Relational Schema

- User(<u>username</u>, password, first_name, last_name, email)

- User_Addresses(<u>username, address</u>)

    User_Addresses. username̲ references User.username

- User_Mobile(<u>username, mobile_number</u>)

    User_Mobile. username̲ references User.username

- Customer(<u>username</u>, points)

    Customer.username̲ *references* User.username

- Vendor(<u>username</u>, company_name, bank_number, admin_username)

    Vendor.username̲ *references* User.username
    Vendor.admin_username̲ *references* Admin.username

- Delivery_Personnel(<u>username</u>, admin_username)

    Delivery_Personnel.username̲ *references* User.username
    Delivery_Personnel.admin_username̲ *references* Admin.username

- Admin(<u>username</u>)

    Admin.username̲ *references* User.username

- Product(<u>serial_number</u>, name, category, description, availability, price, rate, image, color, offer_number, vendor_username)

    Product.offer_number̲ *references* Offer.number
    Product.vendor_username̲ *references* Vendor.username

- Rating_a_Product(<u>customer_username, product_id,</u> rate)

    Rating_a_Product.customer_username̲ *references* Customer.username
    Rating_a_Product.product_id̲ *references* Product.serial_number

- Question_Exchange(<u>customer_username , product_id</u>, question, response)

    Question_Exchange.customer_username̲ *references* Customer.username
    Question_Exchange.product_id̲ *references* Product.serial_number

- Buy(<u>customer_username, product_id</u>)

  Buy.customer_username *references* Customer.username
  Buy.product_id *references* Product.serial_number

- Credit_card(<u>number</u>, expiry_date, cvc_code)

- Credit_Card_Owner(<u>customer_username, credit_card_number</u>)

  Credit_Card_Owner.customer_username *references* Customer.username
  Credit_Card_Owner. credit_card_number *references* Credit_card.number

- Add_To_Cart(<u>customer_username, product_id</u>)

  Add_To_Cart.customer_username *references* Customer.username
  Add_To_Cart.product_id *references* Product.serial_number

- Wish_list(<u>username, name</u>, number_of_products)

  Wish_list.username *references* Customer.username
  where number_of_products is calculated

- Adds_Item_To_Wishlist(<u>wishlist_name, product_id</u>)

  Adds_Item_To_Wishlist. wishlist_name *references* Wishlist.name
  Adds_Item_To_Wishlist.product_id *references* Product.serial_number

- Order(<u>number</u>, payment_method, credit_card_used, total,
  amount_of_points_used_in_purchase, status, customer_username)

  Order.customer_username *references* Customer.username

- Delivery(<u>order_number, type</u>, fees, delivery_status, time duration, time_limit,

  window, delivery_personnel_username)

  Delivery.order_number *references* Order.number
  Delivery.delivery_personnel_username *references* Delivery_Personnel.username

- Promotion(<u>number</u>, amount_of_discount, expiry_date)

- Offer(<u>number</u>)

  Offer.number *references* Promotion.number

- Today's_Deals(<u>number</u>)

  Today's_Deals.number *references* Promotion.number

- Gift_Card(<u>number</u>)

  Gift_Card.number *references* Promotion.number

- Adding_Today's_Deals(<u>product_id</u>, admin_username,today's_deals_number)

  Adding_Today's_Deals.admin_username *references* Admin.username
  Adding_Today's_Deals.product_id *references* Product.serial_number
  Adding_Today's_Deals.today's_deals_number *references* Today's_Deals.number

- Adding_ Gift_Card(<u>customer_username</u>, admin_username,gift_card_number)

  Adding_Gift_Card.admin_username *references* Admin.username
  Adding_ Gift_Card.customer_username *references* Customer.username
  Adding_ Gift_Card.gift_card _number *references* Gift_Card.number