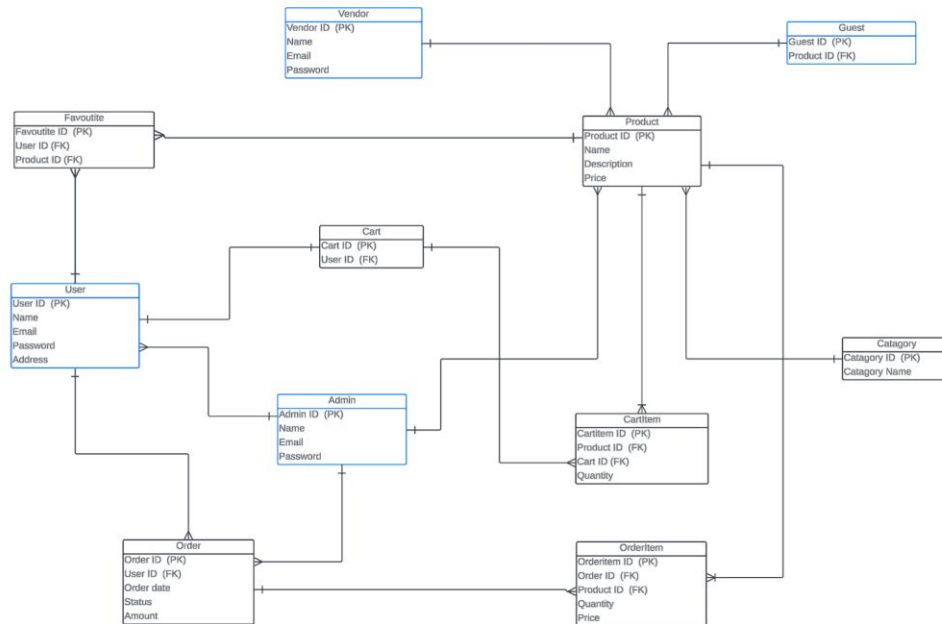# DELEVERABLE 2 – ENTITY RELATIONSHIP DIAGRAM (ERD)

ENTITIES AND ATTRIBUTES:

- **User:**
    - User ID (PK)
    - Name
    - Email
    - Password
    - Address
- **Vendor:**
    - Vendor ID (PK)
    - Name
    - Email
    - Password

- **Admin:**
  - Admin ID (PK)
  - Name
  - Email
  - Password

- **Guest:**
  - Guest ID (PK)
  - Product ID (FK)

- **Product:**
  - Product ID (PK)
  - Name
  - Description
  - Price

- **Category:**
  - Category ID (PK)
  - Category Name

- **Cart:**
  - Cart ID (PK)
  - User ID (FK)

- **CartItem:**
  - CartItem ID (PK)
  - Cart ID (FK)
  - Product ID (FK)
  - Quantity

- **Order:**
  - Order ID (PK)
  - User ID (FK)
  - Order Date
  - Status
  - Amount

- **OrderItem:**
  - OrderItem ID (PK)
  - Order ID (FK)
  - Product ID (FK)
  - Quantity
  - Price

- **Favourite:**
  - Favourite ID (PK)
  - User ID (FK)
  - Product ID (FK)

RELATIONSHIPS

User - Order: One-to-Many, A User can place multiple Orders and each Order is linked to one User).

Order - OrderItem: One-to-Many, Each Order has multiple OrderItems each OrderItem belongs to one Order).

Product - OrderItem: One-to-Many, A Product can appear in many OrderItems; each OrderItem links to one Product.

User - Cart: One-to-One, Each User has one Cart and a Cart is linked to one User.

Cart - CartItem: One-to-Many, A Cart can have multiple CartItems and each CartItem belongs to one Cart).

Product - CartItem: One-to-Many, A Product can appear in many CartItems and each CartItem links to one Product.

Product - Category: Many-to-One, a Category can have many Products.

Vendor - Product: One-to-Many, A Vendor can add many Products; each Product is linked to one Vendor.

User - Favourite: One-to-Many, A User can favourite many Products; a Product can be favourited by many Users, typically managed by a junction table.

Favourite - Products: Many-to-One, A Product can be linked to many Favourite entries.