

SSN COLLEGE OF ENGINEERING

Department of Computer Science &

Engineering

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Faculty:

Assigned: 28-02-22 Due: 10-03-22

UCS1412 – DBMS Lab Assignment – 1

Title: DDL for Mail Order Database

Mail Order Database

Consider a mail order database in which employees take orders for parts from customers. The data requirements are summarized as follows:

- a) The mail order company has employees identified by a unique employee number, their name, date-of-birth, pin code and city where they are located.
- b) The customers of the company are identified by a unique customer number, their name, street name, pin code, city where they are located, date-of-birth and a phone number.
- c) The parts being sold by the company are identified by a unique part number, a part name, their price, and quantity on hand.
- d) Orders placed by customers are taken by employees and are given a unique order number. Each order may contain certain quantities of one or more parts and their received date as well as a shipped date is recorded.

Create the relations with the above mentioned specifications and also consider the following constraints:

- 1. Identify the primary key(s) and foreign key(s) from the schema.
- 2. Ensure that order number begins with 0, similarly customer number with C, employee number with E and part number with P.
- 3. The phone numbers of the customers should not be identical to each other.
- 4. The quantity ordered should not be zero.
- 5. Order received date should always be less than the shipped date.
- 6. The price of the part should compulsorily contain some value.

- The following changes have been identified due to increasing business. As a database designer you must accommodate these changes in your design.
- 7. It is identified that the following attributes are to be included in respective relations: Parts (reorder level), Employees (hiredate)
- 8. The width of a customer name is not adequate for most of the customers.
- 9. The date-of-birth of a customer can be addressed later / removed from the schema.
- 10. An order can not be placed without the receive date.
- 11. A customer may cancel an order or ordered part(s) may not be available in a stock.

 Hence on removing the details of the order, ensure that all the corresponding details are also deleted.

Note:

Populate each relation with relevant row(s) and prepare test cases to demonstrate that the requirements are satisfied.

What you have to submit:

- 1. Schema Diagram with constraints
- 2. Demo script file

