資料庫管理系統

期末專題報告

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* 報告主題

實作經銷商產品訂單銷售系統

* 需求描述
* Entity

Entity1:經銷商公司會有客戶資料customer

客戶資料attribute包含如下

1. 客戶代號(Key attribute): custID
2. 客戶姓名:custName
3. 客戶電話:custPhone
4. 客戶地址:custAddr

故其ER Diagram :

customer

Entity2:經銷商公司會有員工資料employee

員工資料attribute包含如下

1. 員工代號(Key attribute): EmpID
2. 員工姓名:EmpName
3. 員工電話:EmpPhone

故其ER Diagram :

employee

Entity3:訂單資料order

訂單資料attribute包含如下

1. 訂單編號(Key attribute): orderID
2. 運費:fare
3. 送貨日期:deliverDate

故其ER Diagram :

order

Entity4:產品資料product

產品資料attribute包含如下

1. 產品代號(Key attribute): productID
2. 定價:price
3. 產品名稱:productName

故其ER Diagram :

product

Entity5:供應商資料vender

供應商資料attribute包含如下

1. 供應商代號(Key attribute): venderID
2. 供應商名稱:venderName
3. 供應商電話:venderPhone
4. 供應商地址:venderAddr

故其ER Diagram :

vender

* Relationship

1. 客戶-員工-訂單存在”訂購”(purchase)的三元關係

針對一個客戶會配給一個員工處理訂購業務,訂購可以訂購多個訂單.

ER diagram :

purchase

order

employee

customer

1

1

N

1. 訂單-產品之間存在”包含”(include)的二元關係

其中還要記錄產品數量(Iquantity)

ER diagram :

include

product

order

1

N

1. 供應商-產品之間存在”供應”(provide)的二元關係

其中還要記錄供應的產品數量(Pquantity)

ER diagram :

provide

product

vender

1

N

* 完整ER Model

N

1

customer

purchase

1

employee

order

include

product

1

N

provide

vender

1

N

* ER Schema

Entity

1. customer

|  |  |  |  |
| --- | --- | --- | --- |
| custID | custName | custPhone | custAddr |

1. employee

|  |  |  |
| --- | --- | --- |
| EmpID | EmpName | EmpPhone |

1. order

|  |  |  |
| --- | --- | --- |
| orderID | fare | deliverDate |

1. product

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| productID | productName | price | orderID | Iquantity | venderID | Pquantity |

include關係 provide關係

1. vender

|  |  |  |
| --- | --- | --- |
| venderID | venderName | venderPhone |

1. purchase關係

purchase

|  |  |  |
| --- | --- | --- |
| custID | EmpID | orderID |

custID/orderID合起來作為複合主鍵

同時三個欄位都為外來鍵