S3 Business Enterprise & IT

Unit 3 – Business Administration

Induction Training – Part 1
Introduction to Databases
Access 2010

Today's Learning Intentions

- Explore the **purpose** of a database

- Investigate the **structure** of a database

- Examine the **advantages** of using a database
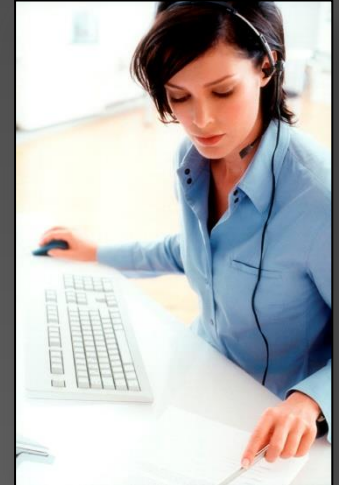
- **Construct a simple database** together

What is a Database?

- A (large) collection of related information which is stored somewhere…

- Can be stored:

  › In filing cabinets
  › On computer systems

Examples of Info stored in Databases

- Stock System – eg Argos, Tesco's
- Employee details
- Customer details
- Library details (lenders/due back)
- Student details – Seemis is a database!!
- Bank Accounts
- Holiday companies
- National Insurance Records
- …and many more

Advantages of Using an Electronic Database

- Information usually stored in a way which aids <u>quick retrieval</u>

- Computerised databases <u>can find information in seconds</u>

- New <u>data can be added</u> – huge amounts in a very small space compared to paper-based

- Existing data can be <u>edited/deleted/altered</u> easily

What does a database look like?

FIELDS

RECORDS

I	ITEM	SUPPLIER	REF NO	DATE LAST ISSUED	DEPT ISSUED TO	PRICE	NO
1	A4 Paper	Glenspey	G45/34	12/01/2000	Finance	£3.45	
2	Envelopes	Blackmyres	W23/90	15/02/2000	Sales	£6.98	
3	Sellotape	Neat Things	N34/55	23/03/2000	Purchases	£0.85	
4	Binders	Blackmyres	W12/59	10/01/2000	Human Resources	£7.85	
5	Lever Arch Files	Neat Things	N50/89	12/11/1999	Finance	£9.60	
6	Printer Ribbons	Blackmyres	W34/80	07/01/2000	Purchases	£16.90	
7	Card	Glenspey	G23/70	30/01/2000	Sales	£6.50	
8	Poly Pockets	Neat Things	N81/29	15/02/2000	Finance	£2.90	
9	Disks	Blackmyres	W90/44	03/12/1999	Finance	£8.35	
10	OHP Sheets	Neat Things	N66/17	14/02/2000	Sales	£32.50	
*	ew)					£0.00	

DB Task 1 Mrs King

A database can consist of a number of TABLES

Database Design

- When creating tables within a database, each field will have a specific "**datatype**".

  › **Text** – most common, eg name, address (& tel no!!)
  › **Number** – quantities of stock, no of people etc
  › **Currency** – money amounts, £/dp automatically entered
  › **Autonumber** – creates new number automatically, eg ID, good for customer account numbers, if deleted will not be reused
  › **Yes/No** – tickbox/checkbox, tick=yes, untick=no
  › **Date/Time** – date of birth, start date, different formats of displaying the date

DB Task 1 - Celebrities

You will:

- Create a database file – name/save as!!
- Create and design a database table
- Populate the table with information about celebrities
- Check the database for accuracy

Today's Success Criteria.......

You can:

- **Describe** the **purpose** of a database
- **Distinguish** between a **field** and a **record**
- **Explain** the **advantages** of a database
- Successfully **construct** a database table