# Data Handling: Validation

We use validation to control the data that can be entered into the database. For example, if you were setting up a database for a club that only allowed children aged 16 and under, we could make sure that only children of this age can be entered into the database.

For this example we will create a very simple database.

- Create a new database called 'Childrens Club'.

- Create a new table in 'Design' mode.

- Add the following fields:
  - Child ID – set as primary key – Data Type: AutoNumber
  - Child Forename
  - Child Surname
  - Child Age

- Set the data types of these fields.

- Set the field sizes of these fields.

- Save the table as 'Childrens Club table'.

Now we are going to add a validation rule to make sure that only children of 16 and under can be added. This will also help to prevent mistakes with data that is entered into the database.

- Make sure that you have the age field selected

- At the bottom of the table design, you will see a tab that is labelled 'General'

- You will set the validation in the validation rule box

- You need to type '<=16'
  It is important that you get the <
  and = signs this way round otherwise
  the rule will not work.
  If we only wanted children under the
 Age of 16, you would not need the = sign
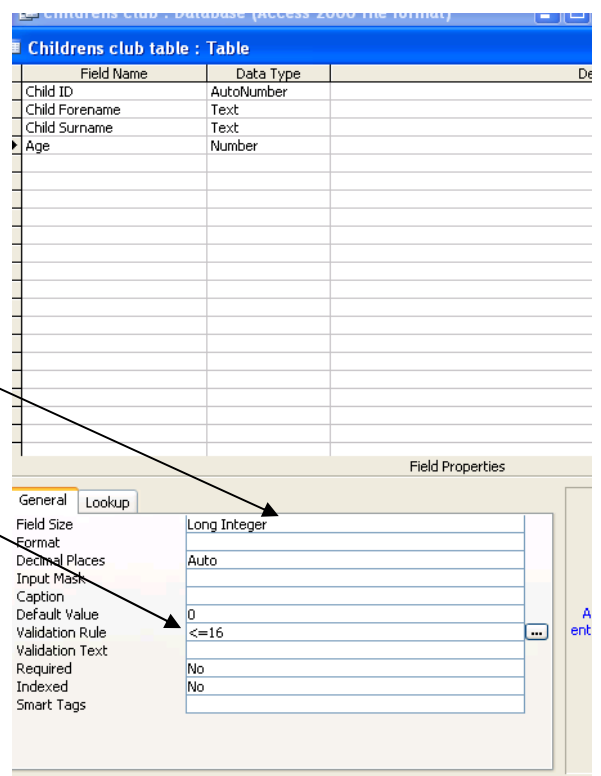
The next thing that we can do is to write a message to be displayed if someone tries to enter incorrect data, in this case a value that is greater than 16. It is important to make people aware of what is wrong with the value that they have entered so that they know what to do to fix the problem.

In the box underneath the validation rule, there is a box labelled 'validation text'. This is where you can write a comment that will be displayed if incorrect data is entered.

The error message written here says 'Sorry, the age you have entered is above our age limit'

You can of course write your own version of this message
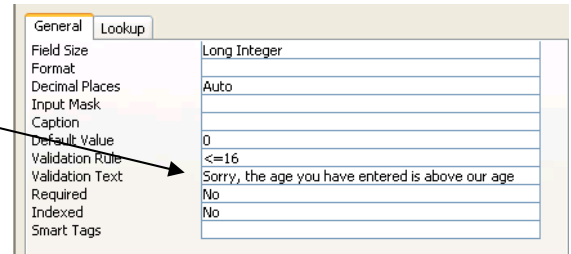
Just as the validation rule works for greater than, it will also work with less than (< or <=).
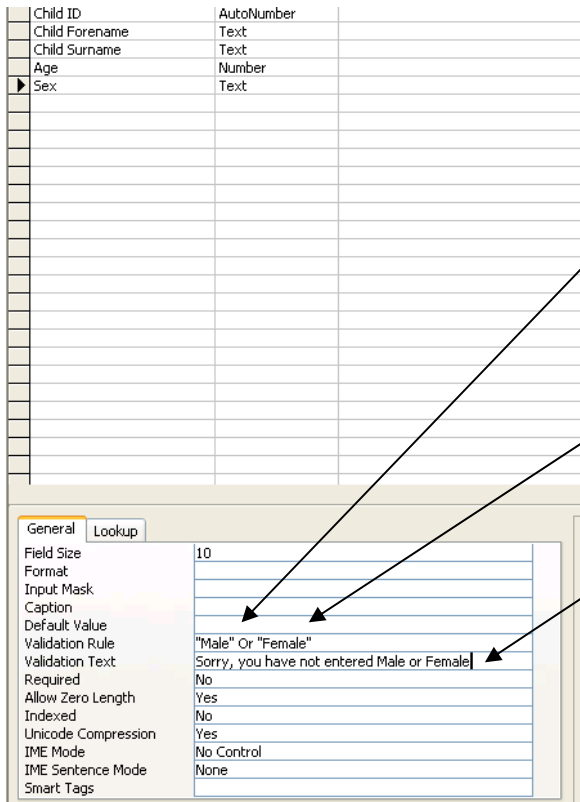
SAVE the table. Now open it in 'Datasheet' view. Enter a forename and surname into the first record. Now enter an age that is greater than 16. When you move away from this field, the error message should be displayed.
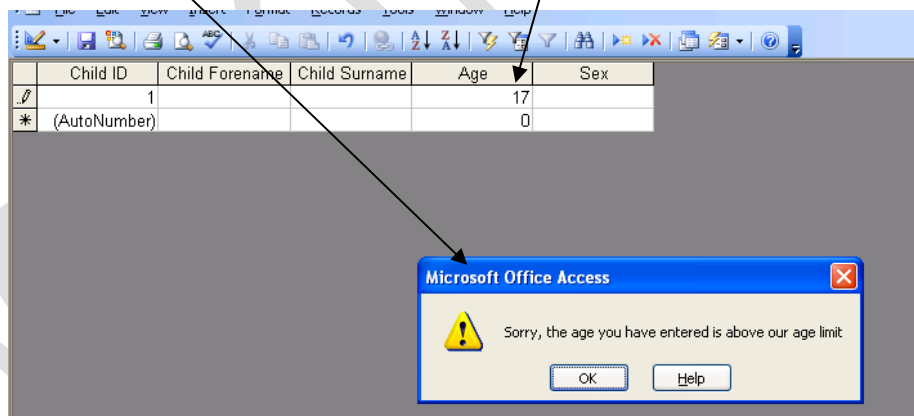
Now enter values that are less than 16 to check that these are accepted.

Add a new field to your table called 'Gender'. Make sure that the data type and field size are set appropriately.

We want to add a validation rule here to say that only the values 'Male' or 'Female' can be entered. There is no other possibility and we do not want anything else written in this field.

Child ID	AutoNumber
Child Forename	Text
Child Surname	Text
Age	Number
Sex	Text

General	Lookup
Field Size	10
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	"Male" Or "Female"
Validation Text	Sorry, you have not entered Male or Female
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Smart Tags	

- In the general type, validation rule box type the following:

  Male OR Female

- Access will automatically put quotation marks around the text values "Male" / "Female", as these text values are acceptable

- You now need to enter a message to be displayed if incorrect data is entered

- Save the table

- Now test this out by viewing the table in Datasheet view and trying to enter a value other than 'Male' or 'Female'

- You should also try entering Male / Female to check that these values are accepted.

- Save the database

3