

Most projects will have some aspect that requires data to be entered about people. This exercise involves creating a table to store data about people. In the process it shows you one or two tricks you may not have encountered previously.

Exercise 1

- 0) Open a new database
- b) choose blank database
- c) Click on **Tables**
- d) Select create table in **design view**
- e) Create a table called tblmembers with the following fields

ID	Auto number - primary key
Title	Text
Surname	Text
Forename	Text
Address1	Text
Address2	Text
Address3	Text
Post Code	Text
Telephone Number	Text
Date of Birth	Date/time
Sex	Text
Driving Licence	Yes/no

- f) Note that the ID field is the primary key
- g) Save the table by closing the window it is conventional to call the table tbl so name this tblperson

Exercise 2

Editing the table structure

Some helpful methods

Inserting a field Click on the row selector on the row below where the new field will be and press the <insert> key.

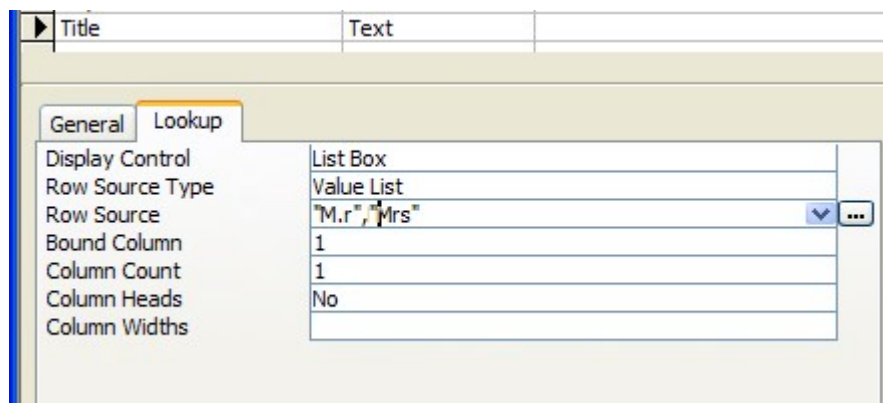
Deleting a field click on the row selector and press <delete>

Moving a Field Click on the row selector, click again and drag to the new position.

Changing the Primary key "There can be only one" primary key.; Click on the row selector of the correct field and select primary key from the options.

Setting the Field properties

- o) In design mode ensure that the ID field is a long integer (it should already be that)
- i) The title Field will contain things like Mr. We should know what all the possible values for this field are so we can save data input time by entering them now Click on the field name Title.
- j) Click the tab for lookup
- k) Change the row Source Type to value list
- l) in the Row sources type in "Mr.,"Mrs." and the other necessary titles. Alternatively you can use the lookup wizard and select I will type in the values I want.
- m) **Surname forename address1** and **address2** need to have the length of the field cut to a sensible number of characters 20 or 30 - you decide what.
- n) Address3 is different. All the addresses will be in Nottingham, so we can set a default field. This is under the general tab so type in Nottingham
- o) The post code is an interesting field for the moment limit it to 10 characters
- p) Set the telephone number field to 15 characters (this is text because spaces and leading zeros are required.
- q) For the DOB field click on the format box in the field properties choose **Short Date**
- r) It is possible to set an input mask property click on the three dots icon at the end of the row and set a place holder to --/--/---- Click on the input mask property box select short date.
- s) Then use the input mask wizard if prompted to save the table do so.
- t) The sex will be either M or F In the validation text box type in *Sex must be either M or F* This is the error message that appears if a wrong value is entered.
- u) In the validation rule box type in **M or F**
- v) no action is require on the Yes / No Field
- w) Save the table on exiting and try entering some data.



Useful keys when entering Data	Action
<tab> or <enter> or <right arrow>	Moves to the next field
<shift>+ <tab> or <right arrow>	Moves to previous field
<down arrow>	Move to the next record
<up arrow>	Move to the previous record
<home>	Move to the start of the field

<end>	Move to the end of the field
<escape>	To quit editing a record This enables the undo menu option

Background

Setting input mask properties

Characters for input masks you are likely to use are as follows:

0	A number 0 – 9 must be entered
9	A number 0 -- 9 must be entered
#	A number + 0r – sign or space must be entered
L	A letter A- Z must be entered
A	A letter or digit must be entered
a	A letter or digit may be entered
C	A character or space must be entered
&	Any character or space may be entered
<	All Characters to the left are changed to lower case
>	All Characters to the right are changed to upper case
?	A letter or a digit must be enter

A british post code consists of one or two letters then one or two numbers then a space a number and two letters All letters must be capitals.

Exercise 3

0) Return to the above exercise and provide an input mask for the post code.

Background

Validation rules allow you to control the value entered into a field. The validation text property is the “error message” shown if the rules you create are broken.

You have already set up a rule. A number of comparison operators are available in Access. This is very flexible and a clear strength of Access.

Operator	Meaning
<	Less than
<=	Less than or equal to
>	Greater than
>=	Greater than or equal to
=	equal
<>	Not equal
IN	Test for equal to any item in a list
BETWEEN	Test for a range of values the two values separated by the AND Operator
LIKE	Test a Test or Memo field to match a pattern of string charaters

0) Create a Validation rule for a salary greater than £8000

z) to enter a date before January 1st 2001

aa) A date must be entered after today (date())

bb) the only valid sizes are SML

cc) A number between 1 and 21

dd) Code has five characters starting with A

ee) Age of a student must be less than 20

ff) Grades must be A B or C