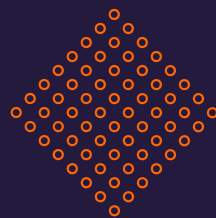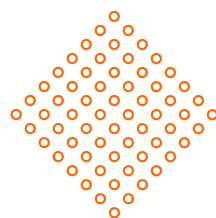# KU Market Place

2023 Database Project

6410546122 Jiratchaya Thongsuthum
6510545713 Worawalan Chatlatanagulchai
6510545268 Kantaphat Phapui
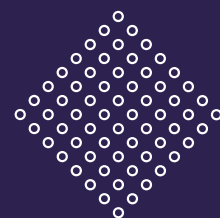6510545659 Phiranat Chaleekul

Ecommerce Presentation

KU Market Place is an E-commerce web application that performs business inquiries such as adding products to the cart, filtering out the newest products, searching for products, etc.

KU Market Place
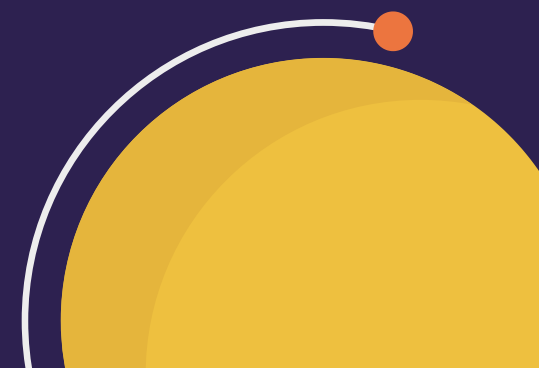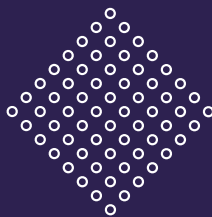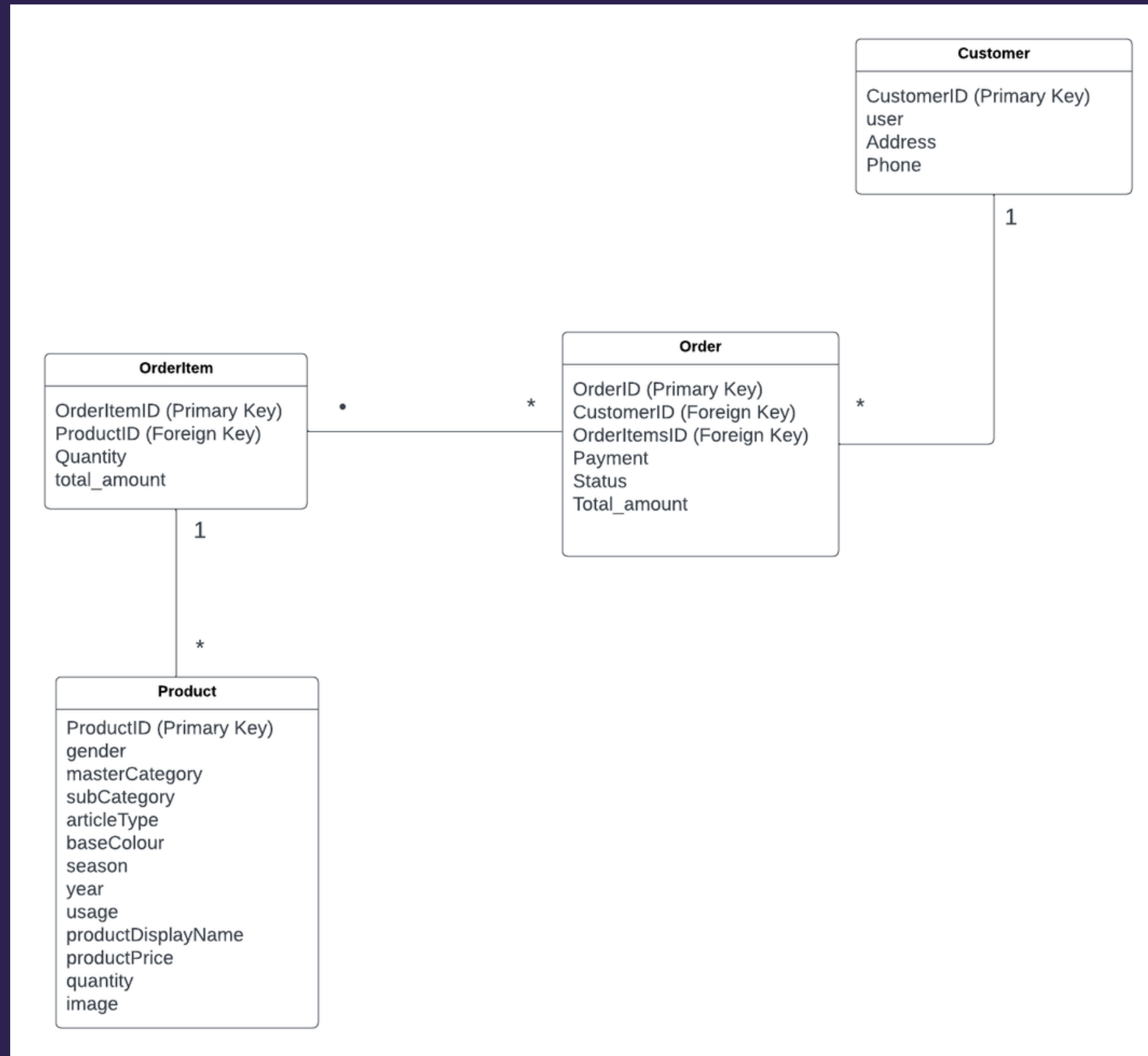
Activities and Processes

- Add products to a cart
- Remove products from a cart
- Summarize orders
- Compute the total amount of an order
- Search for specific products
- Filter for specific categories of products
- Keep track of each order of user
- Describe information about each product
- Users can login

KU Market Place

DATABASE DESIGN : Uml Diagram

Customer

CustomerID (Primary Key)
user
Address
Phone

1

OrderItem

OrderItemID (Primary Key)
ProductID (Foreign Key)
Quantity
total_amount

•   *

Order

OrderID (Primary Key)
CustomerID (Foreign Key)
OrderItemsID (Foreign Key)
Payment
Status
Total_amount

*

1

*

Product

ProductID (Primary Key)
gender
masterCategory
subCategory
articleType
baseColour
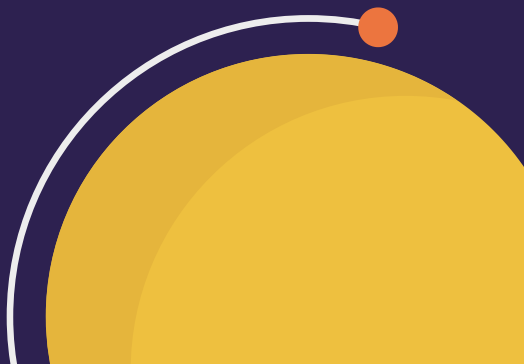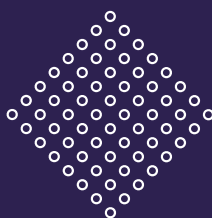season
year
usage
productDisplayName
productPrice
quantity
image

DATABASE DESIGN : Dependencies

Product -> ProductID (pk), gender, masterCategory, subCategory, articleType, baseColour, season, year, usage, productDisplayName, productPrice, quantity, image

OrderItem -> OrderItemID (pk), ProductID (fk), gender, masterCategory, subCategory, articleType, baseColour, season, year, usage, productDisplayName, productPrice, quantity, image, quantity, total_amount

Customer -> CustomerID (pk), user, address, phone

CustomerOrder -> OrderID (pk), CustomerID (fk), user, address, phone, OrderItemsID, ProductID, gender, masterCategory, subCategory, articleType, baseColour, season, year, usage, productDisplayName, productPrice, quantity, image, quantity, total_amount, payment, status, total_amount

DATABASE DESIGN: 3rd Normal Form

Customer

Customer_id	firstname	lastname	email	address	phone
...	...	...	...	...	...

OrderItem

id	quantity	product_id	total_amount
...	...	...	...

Order

id	status	total_amount	customer_id	payment
...	...	...	...	...

Product

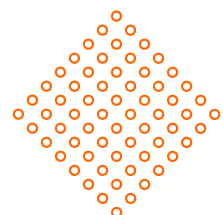| product_id	Product name	articleType	baseColour	gender	season	Category	usage	productPrice	year	product_quantity	image
...	...	...	...	...	...	...	...	...	...	...	...

SQL Queries
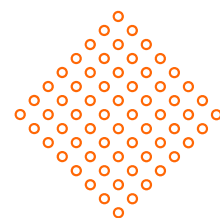
1.) List all customers and their total order amounts

SELECT c.CustomerID, c.address, SUM(co.total_amount) AS
total_order_amount
FROM Customer c
LEFT JOIN CustomerOrder co ON c.CustomerID =
co.CustomerID
GROUP BY c.CustomerID, c.address;

2.) Filter products from most to least expensive

SELECT ProductID, productPrice, productDisplayName
FROM Product
ORDER BY productPrice DESC

KU Market Place

SQL Queries

3.) Calculate the total sales for each product.

SELECT p.ProductID, p.productDisplayName,
SUM(co.total_amount) AS total_sales
FROM Product p
JOIN OrderItem oi ON p.ProductID = oi.ProductID
JOIN CustomerOrder co ON oi.OrderItemID = co.OrderItemID
GROUP BY p.ProductID, p.productDisplayName;

4.) List all orders with 'Credit Card' payment

SELECT CustomerID, OrderID, payment FROM CustomerOrder
WHERE payment = 'Credit Card';

KU Market Place

SQL Queries

5.) Find customers who haven't placed any orders

SELECT c.CustomerID, c.address
FROM Customer c
LEFT JOIN CustomerOrder co ON c.CustomerID = co.CustomerID
WHERE co.CustomerID IS NULL;

6.) Retrieve a list of products that are currently out of stock.

SELECT * FROM Product
WHERE quantity = 0;

7.) Calculate the average order value for all preparing orders.

SELECT AVG(total_amount) AS average_prepared_order
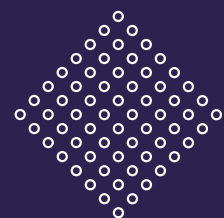FROM CustomerOrder
WHERE status = 'Prepare';

SQL Queries

8.) Identify all preparing orders and their details.

SELECT co.OrderID, co.status, co.total_amount
FROM CustomerOrder co
JOIN Customer c ON co.CustomerID = c.CustomerID
WHERE co.status = 'Prepare';

9.) Identify the most common payment method:

SELECT payment, COUNT(*) AS payment_count
FROM CustomerOrder
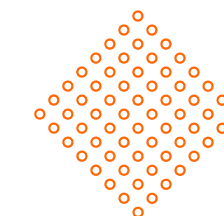GROUP BY payment
ORDER BY payment_count DESC

KU Market Place

SQL Queries

10.) Count order items for a specific order:

SELECT COUNT(*) AS "count"
FROM OrderItem
INNER JOIN CustomerOrder
ON (OrderItem.OrderItemID = CustomerOrder.OrderItemID)
WHERE CustomerOrder.OrderID = 57;

11.) Search products by display name with price sorting:

SELECT ProductID, gender, masterCategory, subCategory,
articleType, baseColour, season, year, usage, productDisplayName,
productPrice, quantity, image
FROM Product
WHERE UPPER(Product.productDisplayName) LIKE
UPPER('%Watch%')
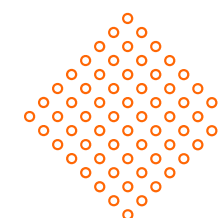ORDER BY Product.productPrice DESC;

KU Market Place

SQL Queries

12.) Retrieve product by ID.

SELECT ProductID, gender, masterCategory, subCategory, articleType, baseColour,
 season, year, usage, productDisplayName, productPrice, quantity, image
FROM Product
WHERE Product.ProductID = '18696'

13.) Identify total purchase amount of each customer.

SELECT
 CustomerID, totalPurchaseAmount
FROM (
 SELECT
 c.CustomerID,
 SUM(co.total_amount) AS totalPurchaseAmount
 FROM Customer c
 JOIN CustomerOrder co ON c.CustomerID = co.CustomerID
 GROUP BY c.CustomerID
) AS CustomerPurchase
WHERE totalPurchaseAmount > 500;

KU Market Place

Web Application Page: Filter products

Featured Items

Product Name

Product Price

฿

Order By Price

Gender

Select Gender

Category 1

Select Master Category

Category 2

Select Sub Category

Article

Select Article Type

Colour

Select Colour

Season

Select Season

Usage

Select Usage

Year of Production

Select Year

🔍 Search

Baggit Women Brown Handbag
฿6503.25
Women

Manchester United Men Solid Black Track Pants
฿7636.25
Men

Jealous 21 Women Purple Shirt
฿1697.75
Women

Inkfruit Mens Chain Reaction T-shirt
฿4489.0
Men

Skagen Men Black Watch
฿6199.5
Men

Fabindia Men Striped Green Shirt
฿6280.75
Men

CASIO G-Shock Men Black Digital Watch G-7710-1DR G223
฿3616.0
Men

Puma Men Future Cat Remix SF Black Casual Shoes
฿7081.5
Men

Reid & Taylor Men Check Purple Shirts
฿3077.25
Men

Web Application Page: Sign Up

Create Account

👤 Username: | Username |

✉ Email (Optional): | Email address |

🔒 Password: | Password |

🔒 Confirm Password: | Password (again) |

Sign Up

Sign In

Web Application Page: Sign in

Sign in

OR

G Sign in with Google

Sign Up

👤 Username:

admin

🔒 Password:

••••••••••

☐ Remember Me

Sign in

OR

Sign Up with Google

Web Application Page: Products Detail

KU Marketplace

LOGOUT   PRODUCTS   CART   ORDER LIST

Baggit Women Brown Handbag

Elevate Your Style

Baggit Women Brown Handbag

฿6503.25

Discover a piece that speaks to your individuality:

- **Gender:** Women
- **Master Category:** Accessories
- **Sub Category:** Bags
- **Article Type:** Handbags
- **Color:** Brown
- **Season:** Summer
- **Usage:** Casual
- **Year of Production:** 2012

Only 144 left in stock! Act now.

Quantity:

Quantity

ADD TO CART

Web Application Page: Cart Detail

KU Marketplace

LOGOUT   PRODUCTS   CART   ORDER LIST

Your Cart

Items in your cart: 1   Total Amount: ฿ 1697.75

Jealous 21 Women Purple Shirt

Gender: Women Master Category: Apparel Sub Category: Topwear Article Type: Shirts Base Colour: Purple Season:
Summer Year: 2012 Usage: Casual
Price: ฿ 1697.75
Quantity: 1
Total: ฿ 1697.75
Quantity:

Quantity

🗑 Remove

Shipping Address:

463 ประเสริฐมนูกิจ 28

Payment Method: Credit Card ▾   🛒 Checkout

Web Application Page: Order Confirmation

KU Marketplace

Order Confirmation

Thank you for your order.

Number	Shipping Address	Payment	Status	Total Price
84	463 ประเสริฐมนูกิจ 28	PayPal	Delivery	฿ 9979.0

Would you like to purchase another item? Click 🛒 here.

Murcia Women Blue Handbag

Gender: Women Master Category: Accessories Sub Category: Bags Article Type: Handbags Base Colour: Blue Season:
Summer Year: 2012 Usage: Casual
Price: ฿ 9979.0
Quantity: 1
Total: 9979.0

Web Application Page: Display your order list

KU Marketplace

LOGOUT   PRODUCTS   CART   ORDER LIST

Order List

Order ID	Customer Name	Product Name	Payment	Order Status	Order Total	Order Details
80	peanutt	Jealous 21 Women Purple Shirt Manchester United Men Solid Black Track Pants	Credit Card	Shipping	32242.75	Details
82	peanutt	Manchester United Men Solid Black Track Pants	Cash on Delivery	Delivery	7636.25	Details
83	peanutt	Ben 10 Boys Navy Blue Slippers Skagen Men Black Watch	Credit Card	Delivery	17968.5	Details
84	peanutt	Murcia Women Blue Handbag	PayPal	Delivery	9979.0	Details
85	peanutt	Fabindia Men Striped Green Shirt	Cash on Delivery	Delivery	6280.75	Details