Tea Shop Management System Class Diagram - Stage 3

Register

-cart: ArrayList<List>
-itemDetails: ArrayList<Object>
-allTransactions: ArrayList<List>
-transactionDetails: ArrayList<Object>
-tempSubTotal: double
-saleQuantity: int
-tempTotal: double
-subTotal: double
-total: double
-totalQuantity: int
-transactions: int
-productIndex: int
-productList: Map<Integer, Product>

+addToCart(Product n, int saleQuantity): void
+sale(): void
+clearCart(): void
+viewCart(): void
+salesRecords(Register register): void
+getProductList(): Map<Integer, Product>
+getAndIncrementProductIndex(): int
+getProductIndex(): int
+setProductIndex(int productIndex): void
+getAllTransactions(): ArrayList<List>
+sale(boolean x): void

SignIn

+SignIn()
+signIn(Register register, Employees employees, Employees schedule): void

EmployeeMainMenu

+employeeSignin(Register register, Employees employees, Employees schedule): String
+employeeMainMenu(Register register, Employees employees, Employees schedule, String name): void

ManagerMainMenu

+managerSignIn(Register register, Employees employees, Employees schedule): String
+managerMainMenu(Register register, Employees employees, Employees schedule, String name): void

Persistence

-readFile: FileReader
-writeFile: FileWriter
-reprint: String
-transNum: int

+Persistence()
+findLine(String line): int
+findTransactionRecord(int transNum): int
+addTrans(Double subtotal, int quantity, double total): String
+wrtie(String trans): void

Hat

-hatType: String

+Hat(Register register, String name, String hatType, String color, double price, int quantity)
+Hat(Register register, String name, String hatType, String color, String productDesc, double price, double discount, double taxRate, int quantity)
+getHatType(): String
+setHatType(String hatType): void

Sale Menu

+saleMenu(Register register, Employees employees, Employees schedule, ProductMenu productMenu, String name): void

ProductMenu

+ProductMenu(): void
+productMenu(Register register): void
+getProductLog(Register register): void
+modifyProduct(Register register): void
+modifyDiscount(Register register, int x): void
+modifyTaxRate(Register register, int x): void
+modifyPrice(Register register, int x): void
+modifyQuantity(Register register, int x): void
+modifyName(Register register, int x): void
+chooseProductType(Register register): void
+addProduct(Register register): void
+getProduct(Register register): void
+delete(Register register): void
+addTea(Register register): void
+addFood(Register register): void
+chooseApparelType(Register register): void
+addApparel(Register register): void
+addShirt(Register register): void
+addHat(Register register): void

InputMenu

-totalGrossCost: double
-totalTaxAmount: double
-totalDiscountAmount: double
-totalNetCost: double
-inputDescription: LinkedList<Input>

+InputMenu()
+inputMenu: void
-calculateTotals(Map<Integer, Double> total): double
+getTotalGrossCost(): double
+getTotalTaxAmount(): double
+getTotalDiscountAmount(): double
+getTotalNetCost(): double

EmployeesMenu

+employeesMenu(Register register, Employee employees, Employees schedule, String name): void

Apparel

-apparelType: char
-color: String

+Apparel(Register register, String name, String color, double price, int quantity)
+Apparel(Register register, String name, String color, String productDesc, double price, double discount, double taxRate, int quantity)
+Apparel()
+getApparelType(): char
+setApparelType(char apparelType): void
+getColor(): String
+setColor(String color): void

Input

-lineItemID: int
-vendorName: String
-vendorCategory: String
-input: String
-cost: double
-taxRate: double
-discount: double
-quantity: int

+Input(int lineItemID, String vendorName, String vendorCategory, String input, double cost, int quantity, double discount, double taxRate): void
+Input(): void
+setDiscount(double discount): void
+getDiscount(): double
+setTaxRate(double taxRate): void
+getTaxRate(): double
+setInput(String input): void
+getInput(): String
+serQuantity(int quantity): void
+getQuantity(): int
+setCost(double cost): void
+getCost(): double
+getGrossCost(double cost, int quantity): double
+getTaxAmount(double taxRate, double cost, int quantity): double
+getDiscountAmount(double cost, int quantity, double discount): double
+getNetCost(double taxRate, double cost, int quantity, double discount): double
+setLineItemID(int lineItemID): void
+getLineItemID(): int
+setVendorName(String vendorName): void
+getVendorName(): String
+setVendorCategory(String vendorCategory): void
+getVendorCategory(): String
+displayHeaders(): void
+toString(): String

Employees

-employees: Map<String, ArrayList<String>>
-shedule: Map<String, Map<String, ArrayList<String>>>

+Employees()
+addEmployee(String name, String empid, String position, String wage, String ssn, String hours, String type): void
+addDefaultEmployee(): void
+printEmployeeInfo(String name): void
+printEmployees(): void
+deleteEmployee(String name): void
+changeName(String name, String newName): void
+nameCheck(String name): boolean
+changeEmpid(String name, String empid): void
+getEmpid(String name): String
+changePosition(String name, String position): void
+getPosition(String name): void
+changeWage(String name, String wage): void
+getWage(String name): String
+changeSSN(String name, String ssn): void
+getSSN(String name): String
+changeHours(String name, String hours): void
+getHours(String name): String
+isManagerChange(String name, String type): void
+isManager(String name): void
+addShift(String name, String shiftDay, String shiftHourStart, String shiftStartMeridiem, String shiftMinStart, String shiftHourEnd, String shiftMinEnd, String shiftEndMeridiem): void
+dailyHours(String name, String shiftDay): double
+totalHours(String name): double
+removeShift(String name, String shiftDay): void
+printSchedule(): void
+remove(String name): void

Shirt

-sQuantity: int
-mQuantity: int
-lQuantity: int
-xLQuantity: int
-longSleeve: boolean
-hoodie: boolean

+Shirt(Register register, String name, String color, boolean longSleeve, boolean hoodie, double price, int sQuantity, int mQuantity, int lQuantity, int xLQuantity)
+Shirt(Register register, String name, String color, boolean longSleeve, boolean hoodie, String productDesc, double price, double discount, double taxRate, int sQuantity, int mQuantity, int lQuantity, int xLQuantity)
+getQuantity(): int
+getSQuantity(): int
+setSQuantity(int sQuantity): void
+getMQuantity: int
+setMQuantity(int mQuantity): void
+getLQuantity: int
+setLQuantity(int lQuantity): void
+getXLQuantity: int
+setXLQuantity(int xLQuantity): void
+getLongSleeve(): boolean
+setLongSleeve(boolean isLongSleeve): void
+getHoodie(): boolean
+setHoodie(boolean isHoodie): void

Food

-glutenFree: boolean
-sugarFree: boolean

+Food(Register register, String name, double price, int quantity)
+Food(Register register, String name, boolean gluten, boolean sugarFree, String productDesc, double price, double discount, double taxRate, int quantity)
+isGlutenFree(): boolean
+setGlutenFree(boolean gluten): void
+isSugarFree(): boolean
+setSugarFree(boolean sugarFree): boolean

Product

-name: String
-id: int
-productType: char
-productDesc: String
-price: double
-discount: double
-taxRate: double
-available: boolean
-quantity: int
-inputDetails: ArrayList<Object>

+Product(Register register, String name, double price, int quantity): void
+Product(Register register, String name, String productDesc, double price, double discount, double taxRate, int quantity): void
+Product(): void
+getName: String
+setName(String name): void
+getID(): int
+setID(int id): void
+getProductType(): char
+setProductType(char productType): void
+getProductDesc(): String
+setProductDesc(String productDesc): void
+getPrice(): double
+setPrice(double price): void
+getDiscount(): double
+setDiscount(double Discount): void
+getTaxRate(): double
+setTaxRate(double taxRate): void
+setAvailable(boolean available): void
+getAvailable(): boolean
+getQuantity(): int
+setQuantity(int quantity): void

Tea

-caffeine: boolean
-sugarFree: boolean
-seasonal: boolean

+Tea(Register register, String name, double price, int quantity)
+Tea(Register register, String name, boolean caffeine, boolean sugarFree, boolean seasonal, String productDesc, double price, double discount, double taxRate, int quantity)
+isCaffeine(): boolean
+setCaffeine(boolean caffeine): void
+isSugarFree(): boolean
+setSugarFree(boolean sugarFree): void
+isSeasonal(): boolean
+setSeasonal(boolean seasonal): void