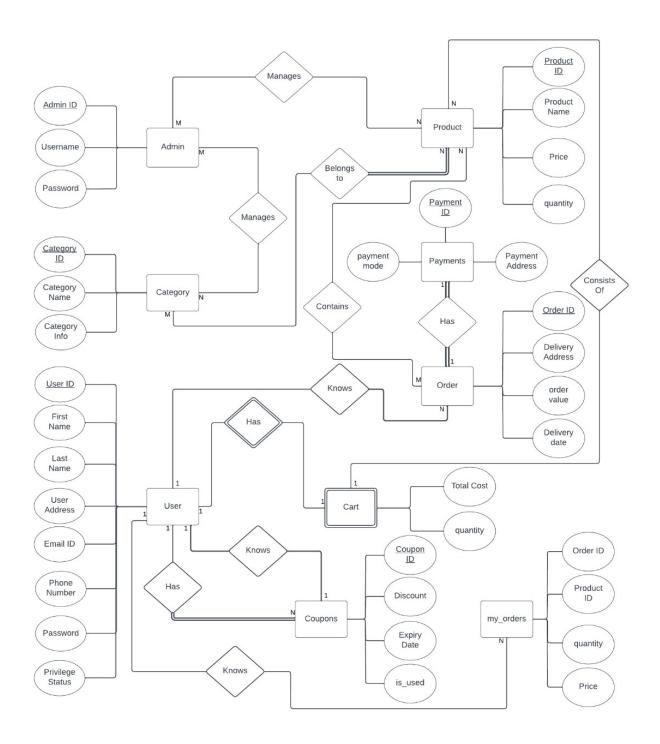
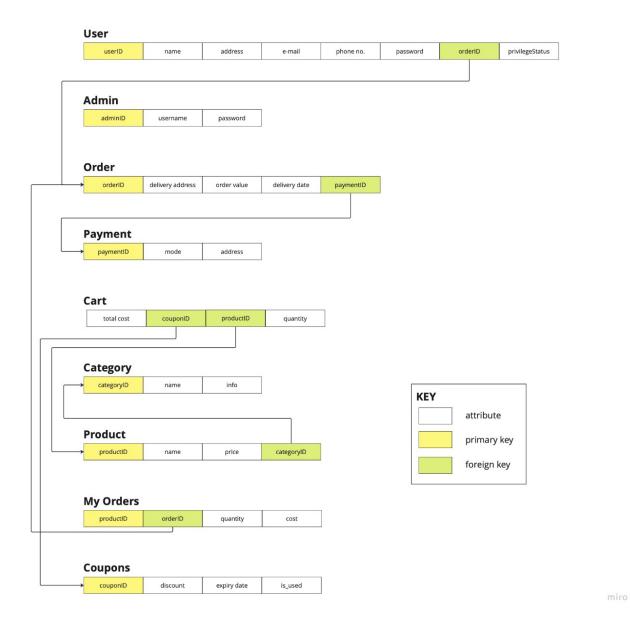
ER Diagram



Relational Model



Schema

1. admin

admin(<u>adminID</u>, username, pass)

adminID	INT PRIMARY KEY NOT NULL AUTO_INCREMENT
username	VARCHAR(10) NOT NULL
pass	VARCHAR(20) NOT NULL

2. Cart

 $Cart(userID,\,total_cost,\,productID,\,quantity)$

userID	INT NOT NULL FOREIGN KEY REFERENCES user
total_cost	$egin{array}{c} { m INT} \\ { m DEFAULT~VALUE~0} \\ { m CHECK~total_cost} >= 0 \\ \end{array}$
productID	INT NOT NULL FOREIGN KEY REFERENCES product
Quantity	$\begin{array}{c} \text{INT} \\ \text{NOT NULL} \\ \text{DEFAULT VALUE 1} \\ \text{CHECK quantity} >= 1 \end{array}$

3. Category

Category(<u>categoryID</u>, category_name, info)

categoryID	INT PRIMARY KEY NOT NULL AUTO_INCREMENT
category_name	VARCHAR(50) NOT NULL
info	VARCHAR(50) DEFAULT NULL

4. Coupons

Coupons(<u>couponID</u>, discount, expiry, is_used)

couponID	CHAR(10) PRIMARY KEY NOT NULL
discount	$\begin{array}{c} \text{INT} \\ \text{NOT NULL} \\ \text{DEFAULT VALUE 0} \\ \text{CHECK discount} > 0 \end{array}$
expiry	DATE NOT NULL
is_used	TINYINT(1) NOT NULL DEFAULT VALUE 0

5. my_orders

 $my_orders(\underline{orderID},\,\underline{productID},\,quantity,\,cost)$

orderID	INT NOT NULL PRIMARY KEY FOREIGN KEY REFERENCES order
productID	INT NOT NULL PRIMARY KEY
quantity	INT NOT NULL DEFAULT VALUE 1
cost	INT NOT NULL DEFAULT VALUE 0

6. Order

$$\label{lem:conder} \begin{split} & \text{Order}(\underline{\text{orderID}},\, \text{delivery_address},\, \text{userID},\, \text{order_value},\\ & \text{delivery_date},\, \text{couponID},\, \text{paymentID}) \end{split}$$

orderID	INT NOT NULL PRIMARY KEY AUTO_INCREMENT
delivery_address	VARCHAR(50) NOT NULL
userID	INT NOT NULL FOREIGN KEY REFERENCES user
order_value	$\begin{array}{c} \text{INT} \\ \text{NOT NULL} \\ \text{CHECK order_value} >= 0 \end{array}$
delivery_date	DATE NOT NULL
couponID	CHAR(10) DEFAULT NULL FOREIGN KEY REFERENCES coupons
paymentID	INT NOT NULL FOREIGN KEY REFERENCES payments

7. Payments

Payments(paymentID, payment_mode, payment_address)

paymentID	INT PRIMARY KEY NOT NULL
payment_mode	VARCHAR(10) NOT NULL
payment_address	VARCHAR(20) NOT NULL

8. Product

 ${\bf Product}(\underline{{\bf productID}},\, \underline{{\bf product_name}},\, \underline{{\bf price}},\, \underline{{\bf quantity}})$

productID	INT PRIMARY KEY NOT NULL AUTO_INCREMENT
product_name	VARCHAR(10) NOT NULL
price	DOUBLE NOT NULL DEFAULT VALUE 0
quantity	INT NOT NULL DEFAULT VALUE 0

$9.\ Product_category_map$

 ${\bf Product_category_map}(\underline{{\bf productID}},\,\underline{{\bf categoryID}})$

productID	INT PRIMARY KEY NOT NULL FOREIGN KEY REFERENCES product
categoryID	INT PRIMARY KEY NOT NULL FOREIGN KEY REFERENCES category

10. User

User(<u>userID</u>, first_name, last_name, user_address, email_id, phone_number, pass, priviledge_status)

userID	INT NOT NULL PRIMARY KEY AUTO_INCREMENT
first_name	VARCHAR(20) NOT NULL
last_name	VARCHAR(20) DEFAULT NULL
user_address	VARCHAR(50) NOT NULL
email_id	VARCHAR(20) NOT NULL
phone_number	BIGINT NOT NULL CHECK phone_number > 1000000000 and phone_number < 10000000000
pass	VARCHAR(20) NOT NULL
privilege_status	VARCHAR(10) NOT NULL DEFAULT VALUE normal