For your portfolio you will produce:

- A database designed, built and tested to store data.
- Evidence of importing data.
- Evidence of extracting information
- A report identifying significant trends and making recommendations (20 marks)
- An evaluation of the database and your performance. (6 marks)
- **Show example**

Criteria for Entities

For an entity to be part of a database it must meet the following criteria:

- The Entity must be of interest or of use to the database.
- There must be more than one record within the entity.
- An entity must have a number of attributes.
- Each Instance or record of an entity must be uniquely identifiable.
- The data should be permanent

- **It is unusual for a database to consist of one entity.**
- **Most databases will consist of entities that have 'relationships' with each other.**

Designing a Quik Feet database

Describe the entities involved.

Product
Customer
Supplier
Payment processing co.

Stock / order

Draw a ERD to describe their relationship.

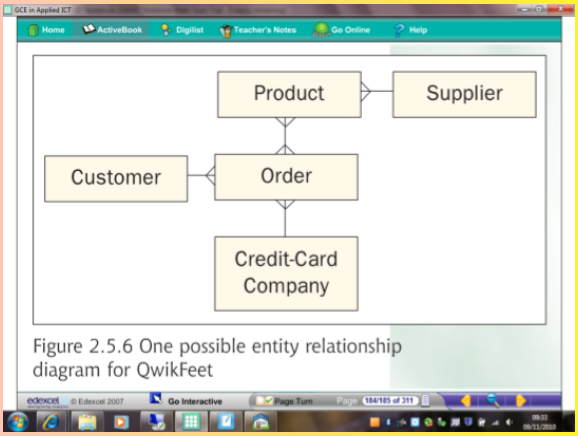


Figure 2.5.6 One possible entity relationship diagram for QwikFeet

What is the main problem for us with this ERD?

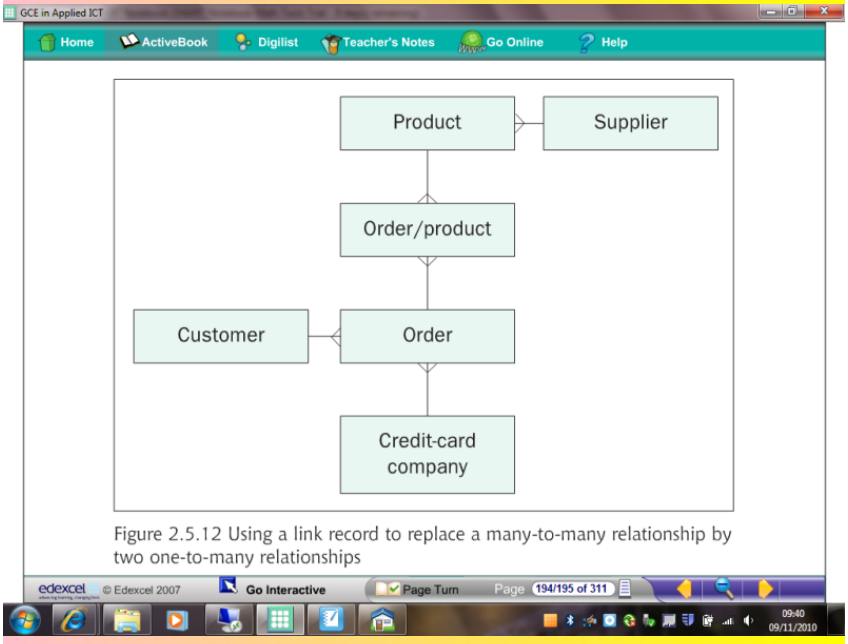
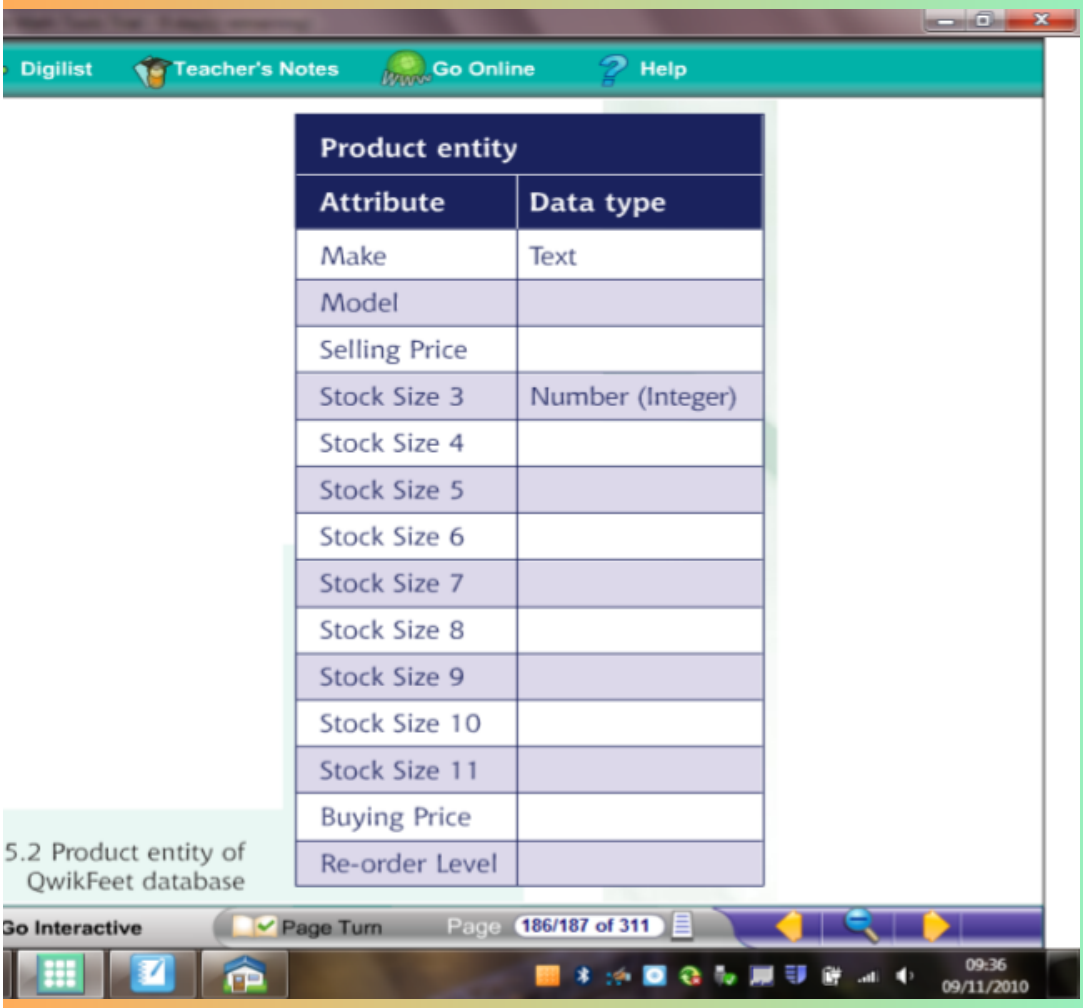


Figure 2.5.12 Using a link record to replace a many-to-many relationship by two one-to-many relationships

Looking at the product entity



see page 189 for some ideas for validation

Data Types

Data Type	*Usage*	*Comments*
Text	Alphanumeric data	Can be 255 characters long
Number	Numeric data	Can be integer or real number.
Date/Time	Dates and Times	Access can calculate between dates
Currency	Monetary Data	Ensures accuracy
Yes/No (Logical)	True/false	
AutoNumber	Key field	Unique value

Data verification

This is the process of double-checking that data entry is correct.

Data validation

Validation is done by a computer program, and checks as far as possible that the data is accurate.

Set up the tables for a Quik Feet database.
See page 189 and 195 for some ideas on validation.
Start with the product table (p191) and then work through ch 2.6.

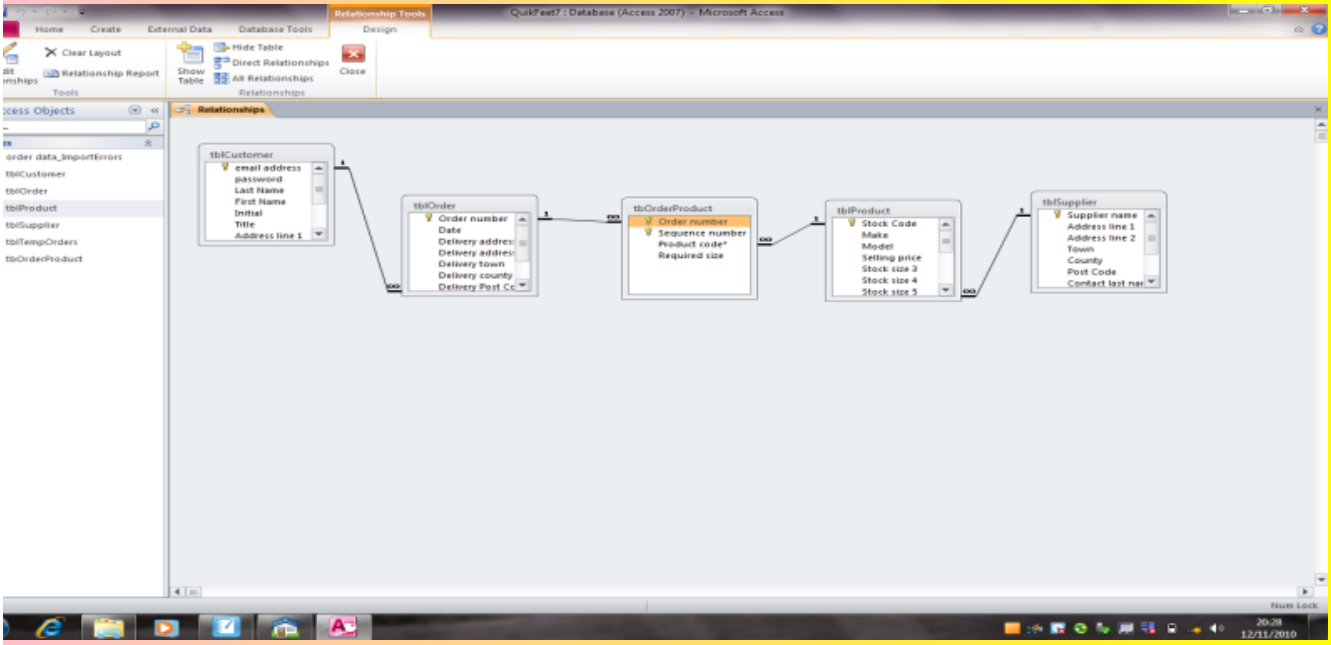
Data Validation

- This is the process of checking that the data entry is correct.
- This is important to a database system.
- Text – certain characters not permitted e.g. %$ or a number. This would ensure fewer mistakes are made when inputting
- Numeric – To avoid mistakes the numbers could have to fall between certain values .E.g. entering a bank account number

15th November

Today we will
- set up the relationships for our database
- import the data

1. Make a copy of your database. Call it QuikFeet2.
Working on QuikFeet2
2. Use your ERD to set up the relationships.
3. Save your current database as QuikFeet3



4. Using your ebook page 199 save the 4 text files.
Use decent names.
5. Have a look at the files. Any observations?
Import demo (QuikFeet5)
6. Import supplier, customer and product.

If time:
For the order file you will need to open a new table as these a
temporary orders.
Call it tblTempOrders

Thursday 18th November 2010

Today we will
- run basic queries
- develop query techniques
- look for trends
- Make a report

Then we will be ready to start the assessed database!

1. Run some queries using one or more tables.

2. Run a query to find out which make and model of trainers "Bridge Ltd" supply and how much they cost. [Use totals functions to group records]

3. Run a query to find out which supplier is used for Morgan trainers and their contact details.
[Multiple table query]

4. Run a query to find out which trainers have gone below the required stock level of 250.
See Activity 10 page 206. [Run a query with a formula]

5. Add the data from tblTempOrders to tblOrder [Create an append query]. Activities 11 and 12

6. Run some more queries, experimenting with different groupings. Try to spot at least one trend in the data - look at dates or sizes or suppliers....

7. Make a report. Watch the demo in the activebook.

Monday 22nd November 2010

Looking for Trends

1. Today we will run queries and write reports on some trends in the QuikFeet data.

Questions you could try to answer:

Are some brands more popular than others?

Is it worth stocking size 3/ size 10?

Is price of trainer related to its popularity?

Do most customers re-order (ie are they happy with QuikFeet)?

Export a query as an excel sheet.

Create a report from one of your queries.

Make a note of all the things you learn on the way. You will need it for later!

2. Read through one or more of the exemplar portfolios.

Homework

Write up what you knew about databases before starting this unit.