	6		
Exceptions:	1. If sale is of shorter duration and is a smaller discount than existing category sales items, the sale should be rejected and not created. It is acceptable, though, to create a category-wide sale even if specific items in the category will have a greater discount from item-specific sales discounts during the specified time period.		
Developer notes:			

Use Case ID:	UC-1.11		Created by:	Mike Gore
Use Case Name:	Process return		Date Created:	3/7/2017
Description:	An administrator wishes to process a return and provide a refund to a Customer.			

Pre-Condition:	Customer has purchased the item and physically shipped it back to the marketplace's physical location. Administrator is logged in and looking at Administrator interface.		
Post-Condition:	Customer has received a refund and the item has been returned to inventory.		
Frequency of Use:	Frequent if site is large scale, but critical for commercial operations.		
Flow of Event:		Actor action	System response
	1	Click on "Process a Return" button.	
	2	Enter order number.	Load order, with option to return any item on the order.
	3	Click "Return Item" next to the specific item returned.	Display list of conditions for a return, and present OK/cancel dialog.
	4	Physically verify contents and other requirements displayed, then click, "OK".	Return item to inventory (increment inventory count of item) and refund money to customer's payment method.
	5		
	6		
Exceptions:	1. Item is not in good enough condition to resell.		
Developer notes:			

Activity Diagram:

Set Item Sale Price
UC 1.9 and UR-09
Activity Diagram
by Mike Gore

Preconditions:
1. Item exists for sale from this seller (see UC 1.8)
2. Seller is logged in to Seller interface.

User Interactions (Sequence Diagram):

Set Item Sale Price
UC 1.9 and UR-09
Sequence Diagram
by Mike Gore

Preconditions:
1. Item exists for sale from this seller (see UC 1.8)
2. Seller is logged in to Seller interface.

Seller

item:Item

category:Category

getTitle()

getAllSales()

getCategorySales()

addItemSale(startDate, endDate, percentDiscount)

<<create>>

sale:Sale

getItemSales()

getCategorySales()

ok = isSaleValid()

setCurrentPrice()