

Cart Design

There are two reasons to have a riak cluster, for data sharding and data replication. For our application we would need the cluster only for replication.

How do we give multiple users access to the same shopping cart?

Challenge: \$Only the cart owner should be able to check out the cart.

\$ Many people are allowed to add and remove products from cart.

\$ Managing user's access permissions.

=> User : Will have attributes: 1. Username, 2 Password, 3. User's cart(The cart will have cartID), 4. UserID

=> 5. AccessList : List of UserIDs of users allowed to modify the user's cart

=> 6. CartIDList : List of CartIDs the user is allowed to access.

There should be a cart share option that will send the user's CartIDs to the recipient. If the recipient exists, then update the user's (sender) AccessList and the recipient's CartID list. Otherwise it will return -ve.

While shopping, there will be two add to cart options.

=> Simple add to cart : will add product to user's shopping cart

=>Add to other cart : Will have a drop down list, showing the carts the user have access to. The user selects a cart (by cart name) and then add to that particular cart.

Cart Object : It will have CartName, CartID, ListOfProductID and ListOfStoreID.

```
/*-----  
| A user should be limited to two cart objects. One self and other shareable. The sharable  
cart| | will be used for sharing purposes.  
-----*/
```

Suggestion : We keep just one cart and allow for multiple wishlists. They could be checked out by converting to cart or maybe just letting wishlists be checked out.