Relational Schema

Create in the 1st order :

1 .

Table's name : usr
Attributes' list :
id_usr : varchar (primary key)
name : varchar
sex : varchar
age : int

2.

Table's name : shop
Attributes' list :
id_shop : varchar (primary key)
name : varchar
url : varchar (principal site, I don't know if it is necessary or not)

3.

Table's name : item
Attributes' list :
id_item : varchar (primary key)
name : varchar
price : float
url : varchar
description : varchar (description of the item)

Create in the 2nd order

4.

Table's name : friend
Attributes' list :
id_usr1 : varchar (foreign key : related to id_usr of the table user)
id_usr2 : varchar (foreign key : related to id_usr of the table user)
(primary key : id_usr1 and id_usr2)
signification :
id_usr1 and id_usr2 are friends

5.

Table's name : ordered
Attributes' list :
id_order : varchar (primary key)
id_usr : varchar
id_shop : varchar
date_order : date
total_price : float
signification :
User id_usr create an order with id : id_order dated : date and the total price for this order is total_price.

6.

Table's name : visit
Attributes' list :
id_usr : varchar (foreign key : related to id_usr of the table user)

id_item : varchar (foreign key : related to id_item of the table item)
date_visit : date
time_visit : time
buy : char
(primary key : id_usr, id_item, date_visit, time_visit)

signification :

The user with id : id_usr visit the site of the item : id_item on date for time seconds.
The attribute “buy” stand for if the user buy this item or not.
We can say :

“y” means that this user bought this item
“n” means that this user didn't buy this item

7.

Table's name : addr (address)
Attributes' list :

street : varchar
city : varchar
country : varchar
id_usr: varchar (foreign key : related to id_usr of the table user)
(primary key : id_usr, street, city, country)

signification :

The user whose id is id_usr lives at street, city, country

PS : in this table, there may be some redundancies. For example, two users live at the same place. But, there won't be too many. Instead of creating two table like : “addr”(containing only address and its id) and “live” (containing user's id and address id), I create only one table who contains already the users' ids for avoiding “join” operation in database.

Create in 3rd order :

8.

Table's name : lineitem
Attributes' list :

id_order : varchar (foreign key : related to id_order of the table order)
id_item : varchar (foreign key : related to id_item of the table item)
quantity : int
(primary key : id_order and id_item)

signification :

The order whose id is id_order contains “quantity” item with id “id_item”