PROJECT 2: DESIGN AN ECOMMERCE WEBSITE DATABASE

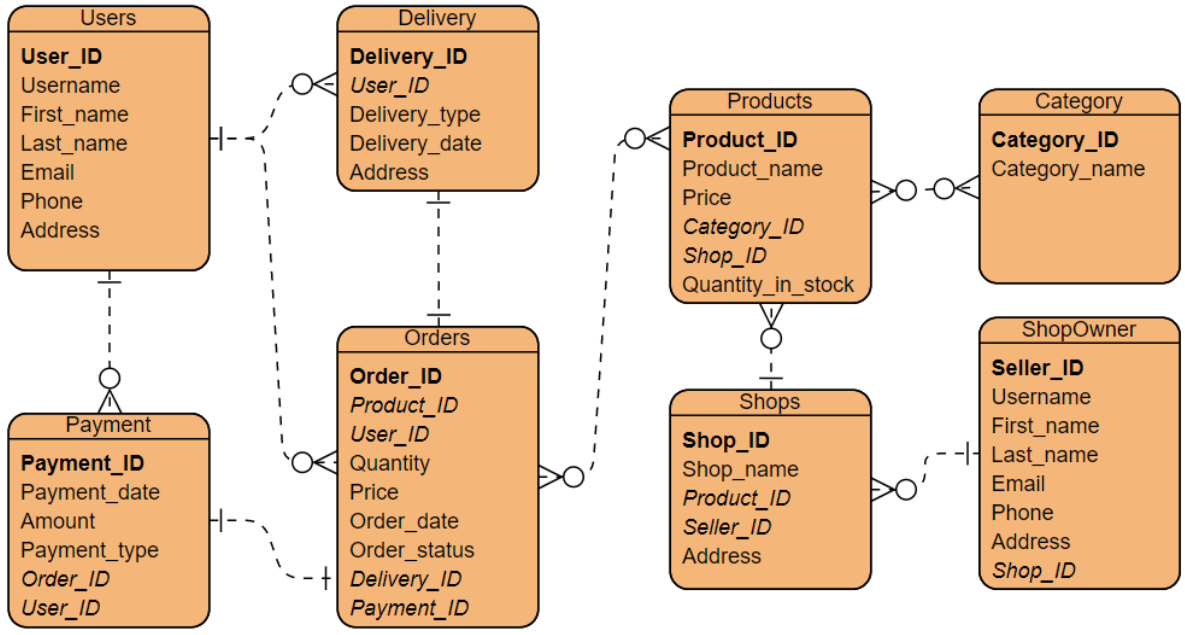
Designing a Database for Shopee/Tokopedia/AliExpress
- Imagine you work in a database management team of an eComm platform
- Please design a database for the platform
- Draw an ERD Diagram for your design
- Implement the Database in SQLite and create all the tables
- Your design should at least include Users, Products, Shops, ShopOwners, Orders tables

1. Tables to be included in Database

Table Name	Column Name (PK / FK)
Users	**User_ID (PK)**
	Username
	First_name
	Last_name
	Email
	Phone
	Address
Products	**Product_ID (PK)**
	Product_name
	Price
	Category_ID (FK)
	Shop_ID (FK)
	Qty_in_stock
Shops	**Shop_ID (PK)**
	Shop_name
	Product_ID (FK)
	Seller_ID (FK)
	Address
ShopOwner	**Seller_ID (PK)**
	Username
	First_name
	Last_name
	Email
	Phone
	Address
	Shop_ID (FK)
Orders	**ID (PK)**
	Product_ID (FK)
	User_ID (FK)
	Price
	Quantity

Table Name	Column Name (PK / FK)
	Order_date
	Order_status
	Delivery_ID (FK)
	Payment_ID (FK)
Payment	**Payment_ID (PK)**
	Payment_date
	Amount
	Payment_type
	Order_ID (FK)
	User_ID (FK)
Delivery	**Delivery_ID (PK)**
	User_ID (FK)
	Delivery_type
	Delivery_date
	Address
Category	**Category_ID (PK)**
	Category_name

2. ERD Diagram



3. Creating tables in SQL Lite

Table	Code
Users	CREATE TABLE "Users" ("User_ID" INTEGER, "Username" TEXT, "First_name" TEXT, "Last_name" TEXT, "Email" TEXT, "Phone" TEXT, "Address" TEXT, PRIMARY KEY("User_ID"));
Products	CREATE TABLE "Products" ("Product_ID" INTEGER, "Product_name" TEXT, "Price" INTEGER, "Category_ID" INTEGER, "Shop_ID" INTEGER, "Quantity_in_stock" NUMERIC, FOREIGN KEY("Category_ID") REFERENCES "Category"("Category_ID"), FOREIGN KEY("Shop_ID") REFERENCES "Shops"("Shop_ID"), PRIMARY KEY("Product_ID"));
Shops	CREATE TABLE "Shops" ("Shop_ID" INTEGER, "Shop_name" TEXT, "Product_ID" INTEGER, "Seller_ID" INTEGER, "Address" TEXT, FOREIGN KEY("Product_ID") REFERENCES "Products"("Product_ID"), FOREIGN KEY("Seller_ID") REFERENCES "ShopOwner"("Seller_ID"), PRIMARY KEY("Shop_ID"));
ShopOwner	CREATE TABLE "ShopOwner" ("Seller_ID" INTEGER, "Username" TEXT, "First_name" TEXT, "Last_name" TEXT, "Email" TEXT, "Phone" TEXT, "Address" TEXT, "Shop_ID" INTEGER, FOREIGN KEY("Shop_ID") REFERENCES "Shops"("Shop_ID"), PRIMARY KEY("Seller_ID"));

Table	Code
Orders	CREATE TABLE "Orders" ("Order_ID" INTEGER, "Product_ID" INTEGER, "User_ID" INTEGER, "Quantity" NUMERIC, "Price" INTEGER, "Order_date" TEXT, "Order_status" TEXT, "Delivery_ID" INTEGER, "Payment_ID" INTEGER, FOREIGN KEY("Product_ID") REFERENCES "Products"("Product_ID"), FOREIGN KEY("Delivery_ID") REFERENCES "Delivery"("Delivery_ID"), FOREIGN KEY("User_ID") REFERENCES "Users"("User_ID"), FOREIGN KEY("Payment_ID") REFERENCES "Payment"("Payment_ID"), PRIMARY KEY("Order_ID"));
Payment	CREATE TABLE "Payment" ("Payment_ID" INTEGER, "Payment_Date" TEXT, "Amount" INTEGER, "Payment_type" TEXT, "Order_ID" INTEGER, "User_ID" INTEGER, FOREIGN KEY("Order_ID") REFERENCES "Orders"("Order_ID"), FOREIGN KEY("User_ID") REFERENCES "Users"("User_ID"), PRIMARY KEY("Payment_ID"));
Delivery	CREATE TABLE "Delivery" ("Delivery_ID" INTEGER, "User_ID" INTEGER, "Delivery_type" TEXT, "Delivery_date" TEXT, "Address" TEXT, FOREIGN KEY("User_ID") REFERENCES "Users"("User_ID"), PRIMARY KEY("Delivery_ID"));
Category	CREATE TABLE "Category" ("Category_ID" INTEGER, "Category_name" INTEGER, PRIMARY KEY("Category_ID"));