Microsoft Access Database Assignment

Requirements

- Students must work alone and should use Access 2007 preferably (although Access 2003 databases will be accepted).
- Each student must submit one Microsoft Access database and a short report in Microsoft Word as detailed below.
- Name the database file as follows: *YourFullName_YourBannerID.accdb* (or *.mdb*) for example *MartinGreen_000123456.accdb* or *MartinGreen_000123456.mdb*
- Similarly, name the Word file *YourFullName_YourBannerID.doc*.
- The **database** should be submitted in a **.zip** file and sent by email to the following email address: **martin@fontstuff.com** to arrive **no later than 27th March 2010**. You will receive an email acknowledging receipt of your work within 2 days of sending it. Remember to include your **Full Name and BannerID** number in the text of your email.
- The **report** should be submitted via **WebCT** in the normal way and accompanied by the headersheet (No. 157073). Submission should be made **no later than 3.00pm on 27th March 2010**.

The Task

Your task is to build a database for a business of your choice that supplies goods or services to its customers. The database will be used to hold a contact list of the company's customers and information about the purchases made by those customers. For example:

- A company selling stationery would need a customer list (containing all the necessary contact details), a list of orders placed by each customer (date of order, payment method, delivery method, salesperson etc.) and a list of the items on each order (description, size, colour, quantity, unit price etc.).
- A hairdresser would need a customer list (containing all the necessary contact details and maybe other personal information such as sex, hair type, eye colour, skin type etc.) a list of the appointments made by the customer (date, time, location, hairdresser, colourist etc.) and the items charged for on each appointment (haircut, styling, colouring, special treatments, product purchased etc).

You do not have to use these examples! Try to think of suitable business to fit this database model: *Customer > Purchase > Details of Purchase*.

Your Access database should contain the following:

Tables

- Three tables to contain details of your **Customers**, their **Orders** or **Purchases**, and the **Order** or **Purchase Details**.
- The tables should be correctly linked using the **Relationships Window** and **Referential Integrity** should be enforced.
- Create a small amount of data to populate these tables (e.g. 5 customers and 2 or 3 orders/purchased for each).
- A **Staff** table. For this you should download and import the sample Excel file **Staff.xls** from *http://www.fontstuff.com/greenwich/COMP1238_Access.htm* (as used in Lab Session 1 of this course).
- Any other tables you see fit to include to provide lookup lists or to store additional information.

Tables should have appropriately named fields to which any necessary field properties have been applied.

Forms

- A form set up as a **Switchboard** containing buttons to lead the user to other parts of the database (forms, queries and reports). This form should be set to open automatically as the database opens and acts as a welcome screen for the user. Make this form yourself, **do not use the Access Switchboard Manager** to create it.

- A **Order/Purchase History** form based on your Customers table with two linked subforms displaying their orders/purchases and the order/purchase details. (HINT: Use the Form Wizard to create these forms and link the subforms for you then personalise them with your own design features).
- A **Staff Details** form based on the Staff table.

Extra marks will be awarded for the inclusion of appropriate **combo boxes** (drop-down lists) and **calculated fields** on forms and for neat, tidy and user-friendly design. Marks will be deducted for untidy and careless work and where it is clear that wizards have been used without any subsequent manual design work.

Queries

Create the following queries. Since you will not have much data in the tables you created most of these queries will be based on the data in the imported Staff table. Create and save (using the name given below) queries to answer the following questions/instructions:

1. Show me a list of your customers sorted by name and showing just their name (or company name), town and postcode. (Save as **Query1**).
2. Show me a summary of the total amount spent by your customers showing the company or customer name and just a total of amount spent (HINT: use the Totals button) sorted in descending order of amount spent. (Save as **Query2**).
3. Show me a list of all the *Female Secretaries* working in the *London* office. (Save as **Query3**).
4. Create a **Parameter Query** allowing me to view the *FirstName*, *LastName*, *Job Title* and *Hire Date* of staff from any chosen **Office** and **Department**. (Save as **Query4**).
5. Create a **Parameter Query** that allows me to see which staff joined the company in a particular year. (HINT: Create a new calculated field showing the Hire Year). (Save as **Query5**).
6. Create a query showing the *FirstName*, *Lastname* and *Age* of all the staff who are under 30 years old (HINT: use the formula *Int((Date()-[BirthDate])/365.25)* to work it out.) (Save as **Query6**.
7. Create a **Crosstab Query** that shows how many staff work in each *Department* of each *Office*. (Save as **Query7**).
8. Create a **Crosstab Query** that shows the salary bill for each *Department* of each *Office*. Format the numbers as *Currency* with no decimal places. (Save as **Query8**).
9. Create a query that shows the numbers of people in each job in the *Sales* department of each *Office* (HINT: use the Totals button). Hide the *Department* field when the query is run. (Save as **Query9**).
10. Create any type of query of your choice based on your own data. (Save as **Query10**).

Reports

Create one report that is an Address List for your customers. You may create the report using a wizard if you wish but extra marks will be awarded if you personalize the report's design and add extra features of your own.

Your Word report should contain the following:

A short description of the structure of your database describing the nature of the business it is designed for, what data is stored in its tables and how and why you have arranged the tables the way they are. Suggest what other features you could add to your database to make it more useful to the business. **The whole report should be no more than about 1000 words.**

Notes

Marks will be awarded for logical design and sensible naming of objects. If you use wizards to build forms and the report your work should show evidence that you have made some input into the design of the object. Marks will be deducted for careless and untidy work.

If you have any problems completing the assignment you should contact Martin Green by email at **martin@fontstuff.com**.