PresentationLayer

C CLIInterface

- □ ServiceController serviceController
- □ Scanner scanner

- ● void main(String[])
- ■ void primeMenu()
- ■ void addRemoveMenu()
- ■ void displayHashMapsMenu()
- ■ void reportMenu()
- ■ void getStockReport()
- ■ void getExpireReport()
- ■ void addCategory()
- ■ void addProduct()
- ■ void addItem()
- ■ void removeCategory()
- ■ void removeProduct()
- ■ void removeItem()
- ■ void displayCategories()
- ■ void displayProducts()
- ■ void displayItems()

C InventoryManagementTests

- □ Product product
- □ Item item
- □ ServiceController serviceController

- ▲ void setUp()
- ▲ void testAddNewProduct()
- ▲ void testUpdateQuantity()
- ▲ void testLowStockAlert()
- ▲ void testGenerateStockReport()
- ▲ void testTrackAndReportDamagedItems()
- ▲ void testAddCategory()
- ▲ void testRemoveCategory()
- ▲ void testSetSupplierCost()
- ▲ void testSetPriceNoDiscount()

uses

ServiceLayer

C ServiceController

- ○ CategoryController categoryController
- ○ ProductController productController
- ○ ItemController itemController

- ● boolean addItem(boolean,boolean,int,int,float,float,float,float,String,String,LocalDate,String,String)
- ● void reportExpired()
- ● void generateStockReport()
- ● void removeExpire()
- ● boolean moveItemToStore(String)
- ● boolean removeItem(String)
- ● List<Product> getAllProducts()
- ● List<Item> getWarehouseItems()
- ● List<Item> getStoreItems()
- ● boolean addNewProduct(String,String,String,double,double,String,String,int)
- ● boolean removeProduct(String)
- ● boolean addCategory(String,String)
- ● boolean removeCategory(String)
- ● void clearCategories()
- ● HashMap<String,Category> getCategories()

uses   uses   uses

DomainLayer

C CategoryController

- □ HashMap<String,Category> categories

- ● void addDefaultCategory()
- ● HashMap<String,Category> getCategories()
- ● boolean doesCategoryExist(String)
- ● Category getCategoryByID(String)
- ● boolean addCategory(String,String)
- ● boolean removeCategory(String)
- ● boolean addProductToCategory(String,Product)
- ● boolean removeProductFromCategory(String,Product)
- ● void clearCategories()
- ● void printCategoriesDetails()

C ProductController

- □ Map<String,Product> products
- □ Map<String,Map<String,Item>> productItems

- ● void addDefaultProduct()
- ● boolean addProduct(String,String,String,double,double,String,String,int)
- ● boolean addItemToProduct(String)
- ● void generateStockReport()
- ● boolean removeProduct(String)
- ● Product getProduct(String)
- ● List<Product> getLowStockProducts(int)
- ● List<Product> getAllProducts()
- ● List<Product> generateReportByCategory(String)

manages

C ItemController

- □ HashMap<String,Item> wareHouseItems
- □ HashMap<String,Item> storeItems

- ● void addDefaultItem()
- ● Item getItemByID(String)
- ● void reportExpiredItems()
- ● void reportDefectionItems()
- ● void removeExpired(ProductController)
- ● boolean addNewItem(boolean,boolean,int,int,float,float,float,float,String,String,LocalDate,String,String)
- ● boolean moveItemToStore(String)
- ● boolean removeItem(String,ProductController)
- ● boolean setDefective(String)
- ● List<Item> getWarehouseItems()
- ● List<Item> getStoreItems()

C Category

- □ String name
- □ String ID
- □ Date discountStartDate
- □ Date discountEndDate
- □ int discountPercentage
- △ ArrayList<Product> products

- ● String getName()
- ● String getID()
- ● Date getDiscountStartDate()
- ● Date getDiscountEndDate()
- ● int getDiscountPercentage()
- ● ArrayList<Product> getProducts()
- ● void setDiscountStartDate(Date)
- ● void setDiscountEndDate(Date)
- ● void setDiscountPercentage(int)
- ● void addProduct(Product)
- ● void removeProduct(Product)
- ● String toString()

manages

contains

C Product

- □ String makat
- □ String name
- □ String supplier
- □ double costPrice
- □ double sellingPrice
- □ String category
- □ String subCategory
- □ boolean isDamaged
- □ int discount
- □ int minimumAmount
- □ LocalDate startDiscount
- □ LocalDate endDiscount
- □ ArrayList<String> discounts
- □ String categoryID
- □ String subCategoryID
- △ ArrayList<Item> items
- □ int itemAmount

- ● String getMakat()
- ● void setMakat(String)
- ● String getName()
- ● void setName(String)
- ● String getSupplier()
- ● void setSupplier(String)
- ● int getCurrentQuantity()
- ● int getShelfQuantity()
- ● int getWarehouseQuantity()
- ● double getCostPrice()
- ● void setCostPrice(double)
- ● void setItemAmount(int)
- ● int getItemAmount()
- ● double getSellingPrice()
- ● void setSellingPrice(double)
- ● String getCategory()
- ● void setCategory(String)
- ● String getSubCategory()
- ● void setSubCategory(String)
- ● int getMinimumAmount()
- ● void setMinimumAmount(int)
- ● boolean isLowStock()
- ● void applyDiscount(int)
- ● void setDiscountPeriod(LocalDate,LocalDate)
- ● boolean isDiscountActive()
- ● void markAsDamaged()
- ● boolean isDamaged()
- ● double getDiscount()
- ● void setDiscount(int)
- ● void addDiscount(String)
- ● ArrayList<String> getDiscounts()
- ● void addItems(Item)
- ● void removeItem(Item)
- ● boolean isAmountBiggerThanMinAmount(int)
- ● String toString()

manages

contains

C Item

- ○ boolean defective
- ○ boolean inWareHouse
- ○ int floorBuilding
- ○ int floorShelf
- ○ float x
- ○ float y
- ○ float supplierCost
- ○ float priceNoDiscount
- ○ String name
- ○ String id
- ○ LocalDate expireDate
- ○ int quantityInWareHouse
- ○ String categoryID
- ○ String productID

- ● String toString()
- ● String getID()
- ● String getName()
- ● boolean isExpired()
- ● void setSupplierCost(float)
- ● void setPriceNoDiscount(float)