**Class diagram**

+ Customer(name: String, status: String)

+ getName(): String

+ getStatus(): String

+ getDiscount(): double

+ toString(): String

* name: String
* satus: String
* discount : String

Customer

+ addMenuItem(item: MenuItem): void

+ getMenuItem(itemId: int): MenuItem

+ getItems(): ArrayList<MenuItem>

+ toString(): String

* int : id
* name: String
* purpose: String
* venue: String
* sessionTime: String
* items: ArrayList<MenuItem>

Menu

Sub classes

+ calculatePrice(): double

DrinkMenuItem

+ calculatePrice(): double

-surchargePercentage(): double

PremiumMenuItem

+ calculatePrice(): double

StandardMenuItem

MenuItem

+ calculatePrice(): double

+ getItemNumber(): int

+ getItemName(): String

+ getItemPrice(): double

+ getCategory(): String

* intNumber: int
* itemName: String
* itemPrice: double
* category: String

+ main(args: String [] ): void

RestaurantDriver

+ Voucher(code: String, discount: double)

+ getCode(): String

getDiscount(): double

* code: String
* discount: double

Voucher

Order

* customer: Customer
* oderedItems: ArrayList<MenuItems>
* quantities: ArrayList<Integer>
* totalAmount: double
* voucherDiscount: double
* surcharge: double
* isDineIn: boolean
* tableNumber: int

+ Order (customer: Customer, isDineIn: boolean )

+ addMenuItem(item: MenuItem, quantity: int ): void

+ calculateTotal(): void

+ applyVoucherDiscount(discount: double ): void

+ applyPercentageVoucherDiscount(discountPercentage: double): void

+ applySurcharge(surchargePercentage: double): void

+ generateInvoice(restaurantName: String, restaurantAddress): String

+ getTotalAmount(): double