

# **DBMS ER DIAGRAM**

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**Branch: SY IT 2022-26**

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## **Attributes, Entity and Relations :**

- Menu:

- Menu\_id (Primary Key)
- Item\_id (Foreign Key referencing Item)

- User:

- User\_id (Primary Key)
- Name
- Contact\_number
- Address

- Bill:

- Bill\_id (Primary Key)
- Amount
- Date
- Payment\_method
- User\_id (Foreign Key referencing User)

- Item:

- Item\_id (Primary Key)
- Item\_name
- Contents
- Price

- Order:

- Order\_id (Primary Key)
- Item\_id (Foreign Key referencing Item)
- Quantity
- User\_id (Foreign Key referencing User)

- Admin:

- Admin\_id (Primary Key)
- Name

- Staff:

- Staff\_id (Primary Key)
- Name

## - Relationships:

For the canteen management system, we can define the following relationships:

### - User-Order Relationship:

- One user can place multiple orders.
- Each order is associated with one user.
- One-to-Many Relationship.

### - User-Bill Relationship:

- One user can have multiple bills.
- Each bill is associated with one user.
- One-to-Many Relationship.

### - Item-Order Relationship:

- One item can be included in multiple orders.
- Each order includes multiple items.
- Many-to-Many Relationship.

### - Staff-Order Relationship:

- One staff member can handle multiple orders.
- Each order is handled by one staff member.
- One-to-Many Relationship.

### - Admin-Staff Relationship:

- One admin can manage multiple staff members.
- Each staff member is managed by one admin.
- One-to-Many Relationship.

### - Admin-Item Relationship:

- One admin can manage the items available in the canteen.
- Each item is managed by one admin.
- One-to-Many Relationship.

### - Menu-Item Relationship:

- One menu can have multiple items.
- Each item belongs to one menu.
- One-to-Many Relationship.

### - Bill-Order Relationship:

- One bill can contain multiple orders.
- Each order is associated with one bill.
- One-to-Many Relationship.

### - User-Order Relationship:

- One user can place multiple orders.
- Each order is associated with one user.
- One-to-Many Relationship.

### - Staff-Item Relationship:

- One staff member can manage multiple items.
- Each item can be managed by one staff member.
- One-to-Many Relationship.

## ER Diagram-

