Foundation Database Design & Development

The Database Project

The database you design and create will be used to help a web based retail organisation administer orders from customers over the Internet. A customer may make many orders over a period of time and each order will consist of one or more items. The retailer will have some of these items in stock but, if not, they will have to order them from a number of different suppliers. At the end of each business day the retailer will also have to make out an order to various suppliers. The retailer will also have to keep a record of how many items are left in stock after an item has been sold from stock. Over a period of time suppliers will receive many orders from the retailer but each of these orders will only go to one supplier. When all the items ordered are in stock they are all sent to the customer. The retailer will employ one or more persons to process the customers’ orders and may want to know which of these people created each order. Only one person makes out the orders to the suppliers.



Example – A web based book store

On a particular day, a customer called Bill may order book A, which is in stock, book B which is not and has to be ordered from supplier 1 and book C which comes from supplier 3. A customer called Mary may order book B and book D which is in stock and a customer called Francis may order A, B and C.

At the end of the day the retailer must make out two orders consisting of three copies of book B from supplier 1 and two copies of book C from supplier 3.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Book A | Book B | Book C | Book D | Book .. |
| Supplier 1 |  | √√√ |  |  |  |
| Supplier 2 |  |  |  |  |  |
| Supplier 3 |  |  | √√ |  |  |
| Supplier 4 |  |  |  |  |  |
| Supplier .. |  |  |  |  |  |

However the retailer will now have one less copy of books A and D in the shop, so the records of stocks of these books will have to be updated!

Think about these questions when you are writing your description

* What information do you keep about customers and orders?
* Could I see how you order new products?
* What are the different categories of products and what is the pricing structure?
* What is the procedure when someone sends in an order?
* Can I see an order form?
* How are stock levels recorded each day?
* What happens if some items are not in stock?
* Do you charge post and packing?
* How do customers pay?
* How do you deal with cancellations? Do you keep records?
* What is the procedure when someone does not pay their bill?
* How is the catalogue created?
* How long do you keep customer details on file?
* What computer facilities do you have at present (if any)
* How many suppliers do you have?
* Does a particular product come from just one supplier or could it come from many suppliers?
* Can I see a supplier order form?
* How many employers do you have?