**Design Analysis: AZCart, a Shopping Cart Plugin**

**angelaz**

**NOTE: I took 2 slack days for this project.**

**OVERVIEW**

AZCart is a lightweight web application that simulates a shopping cart experience online. AZCart provides a similar service as Opencart, Shopify, Paypal, and Stripe, but it fulfills the shopkeepers’ need for a more basic and minimal setup effort required product.

**FEATURES**

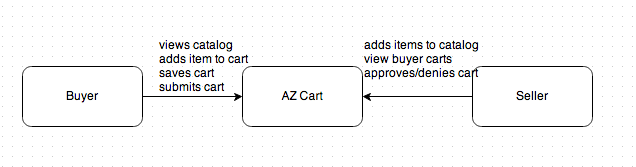
When a shopper is browsing a website, they can

1. create account/log in/log out
2. add items to the shopping cart
3. remove items
4. edit quantity of an item
5. checkout items in the cart
6. retain the shopping cart across browser sessions
7. share shopping carts with other users

For a shopkeeper, AZCart will provide them a simple admin interface to:

1. add items to the catalog
2. edit a catalog item’s title, price, and quantity
3. approve or decline orders submitted by a user

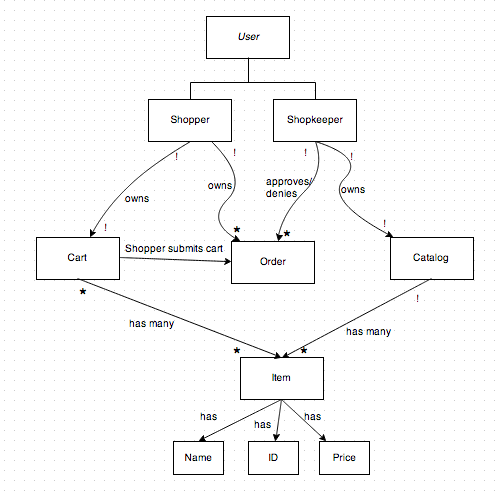
**CONCEPTS**



**BEHAVIORS**

Buyer can add browse catalog and add items to cart before logging in, however, they must log in first to submit a cart for approval by the seller. Buyers cannot post an item for sale.

Sellers all manage the same catalog (think a single store with multiple managers/sales clerks). Once logged in, sellers can create items in the catalog, view all the carts (submitted or not) in the system, approve/deny carts submitted by buyers. Sellers cannot purchase items (since they are all managing one catalog that is their own).

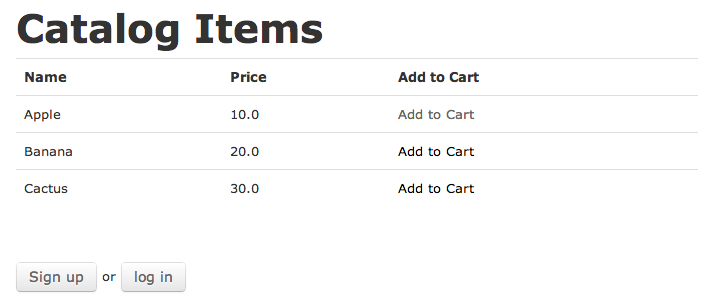


UPDATES (3/12/13):

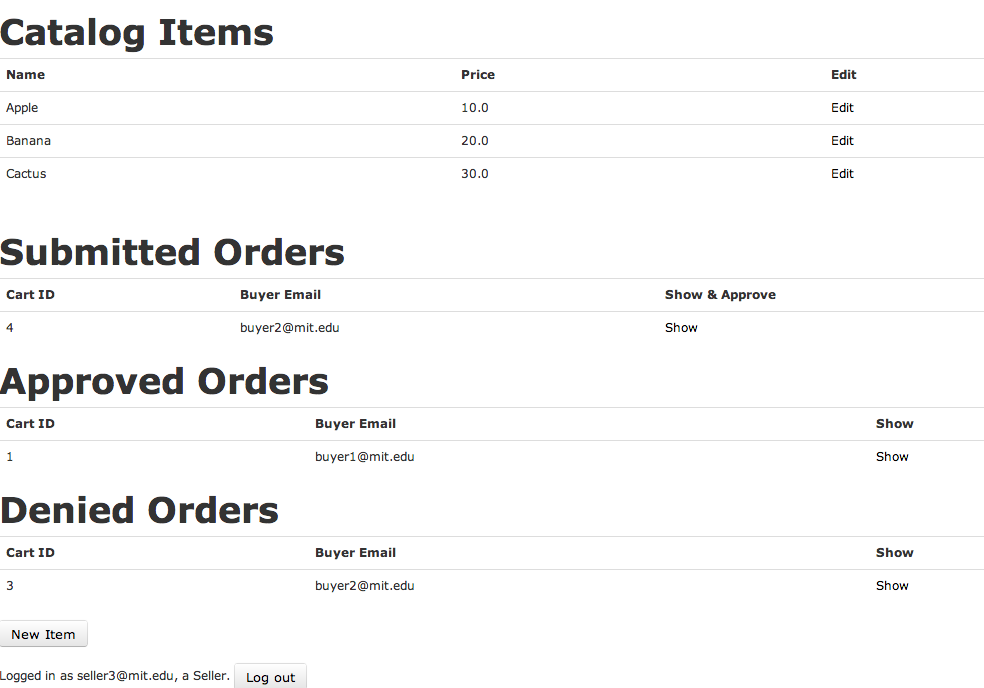
* Shopper now owns multiple Carts, each with a “status” tag (-1= denied, 0 = unsubmitted, 1 = submitted, 2 = approved).
* Order class is removed from the design
* The website holds a total of 1 Catalog, but may have multiple Shopkeepers/Sellers who share the catalog and have the same set of permissions.
* When an Item is added to a Cart, a CartItem is created with a foreign-key into the Cart. Each Cart holds multiple CartItems.

**UI**

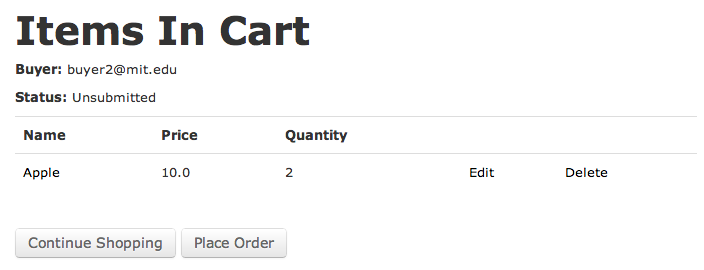
Home Page - Logged Out:



Home Page - Seller:



Cart Page – Buyer (buyer clicks “View Cart” to view the current cart or one of the saved/submitted/approved carts:



All buttons take the buyer back to catalog page.

**Design Concerns**

Below is a list of potential challenges:

* Access control.

Allowing users to create account, log in, and log out. Retaining the cart across browser sessions, specifically, from not logged-in to creating new account or logging into existing account.

* + I decided to let unregistered buyers view the catalog and add items to cart, but they must log in to purchase. One buyer cannot view another buyer’s carts.
  + As for seller, I decided that they have all permission to view buyer’s carts. This decision makes seller ubiquitous, which, in a production environment, should be rethought. For example, sellers probably shouldn’t be able to edit those carts owned by buyers.
* Catalog page layout.

I decided to have all the lists (the entire catalog, all submitted/approved/denied carts, saved carts for buyer) on one page. This is because I think it would be best for users to view everything with a minimum required # of clicks.

* Lack of order item.

Currently, if the seller updates an item, this item will also be updated in all submitted and approved carts. In retrospect, this is a poor design decision. I should have frozen the item price/title once the cart is submitted by the buyer.