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**STRUCTURAL DIAGRAM**

GALLERY

USER

AUTHENTICATION

CATALOG

CMS

(CONTENT MANAGEMENT SYSTEM)

ADMIN

REVIEWS

SEARCH

PAYMENT

CART

ORDER

PRODUCTS

**CLASS DIAGRAM**

GALLERY

USERS: LIST

PRODUCT: LIST

ORDERS: LIST

+addUser(user:User):void

+addPrduct(product:Product):void

+createOrder(cart:Cart): Order

+processPayment(order:Order,paymentinfo:PaymentInfo):Boolean

+searchProduct(keyword:String):List <Product>

USER

UserID: Int

Username: String

Password: String

Email: String

Address: Address

+login(username: String, password: String): Boolean

+logout(): void

+browseProduct(): List<Product>

+addToCart(product:Product, quality:int): Boolean

+removeFromCart(product:Product,quantity:int):Boolean

+viewCart():Cart

+placeOrder(cart:Cart): Order

PRODUCT

productid: int

name: String

description: String

price: Double

stockQuality: int

+displayDetails():void

CART

cartID: int

items:List<CartItem>

+addItem(product:Product, quality:int):void

+removeItem(product:Product, quality: int):void

+viewItems(): List<CartItem>

ORDER

OrderID: int

orderDate: Date

status: OrderStatus

items: List<CartItem>

paymentInfo: PaymentInfo

+getOrderTotal(): double

+cancelOrder():void

+trackOrder(): String

CART ITEM

product: Product

quantity: int

+getTotalPrice(): double

ADDRESS

Street: String

city: String

county: String

postalcode: String

PAYMENTINFO

paymentMethod: paymentMethod

cardNumber: String

expirationDate: Date

**BEHAVIORAL MODEL**

**GALLERY**

**+ +**

<<include>> <<include>>

User registration Product search

* Register -Search

+ +

+ +

User

* Browse
* Add to cart
* Checkout

+ +

+ Artist

- Add product

+ +

+ +

Admin

-Manage data

- Manage user

**DATA DRIVEN MODEL**

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| --- |
| **CATEGORY TABLE** |
| CategoryID (Primary key) |
| Name |

|  |
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| **CART TABLE** |
| CartID (Primary key) |
| UserID (Foreign key) |

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| **PRODUCT TABLE** |
| ProductID (Primary key) |
| Name |
| Description |
| Price |
| Stock quality |
| CatgoryID (Foreign key) |

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| **SHIPPING INFO TABLE** |
| Shipping info ID (Primary key) |
| OrderID (Foreign key) |
| Recipient name |
| Address ID |
| Shipping Date |
| Estimated delivery date |

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| **USER TABLE** |
| UserID (Primary key) |
| Username |
| Email |
| Password |
| AddressID (Foreign key) |

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| --- |
| **ADDRESS TABLE** |
| AddressID (Primary key) |
| Street |
| City |
| County |
| Postalcode |
| **ORDER ITEM TABLE** |
| OrderItemID (Primary key) |
| OrderID (Foreign key) |
| Product (check key) |
| Quantity |
| Total price |

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| --- |
| **PAYMENT INFO TABLE** |
| PaymentInfoID (Primary key) |
| UserID (Foreign key) |
| Payment Method |
| Card Number |
| Expiration Date |

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| --- |
| **REVIEW TABLE** |
| ReviewID (Primary key) |
| UserID (Foreign key) |
| ProductID (Foreign key) |
| Rating |
| Comment |

|  |
| --- |
| **PROMOTION TABLE** |
| PromotionID (Primary key) |
| Code |
| Discount Percentage |
| Expiration date |

|  |
| --- |
| **CART ITEM TABLE** |
| Cart Item ID (Primary key) |
| Cart ID (Foreign key) |
| Product ID (Check key) |
| Quantity |

|  |
| --- |
| **ORDER TABLE** |
| Order ID (Primary key) |
| User ID (Check key) |
| Order date |
| Status |

**FLOW CHART**

USER LOG IN

BROWSE PRODUCT

SELECT PRODUCT

VIEW CART

ADD TO CART

PROCEED TO CHECKOUT

CHOOSE PAYMENT METHOD

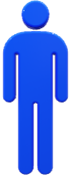
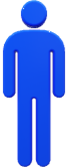
ENTER SHIPPING ADDRESS

REVIEW ORDER DETAIL

CONFIRM AND PLACE ODER

ORDER CONFIRMATION

**USER CASES**



**SEQUENCE DIAGRAM**

USER

ORDER

CART

addProductToCart()

Viewcart()

checkout ()

CreateOrder ()

UpdateStatus ()