## InventoryItem

- itemID: int
- brandName: String
- stockQuantity: int
- price: float
- purchaseCost: float
- sport: String
- description: String
- # InventoryItem()
- # InventoryItem(itemID: String, brandName: String, stockQuantity: int, price: float, purchaseCost: float, sport: String, description: String)
- + getItemID(): String
- + setItemID(itemID: String): void
- + getBrandName(): String
- + setBrandName(name: String): void
- + getStockQuantity(): int
- + setStockQuantity(count: int): void
- + getPrice(): float
- + setPrice(price: float): void
- + getPurchaseCost(): float
- + setPurchaseCost(cost: float): void
- + getDescription(): String
- + setDescription(description: String): void
- + isInStock(): boolean
- + restock(quantity: int): void
- + sell(quantity: int): void
- + getInfo(): String
- + calculateRestockCost(quantity, int): float



## SportsEquipment

- sportName: String
- equipmentCategory: String
- model: Stringsize: String[]
- weightInGrams: float
- + SportsEquipment()
- + SportsEquipment(sportName: String,
- equipmentCategory : String, model : String, size : String[],
- weightInGrams : float)
- + getSportName(): String
- + setSportName(name : String) : void
- + getEquipmentCategory(): String
- + setEquipmentCategory(category: String): void
- + getModel(): String
- + setModel(model : String) : void
- + getSize() : String[]
- + setSize(size : String[]) : void
- + getWeightInGrams(): float
- + setWeightInGrams(weight : float) : float



- sportName: String
- apparelCategory: String
- size: String
- color: String
- + SportsApparel()
- + SportsApparel(sportName : String, apparelCategory :
- String, size: String, color: string)
- + getSportName(): String
- + setSportName(name : String) : void
- + getApparelCategory(): String
- + setApparelCategory(category: String): void
- + getSize(): String
- + setSize(size : String) : void
- + getColor(): String
- + setColor(weight : String) : String

## InventoryManager

- items: InventoryItem[]
- + errorCodes : Map<int, String>
- + addItem(item: InventoryItem): void
- + removeItem(itemID : int) : int
- + getItemInfo(itemID : int) : void
- + checkStock(itemID: int): int
- + restockItem(itemID : int) : void
- + printItemIDs(): void
- + sellItem(itemID : int, quantity : int) : int
- + displayAllItems() : void
- + calculateRevenue(itemID : int, quantity : int) : float
- + calculateCost(itemID : int, quantity : int) : float
- + calculateGrossProfit(itemID : int, quantity : int) : float