Chepstow Comprehensive School – Computing/ICT Department

GCSE Portfolio

Databases

Monmouthshire Visitor Attractions

Monmouthshire Visitor Attractions is a card which allows free entry into a number of places of interest in Monmouthshire and facilitates a discount in a number of restaurants and shops. You need to design and create a three table database including a database table of all the **Monmouthshire Visitor Attractions members**, a small database table of the **visitor attractions** and a small database table of **visits**.

You will then use the database for several purposes.

There are three types of membership (Adult, Junior and Family) and the database should store the details of the members as well as their subscription details - what they have paid and when and how (cheque, credit card, cash)

What you have to do...

Background (Use a word processor for this) example	Create a front cover for the assignment. Create a brief description of **Monmouthshire Visitor Attractions** - the benefits of being a member, A brief list of some of the attractions etc Say what you intend to do and what you intend to use the database for. What is the name of the file(s) you are going to create and where are they going to be stored (give directory structure) [1]	
Design (View example)	Create a database design using a **data structure forms** for member table. Give the names of the fields, their types and any special features about them (eg codes). Consider	It is important that you have fields of several different types. It is a good idea to use at least one Lookup field. You will need to insert a calculated field later so make sure you have at least one numeric field.

	any validation which may be necessary. [3] Identify the key field.	
Data capture Example	Design a suitable **data capture form** for the member table. Print out two copies and fill one of them in (in pen).	The fields on the data capture form should match those in the database.
Example Example Example	Create the Member table. Enter the fields and their types and validation rules. Enter the data. You need to test the validation rules are working. Test with normal and with invalid data. Create the visitor attractions table. Create the visits table	It does not have to be huge! 20-30 records is plenty. Document the validation. (Use screen dumps etc)
Searches	Perform at least 2 simple searches...but you must give reasons for each.	Eg 'To identify the members who have not paid their subscriptions so reminders can be sent'.
	Perform at least two complex searches - using more than one field. Give reasons for each search.	E.g. 'To identify all junior members living in a particular town to promote a special event
Sorts	Print out at least two sorted lists - give <u>reasons</u> for each sort.	Eg : 'Sorted in order of surnames so that details of individual members can be found easily.'
Advanced processing Example Example Example	Include at least two of the following: • headers / footers • import/export of data • use of forms for data entry • command buttons on forms • * hyperlinks on forms • design and output of report (no wizards!) • * calculated field • input masks • macros • * relational links between tables • subforms	We recommend: A calculated field e.g. insert an additional field with a percentage of the subscription for tax purposes. Relational links between tables Hyperlink field on attractions table to their websites

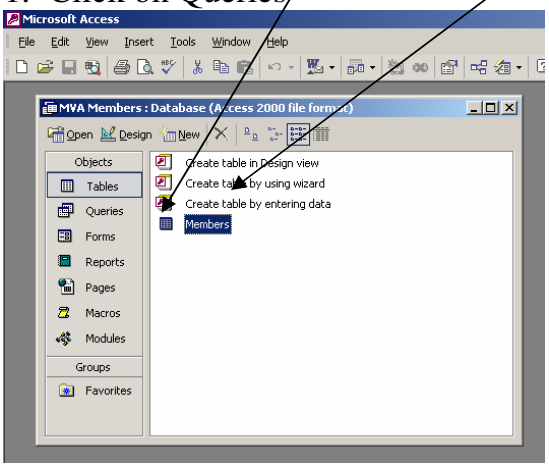
	Other things for which you will get marks: • accurate data. • plausible data. (ie keep the data sensible)	
View the mark scheme		

Interrogating your MVA database

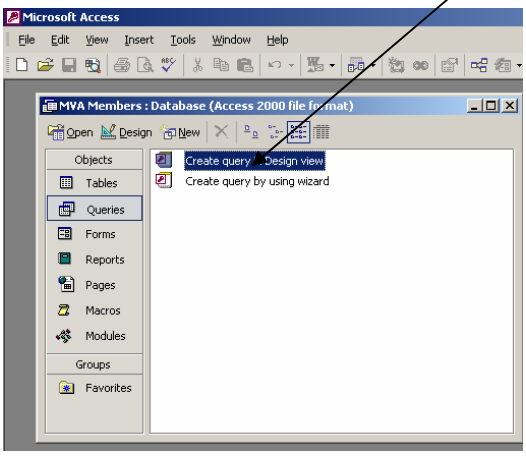
First, open the database you have created.

Then follow these instructions:

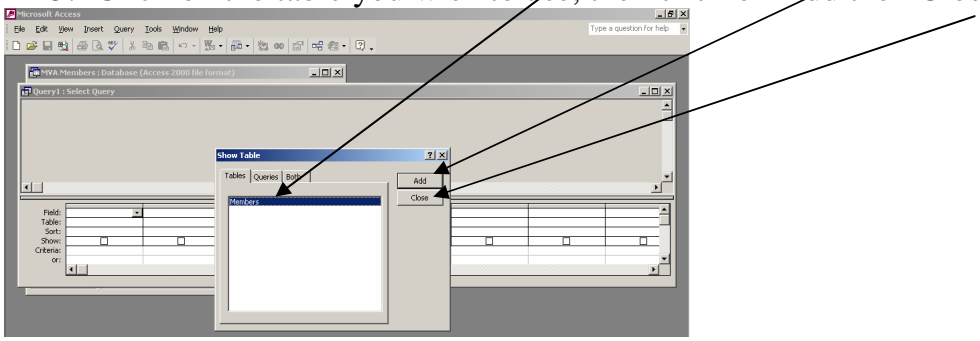
1. Click on Queries



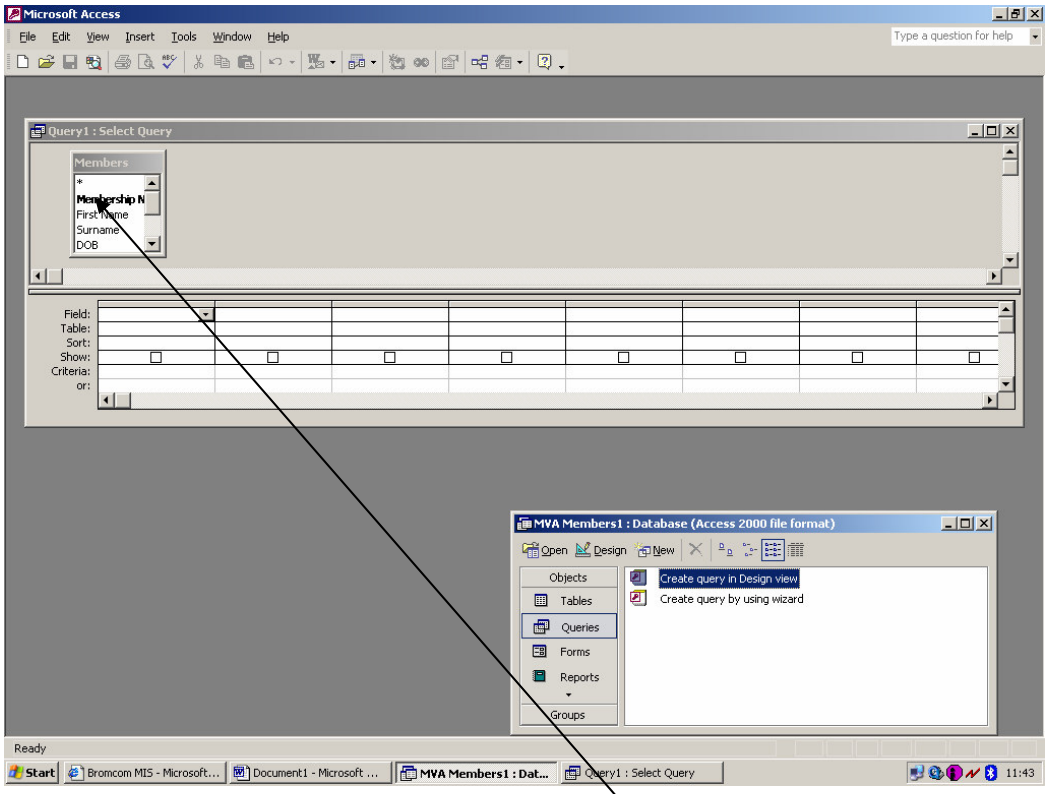
2. Click on Create Query in Design View



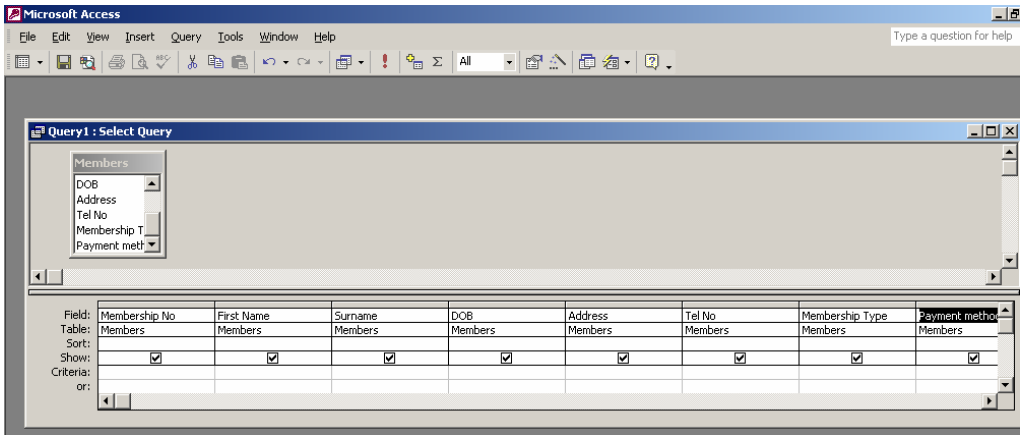
3. Click on the table you wish to use, then click on Add then Close



4. The screen should then look like this….



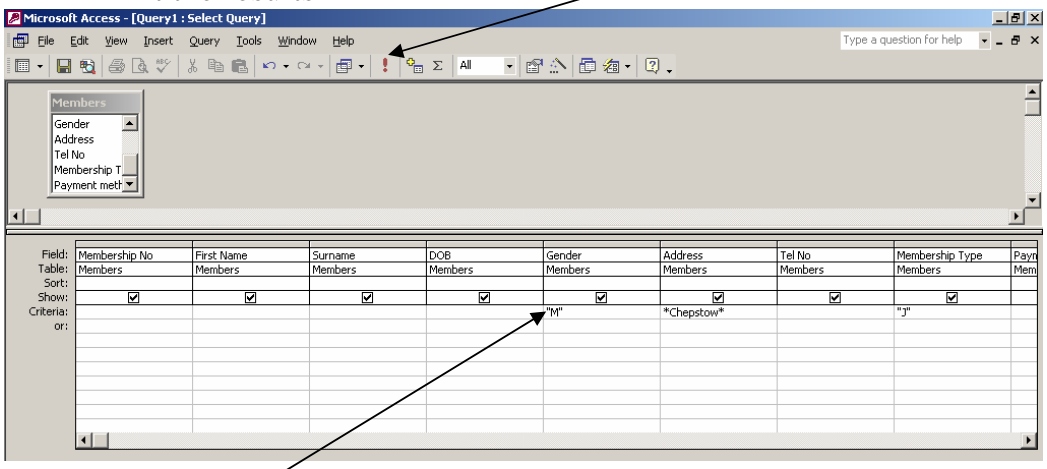
5. Now you need to bring down the fieldnames you wish to show and/or query. To do this you simply double click on the fieldname from the members table in the Query window
6. Now it should look like this…



The TICKS show which data will be shown when it prints or comes up on the screen.

If you wanted to search for anyone who was male, junior member and lived in Chepstow this is what you would do:

- In the CRITERIA row for Gender type M
- In the Membership Type criteria put J
- In the Address field criteria row type *Chepstow*
- Click on the RED exclamation mark (run) to see the results
- Save the query – call it Male Junior Chepstow School
- Print the results



Access automatically puts in the speech marks

Monmouthshire Visitors Attractions Scheme

Suggested Data Structure

Members:

Fieldname	Data Type	Description
Membership No	Autonumber	Key field
Fist Name	Text	
Surname	Text	
DOB	Date	Short date eg DD/MM/YY
Gender	Text	M or F
Address	Text	Number, street, town, county
Tel No	Text or Number	
Membership Type	Text	A=Adult F=Family J=Junior SC=Senior Citizen
Fee	Currency	A=£25 F=£40 J=£12.50
Date Joined	Date	Short date DD/MM/YY
Renewal Date	Date	Short date DD/MM/YY
Method of Payment	Text	CQ=Cheque CA=Cash CC=Credit card DC=Debit card DD=Direct debit

Monmouthshire Visitor Attractions Write Up.

I opened up Microsoft Access and made a table on Monmouthshire Visitor Attractions. I saved my work on two files, A: \monvis.mdb and N: \my doc\attractions.mdb. Once I had gathered all of my information I did a data structure form and data caption form. The next thing to do was some queries 2 simple and 2 complex. I printed out evidence that I had done all of these things.

Next I did 2 sorts one was for alphabetical order of names of attractions and the other fee 1 in descending order and printed the evidence. I then added a Weblink column by going into the design view and adding it at the bottom of the table. Data type was hyperlink. I inserted the website addresses that are relevant to the attractions.