

Assignment on ER Diagrams

"Blue Yu" is a new brand of mobile phones and accessories. The company wants to set up a web and mobile application to showcase and sell their products. In this regard, you are to create the required database tables.

There are several **products** in a few **categories**. The categories are:

1. Smartphones
2. Wifi devices
3. Bands
4. Power banks
5. Headphones
6. VR Players
7. Charging accessories
8. Bluetooth speakers ... and more categories to come in the future. In each category, there may be one or more products. In order to showcase all these products, there may be one or more **pictures** (3 to 5) for each of the products.

The application allows **customers** to browse, choose and buy products. A customer may place an **order**, which consists of one or more products of varying quantity. Occasionally, the company releases **coupon** codes, against which the customer may get good discounts. The coupon code is entered by the customer during the checkout process. The customers optionally re-visit the application to **review** the product they may have used and give rating and feedback on the same.

Identify the various entities, attributes and the relationships between entities from the above case study. Create proper ER diagrams representing the same.

Solution:

Product (product_id, name, description, unit_price, units_in_stock, quantity_per_unit, category_id)

Category (category_id, name, description)

Customer (customer_id, name, street, area, city, state, country, pincode, email, phone)

Coupon (coupon_code, description, discount_percent, expires_on)

Product_Pictures (id, product_id, picture)

Order (order_id, customer_id, coupon_code, order_date, status, shipped_date, freight, order_total, pmt_mode)

Order_products (order_id, product_id, quantity)

Review (customer_id, product_id, review_date, rating, feedback)

ratings_grades (id, rating_min, rating_max, rating_category)