## E-SHOPPING DATABASE MANAGEMENT SYSTEM

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## Definition

**E-Shopping** or **Online shopping** is a form of electronic commerce consumers to directly buy goods or service from a seller over the internet without an intermediary service.

## Objective

Our objective is to create an online-shopping database management system where user can purchase any laptop, mobile or related accessories.

In this database description we describe all 5 entities which are used to store the all the records of the products, the customers and billing calculation of store. It also be used to apply to the overall processes of designing, not just the data structure but also the forms and queries used as part of the database application.

## 

## Design Overview

## **CUSTOMER**

The CUSTOMER table stores the details of the new user. The customer who is not registered can register to the E-Shopping system by entering their following details.

**Attributes :-** User\_id , Email\_id , F\_name , l\_name,m\_name,password , gender , address , mobile no

## **PRODUCT**

The PRODUCT is a Superclass which has 3 subclasses namely-

1. Laptop
2. Mobile
3. Accessories

All these subclasses inherit following attributes of product –

**Attributes of product :-** company, model\_no , quantity, price

## **LAPTOP**

The LAPTOP table stores details of laptop .

**Attributes :-** ram, processor, hdd , graphics,display.

# **MOBILE**

The MOBILE table stores details of mobiles .

**Attributes :-** type , os , camera

# **ACCESSORIES**

The ACESSORIES table stores details of accessories .

**Attributes :-** type, description , colour

# **BILL\_ PAYMENT**

The BILL\_PAYMENT table stores the bill & payment details of the items purchased by the customers.

**Attributes :-** card\_no , shipping\_address , contact\_no , price, date, status,bill\_no.

# **CARDINALITY RATIO**

1. CUSTOMER:PRODUCT (M:N)

A customer can purchase n products & each product can be purchase by m customers (m:n).

1. AGGREGATION ( CUSTOMER-PURCHASE-PRODUCT) : BILL\_PAYMENT(N:1)

Each customer after purchasing one or more products can opt for one bill & one bill owns to only one customer (n:1).

# **PARTICIPATION**

1. CUSTOMER-PRODUCT (partial-partial)
2. AGGREGATION ( CUSTOMER-PURCHASE-PRODUCT) -BILL\_PAYMENT (total-total)

# **RELATIONSHIPS**

1. PURCHASE: between customer and product. (**Attributes :-** product\_id, model\_no ,company, user\_id,bill\_no).
2. PAYS: between aggregation(CUSTOMER\_PURCHASE\_PRODUCT) and BILL\_PAYMENT

# **CONSTRAINT**

1. Every USER\_ID should be unique.
2. Every customer’s EMAIL\_ID should be valid and with one EMAIL\_ID customer can register for only one account.
3. MODEL\_NO entered in cart should be available in product table.