Name: Zakaria Ismail. JPanel StoreManager StoreView inventory: Inventory - cartID: int storeViews: HashMap<Integer, StoreView> storeMgr: StoreManager shoppingCarts: HashMap<Integer, ShoppingCart> - frame: JFrame - cartIDs: ArrayList<Integer> - homePage: HomePage storePage: StorePage + StoreManager() logoutPage: LogoutPage + getStoreView(cartID: int): StoreView - checkoutPage: CheckoutPage - generateCartID(): int processingPage: ProcessingPage + selectStoreView(): StoreView currentStoreView: StoreView nenerateCortIDD: int StoreView(sm: StoreManager, cartID: int) + requestProductReturn(cartID: int): void + getCartID(); int + processTransaction(cartID: int): float initializeGUI(): void + inventoryIsEmpty(): boolean + initializeHomePage: void + getAllCartIDs(): ArrayList<Integer> setCurrentStoreView(sv: StoreView): void + getAllProducts(): HashMap<Integer, Product> StorePage ProcessingPage CheckoutPage LogoutPage togglePage(selected: int): void storeView: StoreView dropdownList: JComboBox storeView: StoreView + getAllStock(): HashMap<Integer, Integer> storeMgr: StoreManage - storeMgr: StoreManager + togglePage(selected: int, restore: boolean): void + getProductStock(prodID: int): int storeMgr: StoreManager storeView: StoreView storeMgr: StoreManager storeView: StoreView storeView: StoreView + hideAll(); void storeUI: StoreUI selectedIndex: int totalBalance: JLabel + addToCart(cartID: int. prod: Product): void stock: HashMap<Integer, Integer> yesBtn: JButton + main(args: String[]): void removeFromCart(cartID: int, prod: Product): void cartUI: CartUI button: JButton returnBtn: .IButton products: HashMap<Integer, Product> noBtn: JButton splitPane: JSplitPane + getAllCartStock(cartID: int): HashMap<Integer, Integer> yesBtn: JButton HomePage(sm: StoreManager) ProcessingPage(sv: StoreView, sm: StoreManager) + LogoutPage(sv: StoreView, sm: StoreManager) ShoppingCart storeScrollPane: JScrollPane getAllCartProducts(cartID: int): HashMap<Integer, Product> noBtn: JButton updateInterface(): void + generateLabel(): void cartScrollPane: JScrollPane cartContents: JLabel + getTotalBalance(cartID: int): float + ShoppingCart() StorePage(sv: StoreView, sm: StoreManager) totalBalance: float + toString(hasOptions: boolean): String + CheckoutPage(sv: StoreView, sm: StoreManager) removeStock(id: int, quantity: int): Produc + setCartContents(): void getProductPrice(id: int): double setTotalBalance(): void + isEmpty(): boolean Inventory # stock: HashMap<Integer, Integer> # productIDs: ArrayList<Integer> + Inventory() + Inventory(hasDefault: boolean)

ProductUI

+ ProductUI(prod: Product, stock: int, sv: StoreView, sm: StoreManager, cui: CartUI)

storeMgr: StoreManager

product: Product

cartUI: CartUI

initialStock: int

currentStock: int

imageUrl: String addBtn: JButton

removeBtn: JButton

headerPanel: JPanel descLabel: JLabel stockLabel: JLabel imageLabel: JLabel image: Imagelcon

addToCart(): void removeFromCart(): void renderImage(): void renderPlaceholderImage(): void

btnPanel: JPanel

CartUI

storeMgr: StoreManager

logoutBtn: JButton

- checkoutBtn: JButton

cartContents: JLabel

- products: HashMap<Integer,Product>

+ CartUI(sv: StoreView, sm: StoreManager)

- stock: HashMap<Integer. Product>

Name: Zakaria Ismail S#: 101143497 Product

+ Product(name: String, price: int. price: double)

- NAME: String

- PRICE: double

+ getId(): int

getName(): String

+ getPrice(): double

- ID: int

+ removeStock(id: int. quantity: int): Product

+ getProductInfo(id: int): String

+ getAllPIDs(): ArrayList<Integer>

+ getProductName(id: int): String

- generateNewPID(): int

+ isEmpty(): boolean

+ aetProductStock(id: int): int

+ addStock(product: Product, quantity: int): void

+ addStock(name: String, price; double, quantity; int); void