UML Class Diagram

EIRM

+ main(*String[]*) : **void**

Product

- **private** *String* productName
- **private** *Date* boughtOn
- **private** *ArrayList<Date>* soldOn
- **private** *Date* useby
- **private** *int* quantity
- **private** *int* originalQuantity
- **private** *double* boughtAt
- **private** *ArrayList<Double>* soldAt
- **private** *ArrayList<Integer>* quantitySold
- **private** *boolean* purchaseDateSet
- **private** *boolean* purchasePriceSet
- **private** *boolean* sellDateSet
- **private** *boolean* sellPriceSet
- **private** *boolean* expiryDateSet
- **private** *boolean* discarded

+ Product(*String*, *int*)
+ addSaleDate(*Date*) : **void**
+ discarded() : **void**
+ editProductQuantity(*int*) : **void**
+ getExpiryDate() : *Date*
+ getOriginalQuantity() : *int*
+ getProductName() : *String*
+ getPurchaseDate() : *Date*
+ getPurchasePrice() : *double*
+ getQuantity() : *int*
+ getQuantitySold() : *ArrayList<int>*
+ getSellDate() : *ArrayList<Date>*
+ getSellPrice() : *ArrayList<double>*
+ hasExpiryDate() : *boolean*
+ hasPurchaseDate() : *boolean*
+ hasPurchasePrice() : *boolean*
+ hasSellDate() : *boolean*
+ hasSellPrice() : *boolean*
+ isDiscarded() : *boolean*
+ setExpiryDate(*Date*) : **void**
+ setProductName(*String*) : **void**
+ setPurchaseDate(*Date*) : **void**
+ setPurchasePrice(*double*) : **void**
+ setQuantity(*int*) : **void**
+ setSellPrice(*double*) : **void**

InventoryReader

- **private** *ArrayList<Product>* inventory

+ InventoryReader(*String*)
+ getInventory() : *ArrayList<Product>*

InstructionReader

- **private** *ArrayList<Product>* inventory

+ InstructionReader(*String*,*String*, *ArrayList<Product>*)
+ getInventory() : *ArrayList<Product>*

ProductProcessor

- **private** *ArrayList<Product>* discardedInventory

+ buy(*Map*, *ArrayList<Product>*) : *ArrayList<Product>*
+ discard(*ArrayList<Product>*,*Date*) : *ArrayList<Product>*
+ query(*ArrayList<Product>*,*Date*,*Date*,*String*) : *ArrayList<Product>*
+ query(*ArrayList<Product>*,*Date*,*String*) : *ArrayList<Product>*
+ query(*ArrayList<Product>*,*String*,*Date*,*Date*,*String*) : **void**
+ sell(*Map*, *ArrayList<Product>*) : *ArrayList<Product>*
+ sell(*ArrayList<Product>*,*String*) : *ArrayList<Product>*