PROJECT

Online Market

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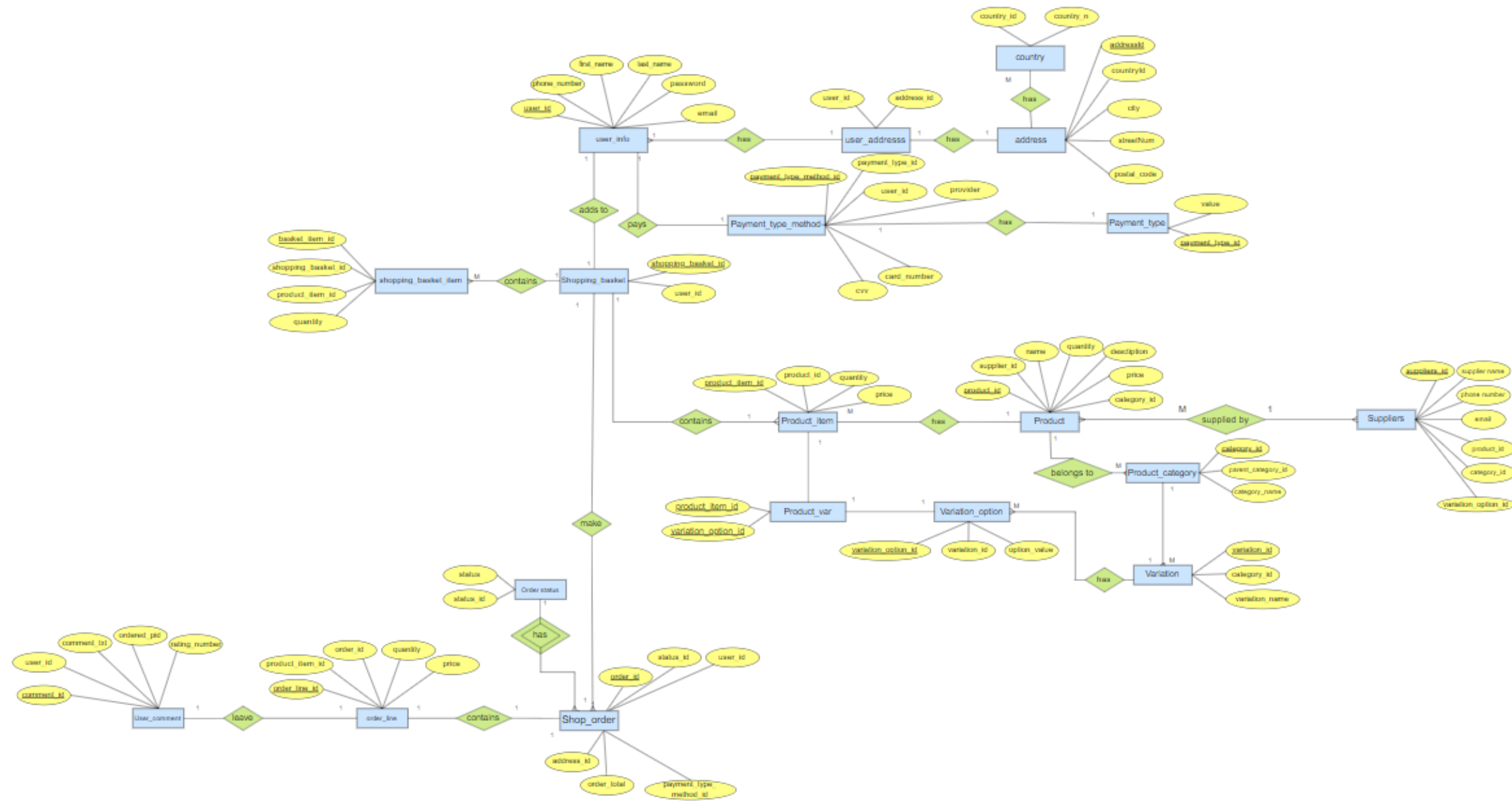Merey Amantay

ONLINE MARKET

Online Market's database design used to manage market's website's users, products, orders, suppliers, payments, reviews, shipping and etc.

Users of online market are customers.

Idea of the database is based on online shops like Lamoda and Flip.

ENTITY-RELATIONSHIP DIAGRAM

19 Entities:

- user_info
- user_address
- address
- country
- payment_type
- payment_type_method
- shopping_basket
- shopping_basket_item
- product_item
- product

- product_category
- variation
- variation_option
- product_var
- shop_order
- order_status
- order_line
- user_comment

Relationships:

- user_info - user_address (1-1)
- user_address - address (1-1)
- user_info - shopping_basket (1-1)
- shopping_basket - shopping_basket_item (1-m)
- user_info - payment_type (1-1)
- payment_type - payment_type_method (1-1)
- shopping_basket - product_item (1-m)
- product - product_category (1-m)
- product_category - variation (1-m)
- variation - variation_option (1-m)
- shopping_basket - shop_order (1-m)
- shop_order - order_details (1-m)
- shop_order - order_status (m-1)
- shop_order - user_comment (1-1)
- shop_order - shipping_method (1-1)

?

CREATION OF TABLES:

```sql
CREATE TABLE USER_INFO(
    USERID NUMBER(6),
    FIRSTN VARCHAR(20),
    LASTN VARCHAR(20),
    PHONEN NUMBER(10),
    EMAILN CHAR(30),
    PASSWORDN CHAR(10),
    CONSTRAINT PK_USERID PRIMARY KEY
(USERID)
);


CREATE TABLE ADDRESS(
    ADDRESSID NUMBER(6),
    COUNTRYID NUMBER(6) REFERENCES
COUNTRY(COUNTRYID),
    CITY VARCHAR(30),
    REGION VARCHAR(30),
    STREETNUM CHAR(30),
    POSTAL_CODE NUMBER(6),
    CONSTRAINT PK_ADDRESSID PRIMARY KEY
(ADDRESSID) );
);


CREATE TABLE COUNTRY(
    COUNTRYID NUMBER(6),
    COUNTRYN VARCHAR(50),
    CONSTRAINT PK_COUNTRYID PRIMARY
KEY (COUNTRYID)
);
```

```sql
CREATE TABLE USER_ADDRESS(
    USERID NUMBER(6) REFERENCES
USER_INFO(USERID),
    ADDRESSID NUMBER(6) REFERENCES
ADDRESS(ADDRESSID)
);


CREATE TABLE PAYMENT_TYPEMETHOD(
    PAYMENT_TYPEMETHODID NUMBER(3),
    USERID NUMBER(6) REFERENCES
USER_INFO(USERID),
    PAYMENT_TYPE_ID NUMBER(2)
REFERENCES
PAYMENT_TYPE(PAYMENT_TYPE_ID),
    PROVIDER VARCHAR(20),
    CARD_NUMBER NUMBER(16),
    CVV NUMBER(3),
    CONSTRAINT
PK_PAYMENT_TYPEMETHODID PRIMARY KEY
(PAYMENT_TYPEMETHODID)
);

CREATE TABLE USER_COMMENT(
    COMMENTID NUMBER(4),
    USERID  NUMBER(6) REFERENCES USER_INFO(USERID),
    ORDERED_PID NUMBER(4) REFERENCES
ORDER_LINE(ORDERED_PID),
    RATING NUMBER(2),
    COMMENT_TXT CHAR(255),
    CONSTRAINT PK_COMMENTID PRIMARY KEY (COMMENTID)
);
```

```sql
CREATE TABLE SHOPPING_BASKET(
    SHOPPING_BASKETID NUMBER(4),
    USERID NUMBER(6) REFERENCES
USER_INFO(USERID),
    CONSTRAINT PK_SHOPPING_BASKETID PRIMARY
KEY (SHOPPING_BASKETID)
);

CREATE TABLE SHOPPING_BASKET_ITEM(
    BASKET_ITEMID NUMBER(4),
    SHOPPING_BASKETID NUMBER(4) REFERENCES
SHOPPING_BASKET(SHOPPING_BASKETID),
    ITEMID NUMBER(5) REFERENCES
PRODUCTT_ITEM(ITEMID),
    QUANTITY NUMBER(4),
    CONSTRAINT PK_BASKET_ITEMID PRIMARY KEY
(BASKET_ITEMID)
);

CREATE TABLE PRODUCT_CATEGORY(
    CATEGORYID NUMBER(4),
    CATEGORYN VARCHAR(20),
    CONSTRAINT PK_CATEGORYID PRIMARY KEY
(CATEGORYID)
);


CREATE TABLE PAYMENT_TYPE(
    PAYMENT_TYPE_ID NUMBER(2),
    PAYMENT_TYPE VARCHAR(6),
    CONSTRAINT PK_PAYMENT_TYPE_ID
PRIMARY KEY (PAYMENT_TYPE_ID)
);
```

CREATION OF TABLES:

```sql
CREATE TABLE PRODUCTT(
    PRODUCTID NUMBER(5),
    CATEGORYID NUMBER(4) REFERENCES
PRODUCT_CATEGORY(CATEGORYID),
    PRODUCTN VARCHAR(40),
    PRODUCT_DES CHAR(255),
    CONSTRAINT PK_PRODUCTID PRIMARY KEY
(PRODUCTID)
);
CREATE TABLE PRODUCTT_ITEM(
    ITEMID NUMBER(5),
    PRODUCTID NUMBER(5) REFERENCES
PRODUCTT(PRODUCTID),
    QUANTITY_IN_STOCK NUMBER(4),
    PRICE CHAR(255),
    CONSTRAINT PK_ITEMID PRIMARY KEY (ITEMID)
);

CREATE TABLE VARIATION(
    VARIATIONID NUMBER(5),
    CATEGORYID NUMBER(4) REFERENCES
PRODUCT_CATEGORY(CATEGORYID),
    VARIATIONN VARCHAR(20),
    CONSTRAINT PK_VARIATIONID PRIMARY KEY
(VARIATIONID)
);

CREATE TABLE ORDER_STATUS(
    STATUSID NUMBER(4),
    STATUS VARCHAR(20),
    CONSTRAINT PK_STATUSID PRIMARY KEY
(STATUSID)
);
```

```sql
CREATE TABLE VARIATION_OPTION(
    VAR_OPTIONID NUMBER(5),
    VARIATIONID NUMBER(5) REFERENCES
VARIATION(VARIATIONID),
    OPTIONV CHAR(255),
    CONSTRAINT PK_VAR_OPTIONID PRIMARY KEY
(VAR_OPTIONID)
);


CREATE TABLE PRODUCT_VAR(
    ITEMID NUMBER(5) REFERENCES
PRODUCTT_ITEM(ITEMID),
    VAR_OPTIONID NUMBER(5) REFERENCES
VARIATION_OPTION(VAR_OPTIONID)
);


CREATE TABLE ORDER_DETAILS(
    ORDERED_PID NUMBER(4),
    ITEMID NUMBER(5) REFERENCES PRODUCTT_ITEM(ITEMID),
    ORDERID NUMBER(4) REFERENCES SHOP_ORDER(ORDERID),
    ORDER_QUANTITY NUMBER(4),
    TOTAL_PRICE NUMBER(20),
    CONSTRAINT PK_ORDERED_PID PRIMARY KEY (ORDERED_PID)
);
```

```sql
CREATE TABLE SHIPPING_METHOD(
    SHIPMID NUMBER(4),
    SHIPMN VARCHAR(20),
    SHIPM_PRICE CHAR(255),
    CONSTRAINT PK_SHIPMID PRIMARY KEY
(SHIPMID)
);


CREATE TABLE SHOP_ORDER(
    ORDERID NUMBER(4),
    USERID NUMBER(6) REFERENCES USER_INFO(USERID),
    ORDER_DATE CHAR(255),
    PAYMENT_TYPEMETHODID NUMBER(3) REFERENCES
PAYMENT_TYPEMETHOD(PAYMENT_TYPEMETHODID),
    ADDRESSID NUMBER(6) REFERENCES ADDRESS(ADDRESSID),
    SHIPMID NUMBER(4) REFERENCES SHIPPING_METHOD(SHIPMID),
    STATUSID NUMBER(4) REFERENCES ORDER_STATUS(STATUSID),
    ORDER_TOTAL NUMBER(10),
    CONSTRAINT PK_ORDERID PRIMARY KEY (ORDERID)
);
```