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SYSC2004 Milestone 5 UML Diagrams

Figure 1: Milestone 5 UML Diagrams of the StoreView, StoreManager, ShoppingCart, Inventory, Product Class and ProductStockContainer

StoreManager

- inventory: Inventory
- cartTrack: HashMap<ShoppingCart, Integer>

+ StoreManager()
+ getInventory(): Inventory
+ checkStock(product: Product): int
+ assignNewCartID(): int
+ getShoppingCart(cartID: int): ShoppingCart
+ addToInven(product: Product, quantity: int): void
+ addToCart(product: Product, quantity: int, cartID: int): void
+ removeFromCart(product: Product, quantity: int, cartID: int): void
+ transaction(product: ArrayList<Product>, amount: ArrayList<Integer>): double

Composition

StoreView

- storeManager: StoreManager
- cartID: int
- FRAME: JFrame
- itemPanels: JPanel[ ]
- plusButtons: JButton[ ]
- minusButtons: JButtonI[ ]
- cartContents: JLabel
- img1: Image, img2: Image, img3: Image, img4: Image
- imageLabels: JLabel[ ]
- productInfo: JLabel[ ]

+ StoreView(storeManager: StoreManager, cartID: int)
- updateCart(): void
- displayProduct(productIndex: int): String
- checkoutPrinting(): String
- quitButton(): JButton
- checkoutButton(): JButton
+ displayGUI(): void
+ main(args: String[ ]): void

interface
ProductStockContainer

+ getProductQuantity(product: Product)
+ addProductQuantity(product: Product, quantity: int)
+ removeProductQuantity(product: Product, quantity: int)
+ getNumOfProducts()

Aggregation

Implements

Inventory

- stock: ArrayList<Integer>
- product: ArrayList<Product>

+ Inventory()
+ checkExit(id: int): boolean
+ getName(productID: int): String
+ getPrice(productID: int): double
+ getProductQuantity(product: Product): int
+ getProductInfo(productID: int): Product
+ getStockList(): ArrayList<Integer>
+ getProductList(): ArrayList<Product>
+ addProductQuantity(newProduct: Product, numStock: int): void
+ removeProductQuantity(product: Product, stockRemoved:int): boolean
+ getNumOfProducts(): int

Composition

Inheritance

Product

- NAME: String
- ID: int
- PRICE: double

+ Product(name: String, id: int, price: double)
+ getName(): String
+ getID(): int
+ getPrice(): double

Aggregation

ShoppingCart

- cartID: int

+ ShoppingCart()
+ getCartID(): int
+ setCartID(cartID: int): void

Implements

Dependency

1 1 1 1 0..* 0..* 1 1..* 0..* 0..*