E-COMMERCE PLATFORM

(Batch No-1)

An **e-commerce platform** is a software application that facilitates buying and selling products online. sThese platforms allow businesses to manage their websites, handle sales, and perform marketing functions. Here are some key points about e-commerce platforms:

E-R DIAGRAM

An Entity-Relationship (ER) diagram for an e-commerce platform. The ER diagram captures the relationships between various entities in the system. Here’s a high-level representation:

1.Entities:

->User: Represents individuals who register on the e-commerce platform.

->Product: Stores information about the products available for purchase, including details like price, description, and stock.

->Order: Captures details of customer orders, such as order ID, date, and total amount.

->Payment: Tracks payment information associated with orders (e.g., credit card, PayPal).

->Cart: Allows users to store selected products before finalizing their order.

->Review: Stores product reviews submitted by users.

->Category: Represents product categories (e.g., electronics, clothing, books).

->Seller: Represents vendors or sellers who offer products.

->Shopping: Represents the act of browsing and selecting products.

->Promotion: Stores information about discounts, coupons, or promotional offers.

2.Relationships:

->User-Order: Each user can place multiple orders.

->Order-Product: An order can contain multiple products, and each product can be part of multiple orders.

->User-Cart: Each user has a shopping cart, which contains selected products.

->User-Review: Users can submit reviews for products.

->Product-Category: Products belong to specific categories.

->Product-Seller: Each product is associated with a seller.

->Order-Payment: An order is linked to payment details.

->Promotion-Product: Promotions apply to specific products.

3.Attributes:

->User: Attributes may include user\_id, name, email, etc.

->Product: Attributes may include product\_id, name, price, description, etc.

->Order: Attributes may include order\_id, order\_date, total\_amount, etc.

->Payment: Attributes may include payment\_id, payment\_method, amount, etc.

->Cart: Attributes may include cart\_id, user\_id, product\_id, quantity, etc.

->Review: Attributes may include review\_id, user\_id, product\_id, rating, comment, etc.

->Category: Attributes may include category\_id, category\_name, etc.

->Seller: Attributes may include seller\_id, seller\_name, etc.

->Promotion: Attributes may include promotion\_id,discount\_percentage, start\_date, end\_date, etc.

4.Cardinality:

\*One-to-Many:

->A user can place multiple orders.

->An order can contain multiple products.

->A user can have one shopping cart.

->A user can submit multiple reviews.

->A product belongs to one category.

->A product is associated with one seller.

->An order has one payment.

->A promotion applies to multiple products.

\*Many-to-Many:

->Products can be part of multiple orders.

->Users can have multiple products in their shopping cart.

->Products can have multiple reviews.

->Categories can have multiple products.

