Shopping Cart ER (Entity-Relationship) Diagram

The **shopping cart ER diagram** reveals the relationships of the shopping cart entities within the database. This describes the logical structure of the system's database or data storage. It is done by identifying the online shopping process entities, their properties, and the interactions between them.

The database design is sketched out using **online shopping cart ER diagrams**. This database sketch becomes the actual basis of the system's data storage that will serve as data destination and source.

What is an ER Diagram?

The ER Diagram is referred to as the online shopping cart's database design. This ER Diagram is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships.

To build and troubleshoot relational databases, the **online shopping cart ER Diagram** is used. It works best with DFD (Data Flow Diagram), which is responsible for data movement. Designing the online shopping cart's database would be much easier with the help of ER diagram.

Importance of ER Diagram for Shopping Cart

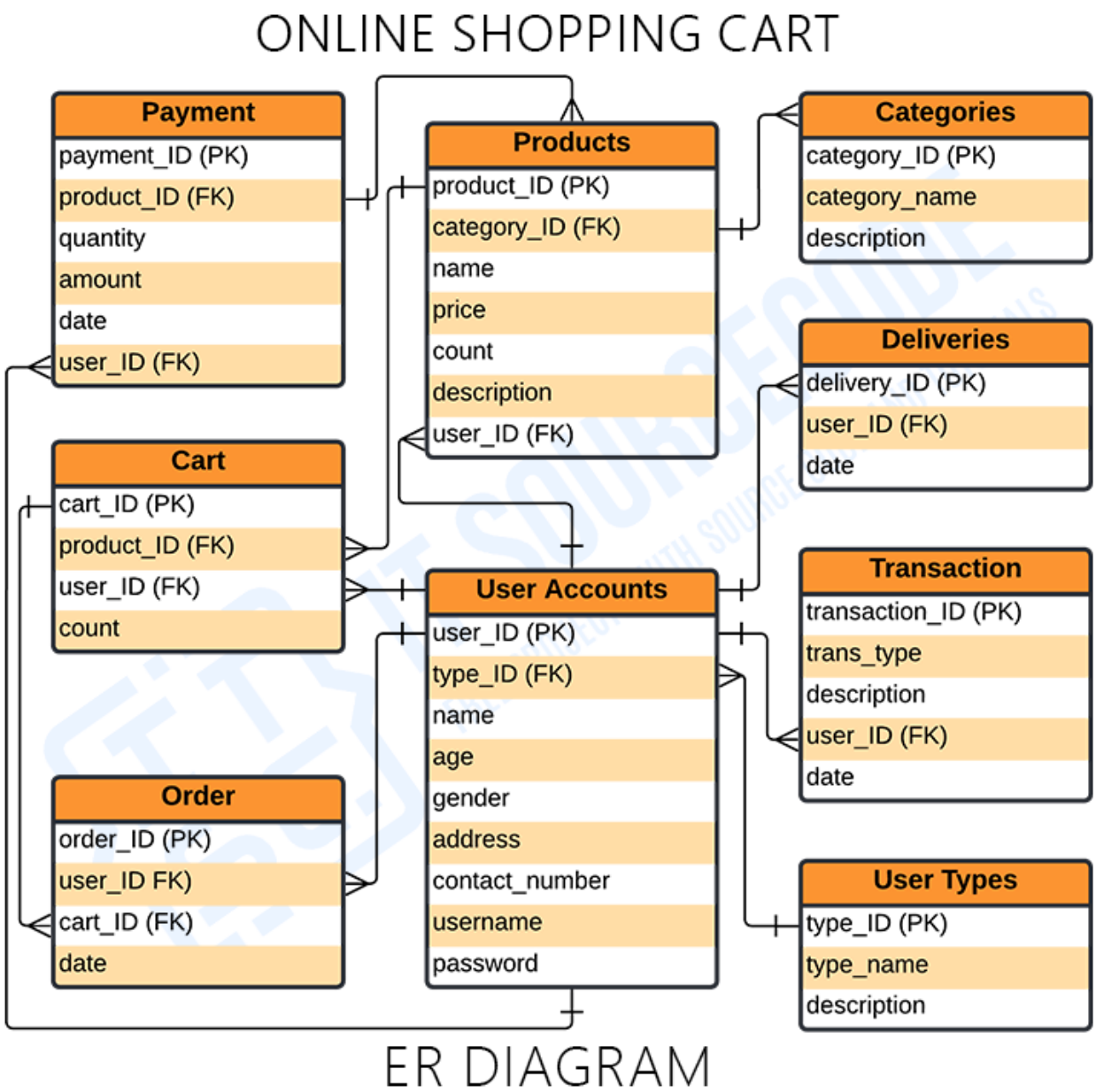
The **importance of ER diagram for online shopping cart** is to help in modeling its data storage or database. It is the basis of the project's database foundation for construction. This entity-relationship diagram (ERD) also aids in defining the data types to be stored such as their attributes and characteristics.

In addition to that, the ER Diagram also describes how an entity interacts with other entities. All other real-world projects are presented with ER Diagrams (database designs). To display the details and attributes of a data store, the er diagram for online shopping cart is used in conjunction with its data flow diagram. They are very important in building a relational database because they let us visualize how data is connected in a generic fashion.

Entity-relationship diagrams are utilized in software engineering during the planning phase of software development. It aids in the identification of various system constituents and their interrelationships. Online Shopping ER Diagram is also used as the foundation of the shopping cart DFD (Dataflow Diagram)

Online Shopping Cart ER Diagram

ER Diagram of Online Shopping Cart shows the system entity and the supposed functions in each relationship. It is the supposed database design of the project. This conveys the data that would be present in the registration system, its characteristics, and its connection with other data (entity).



ER Diagram for Online Shopping Cart

This diagram presents the entities' relational model for the online shopping cart. It is used to enlighten you on how the back end of the database of the project works. The tables are made to

meet the required specification of the system and provide much more specific details of each entity within the system.

ER Diagram for Online Shopping Cart: Tables

These tables below provide the complete database table details such as **Field Name**, **Descriptions**, **data types**, and **character lengths**. Each of these tables represents the characteristics and the attributes of data storage.

The **field** column presents the names of each database's attributes, the **description** column gives the complete thought of each attribute, the **type** column is their data type and the **length** is for their character lengths.

Table Name: User Accounts

Field	Description	Type	Length
user_ID (PK)	User ID	Int	11
type_ID (FK)	Type ID	Int	11
name	User Name	Varchar	255
age	Age	Int	11
gender	Gender	Varchar	255
address	Address	Text	
contact_number	Contact Number	Varchar	255
username	Username	Varchar	255
password	Password	Varchar	255

Table Name: Products

Field	Description	Type	Length
product_ID (PK)	Product ID	Int	11
category_ID (FK)	Category ID	Int	11
name	Name	Varchar	255
price	Price	Varchar	255
count	count	Int	11
description	Description	Text	
user_ID	Use ID	Int	11

Table Name: User Types

Field	Description	Type	Length
type_ID (PK)	Account Type ID	Int	11
type_name	Type Name	Varchar	255
description	Description	Text	

Table Name: Payment

Field	Description	Type	Length
payment_ID (PK)	Login ID	Int	11

product_ID	Username	Varchar	255
quantity	Password	Varchar	255
amount	Amount	Int	11
date	Date	Date	
user_ID (FK)	User ID	Int	11

Table Name: Cart

Field	Description	Type	Length
cart_ID (PK)	Cart ID	Int	11
product_ID	Product ID	Int	11
user_ID (FK)	User ID	Int	11
Count	Count	Int	11

Table Name: Order

Field	Description	Type	Length
order_ID (PK)	Order ID	Int	11
user_Id (FK)	User ID	Int	11
cart_ID (FK)	Cart ID	Int	11
date	Date	Date	

Table Name: Categories

Field	Description	Type	Length
category_ID (PK)	Category ID	Int	11
category_name	Category Name	Varchar	255
description	Description	Text	

Table Name: Deliveries

Field	Description	Type	Length
delivery_ID (PK)	Delivery ID	Int	11
user_ID FK)	User ID	Int	11
date	Date	Date	

Table Name: Transaction

Field	Description	Type	Length
transaction_ID (PK)	Transaction ID	Int	11
trans_ype	Transaction Type	Varchar	255
description	Description	Text	
user_ID (FK)	User ID	Int	11
date	Date	Date	

The tables given will be the basis for developers on how would they design the online shopping database. It has the complete description of the database and they will put this into the

program or data storage exactly the same as the names given to each of the tables. They will create a database with the attributes given as well as the value of each attribute.