ANP-C-7971

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DATA BASE DESIGN FOR

ONLINE SHOPPING MANAGEMENT SYSTEM

ONLINE SHOPPING MANAGEMENT SYSTEM

In today’s digital age, online shopping has become a crucial aspect of retail. An efficient online shopping management system not only enhances user experience but also streamlines operations for business. The Online Shopping Management System (OSMS) is designed to facilitate the buying and selling of products over the internet. It streamlines various processes, including user registration, product management, order processing, and payment handling, thereby enhancing user experience and operational efficiency.The Online Shopping Management System (OSMS) is a comprehensive platform designed to streamline the process of buying and selling products online. This system aims to enhance user experience by providing features such as product browsing, shopping cart management, order processing, and payment integration, all while ensuring efficient management for administrators. The core of this system is its database, which organizes and manages all essential data related to users, products, orders, and more.

Designing a database for a Online Shopping Management System includes different entities, attributes along with their relationships.

**Entities:**

1. Customers

2.Categories

3. Products

4. Shopping-Cart

5. Cart-items

6.Payments

Attributes are the fields of entities that refer to the characteristics or properties  of entities  within a database.

**1.Customers**

Customer-ID (Primary Key)

Name

Email

**2.Categories**

Category-ID (Primary Key)

Category-Name

**3.Products**

Product-ID (Primary Key)

ProductName

Price

Category-ID (Foreign Key)

**4.Shopping Cart:**

Cart-ID (Primary Key)

Customer-ID (Foreign Key)

**5.Cart Items**:

CartItem-ID (Primary Key)

Cart-ID (Foreign Key)

Product-ID (Foreign Key)

Quantity

**6.Payments:**

Payment-ID (Primary Key)

Cart-ID (Foreign Key)

Amount

Entity Relationships:

Customers to Shopping Cart:

One-to-One (A customer has one shopping cart)

Categories to Products:

One-to-Many (A category can have multiple products)

Products to Cart Items:

One-to-Many (A product can be in multiple cart items)

Shopping Cart to Cart Items:

One-to-Many (A shopping cart can have multiple items)

Shopping Cart to Payments:

One-to-One (A cart can have one associated payments)

**ENTITY RELATIONSHIP DIAGRAM – ONLINE SHOPPING MANAGEMENT**

CATEGORY

HAS

ONLINE SHPNG

PRODUCTS

BUYS

DONE

SHOPPING\_CART

PAYEMENT

DOES

MADE

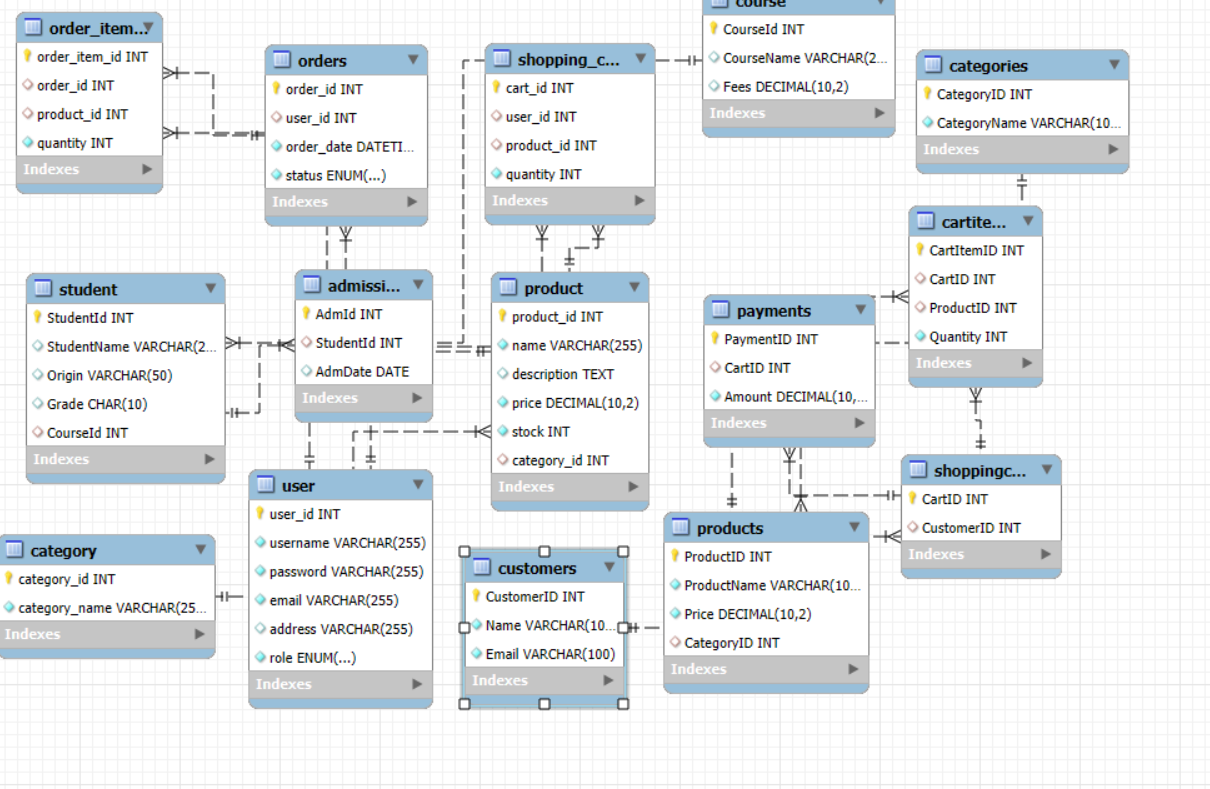
CART\_ITEM

ADDED TO

HAS

BELONGS

CUSTOMER

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