

**DR. B. R. AMBEDKAR NATIONAL  
INSTITUTE OF TECHNOLOGY, JALANDHAR**

**{ CSPC – 202 \*DBMS\* }**



**TOPIC : Order Management System**

**SUBMITTED BY:**

-  Ashanpreet Singh Sra - {20103033}
-  Ayush Kumar Jha - {20103035}
-  Bhart Bansal - {20103039}
-  Cherry Kataria - {20103045}

**SUBMITTED TO: Prof. Dr. Rajneesh Rani**

**DATE: 25-Feb-2022**

## **ASSIGNMENT NO.: 1 [ ER Modelling ]**

**Make an ER diagram of the corresponding project with maximum use of all the concepts studied in ER and EER Modelling.**

- ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.
- This ER (Entity Relationship) Diagram represents the model of Order Management System Entity. The entity-relationship diagram of Order Management System shows all the visual instrument of database tables and the relations between Order\_Info, Order\_Dtls , Product\_Info, Client. It used structure data and to define the relationships between structured data groups of Order Management System functionalities.
- The main entities of the Order Management System are Order\_Info, Order\_Dtls , Product\_Info, Client.

## Order Management System entities and their attributes:

1) **Product\_Info** :- It stores the details of the Product available in the store.

➤ Attributes of Product\_Info are:

- ProductID
- Desc
- ModelNo
- CP
- Remarks

2) **Order\_Info** :- It is linked to Client with foreign key.

➤ Attributes of Order\_Info are:

- OrderID
- Status
- Total\_Price(**derived attribute**)
- OrderDate

➤ It is further divided into two parts based on the status of order:

- **Fulfilled** - Dely\_Date, Pay\_Method
- **In Progress** - Exp\_DelyDate

3) **Order\_Dtls (Weak Entity)** :- It is linked to Order\_Info and Product\_Info with foreign keys.

➤ Attributes of Order\_Dtls are:

- ItemNo (**Partial Key**)
- Price Per Item
- Discount
- Qty

**4) Client :-** It stores information of its clients.

➤ Attributes of Client are:

- ClientID
- Login\_ID

➤ A Client,category (UNION type), represents union of firm and individual.

▪ **Firm:**

- Name {Fname, Mname, Lname}
- Reg No
- Email\_id (**Multivalued**)
- Address {Srt\_No, City, State, Pincode}

▪ **Individual:**

- Name{Fname, Mname, Lname}
- AddharNo
- MobileNo (**Multivalued**)
- Bdate
- Age (**Derived**)
- Address{Srt\_No, City, State, Pincode}