Relational schema

User (<u>username</u> , password, Email, first_name, last_name, activatied)

User_phone (<u>username, phone</u>)

User_phone.username referneces User

User_address (<u>username , address</u>)

User_address.username references User

Admin (<u>username</u>)

Admin.username references User

DeliveryPersonnel (<u>username</u> , <u>admin_username</u>)

DeliveryPersonnel.username references User

DeliveryPersonnel.admin_username references Admin.username

Vendor (<u>username</u>, bank_acc_number, company_name, <u>admin_username</u>)

Vendor.username references User

Vendor.admin_username references Admin.username

Customer (<u>username</u>)

Customer.username references User

Product (<u>serial_number</u> , name , price , rate , color , image , description , category , <u>order_number</u> , <u>customer_username</u> , <u>vendor_username</u>)

Product.order_number references Order

Product.customer_username references Customer.username

Product.vendor_username references Vendor.username

Promotion (<u>number</u> , exp_date , amount_of_discount)

GiftCard (<u>number</u>)

GiftCard.number references Promotion

TodayDeal (number)

TodayDeal.number references Promotion

Offer (number)

Offer.number references Promotion

CreditCard (number , cvc , exp_date)

Wishlist (customer_username, name)

Wishlist.customer_username references Customer.username

Order (number , order_date, payment_method, rem_days, del_id, customer_username , creditcard_number, deliverypersonnel_username)

Where Order.rem_days = calculated Order rem_days

Order.customer_username references Customer.username

Order.del_id references Delivery

Order.creditcard_number references CreditCard

Order.deliverypersonnel_username references DeliveryPersonnel.username

Delivery (del_id , duration, fees , type, admin_username)

Delivery.admin_username references Admin.username

Question (number , statement , answer, serial_number, customer_username)

Question.serial_number references Product

Question.customer_username references Customer.username

ownedBy (creditcard_number , customer_username)

ownedBy.creditcard_number references CreditCard

ownedBy.customer_username references Customer.username

add_in_cart (customer_username , product_sn)

add_in_cart.customer_username references Customer.username

add_in_cart.product_sn references Product

contains (wishlist_name, customer_username , product_sn)

contains.(wishlist_name, customer_username) references Wishlist

contains.product_sn references Product

generate (customer_username , admin_username , giftcard_number)

generate.customer_username references Customer.usrname

generate.admin_username references Admin.username

generate.giftcard_number references GiftCard.number

post (product_sn , admin_username, todaydeal_number)

post.product_sn references Product

post.admin_username references Admin.username

post.todaydeal_number references TodayDeal.number

makes (product_sn , vendor_username, offer_number)

makes.product_sn references Product

makes.vendor_username references Vendor.username

makes.offer_number references Offer.number