Object diagram for shopping system

Checkout

-bogofItems: ArrayList<Buyable>
-bogofDiscount: double
-basket: wills_basket
-shopper: will

+getFinalTotal(): double
+applyLoyaltyCardDiscount(): double
+applyTenPercentDiscount(): double
+applyBogofDiscount(): double
+getTotal(): double
+createBogofArray(ArrayList<Buyable> items): void
+calcBogofDiscount(ArrayList<Buyable> bogofItems): void
+getBogofDiscount(): double

Stock

-items: [Cola, BLT sandwich]

+getItems(): ArrayList<Buyable>

Add item to basket

will (shopper)

-loyaltyCard: true
-name: William

wills_basket (basket)

-items: [Cola, BLT sandwich]

+empty(): void
+addItem(Buyable item): void
+removeItem(Buyable toRemove): Buyable
+getItems(): ArrayList<Buyable>

BLT (sandwich)

name: BLT
price: 2.99
bogof: true

cola (drink)

name: Cola
price: 2.99
bogof: true