Class diagramm for a online shopping system

«Abstract»
User

-userID: int
-name: String
-email: String

+User(String,String)
-generateUserID(): int
+getUserID(): int
+setUserID(): void
+getName(): String
+setName(): void
+getEmail(): String
+setEmail(): void

«Interface»
ShoppingCart

+addToCart(Product,int): void
+removeFromCart(Product): void
+calculateTotal(Product,int): void

Order

-orderID: int
-orderDate: LocalDate
-totalAmount: float
-myProductList: HashMap<Product,Integer>
-Customer: HashMap<String,String>

+Order(HashMap<Product,Integer>
, HashMap<String,String>)
-generateOrderID(): int
+generateInvoice(): void

Customer

-myProductList: HashMap<Product,Integer>
-myOrder: ArrayList<Order>

+Customer(String,String)
+addToCart(Product,int): void {override}
-addToMyShoppingList(Product,int): void
+removeFromCart(Product): void {override}
+calculateTotal(Product,int): void {override}
+placeOrder(): void
+showOrder(): void

Admin

-password: int

+Admin(String,String)
+addProduct(productType: String): Product
+removeProduct(Product): void
+removeCustomer(Customer): void
+checkPassword(): void

OnlineShoppingSystem

-customerList: ArrayList<Customer>
-AdminList: ArrayList<Admin>
-eproductList: ArrayList<Eproduct>
-ClothProductList: ArrayList<ClothProduct>

+addCustomer(Customer): void
+removeCustomer(Customer,Admin): void
+addAdmin(Admin): void
+addProduct(Admin): void
+addProduct(Product): void {overload}
+removeProduct(Product,Admin):void
+showProductInfo(): void
+main(args: String[])

Customer

Admin

Eproduct

ClothProduct

1   0..*

EProduct

-WARRENTYPERIODE: int
-VOLTAGE: float

+EProduct(String,float,int, int, float)
+getWarrentyPeroide(): int
+getVoltage(): float
+showProductInfo(): void {override}

«Abstract»
Product

-PRODUCT_ID: int
-PRODUCT_NAME: String
-price: float
-stockQuantity: int

+Product(String,float,int)
+reduceStock(): boolean
+isAvailable(): boolean
-generateProductID: int
+setStockQuantity(): void
+getStockQuantity(): void
+setPrice(): void
+getPrice(): void
+showProductInfo(): void

ClothingProduct

-WARRENTYPERIODE: int
-SIZE: String
-MATERIAL: String

+ClothingProduct(String,float,int,int,String,String)
+getWarrentyPeroide(): int
+getSize(): String
+getMaterial(): String
+showProductInfo(): void {override}