

# Proicere, Inc.

## MS Access: Tables

Lesson Notes

Author: Pamela Schmidt

### Overview of databases

A database holds records. Records are made up of fields. A relational database ties the information from one database/table to another (a table is like a mini database). A database with only one table is considered a flat database.

#### Keyboard Shortcuts

F1	=	Help
F9	=	Update/refresh
Tab	=	Moves forward from one field to the next.
Shift Tab	=	Moves in reverse from one field to the previous field

#### Naming Conventions

While MS Access allows great leeway in naming items/objects, the following recommendations will make working with the database easier.

The LESZYNSKI naming convention is now the internationally accepted standard, for MS Access object naming.

Do not use spaces or symbols in a name.

Do use upper and lower case

i.e. the last name field could be named LastName or NameLast.

When naming tables, queries, etc., put in lower case at the beginning of the name, the following characters:

tbl = table i.e. tblOwners

qry = query i.e. qryAnimals

frm = form

sbf = subform (not part of the LESZYNSKI standard)

mcr = macro

rpt = report


sbr = subreport (not part of the LESZYNSKI standard)

lbs = labels (not part of the LESZYNSKI standard)

## Help

### Context Sensitive

“Help” is context sensitive. Clicking on the help button in any dialogue box will bring up the help for that topic.

 will also bring up help.

In “Help”, any words in green are called HOT SPOTS. If the hot spot has a solid underline, clicking on it will hyperlink to another page. If the hot spot has a dashed underline, clicking on it will bring up a pop-up, usually a definition.

### Office Assistant

#### Showing the Office Assistant

For MS Office versions XP (2002) and back the office Assistant can be brought from the standard toolbar by clicking on the yellow call out button with the question mark.



In MS Office 2003 the Office Assistant can be brought up by clicking on the Help option on the menu then clicking “Show the Office Assistant”.

The Office Assistant will look different between versions of MS Office.

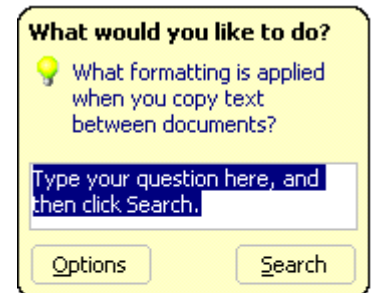
#### Office Assistant Light Bulb

The Office Assistant watches the user's keystrokes. If it thinks it has a better way of doing the procedure, a light bulb will appear. Click on the light bulb to see the tip.

#### Using the Office Assistant

Clicking on the Office Assistant will bring up a dialog box.

Key in a question then click on the search button to have the Office Assistant search the help files for the appropriate help article.

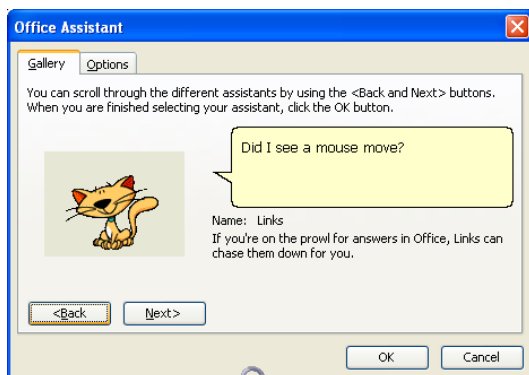


#### Hide the Office Assistant

To hide the Office Assistant, click on the Office Assistant with the right mouse button. Click on “Hide”.

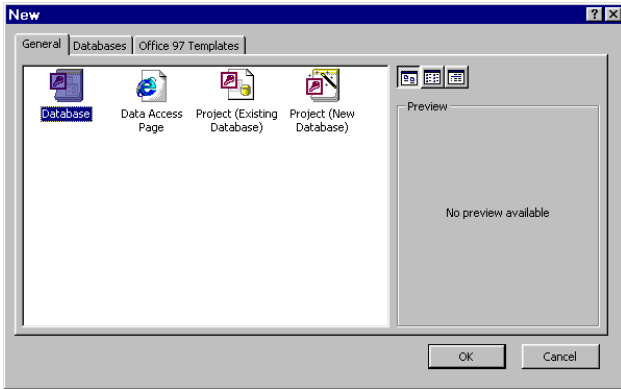
#### Changing the Office Assistant

To change the Office Assistant, click on the Office Assistant with the right mouse button. Click on “Choose Assistant”. A dialog box will appear showing the different Office Assistants available.



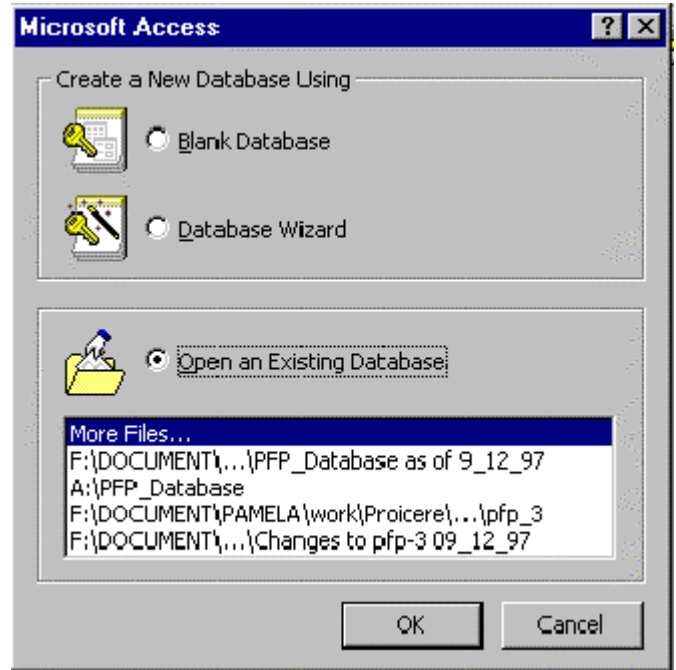
## Creating New Databases

To create a new database, choose Blank Database in the dialog box.

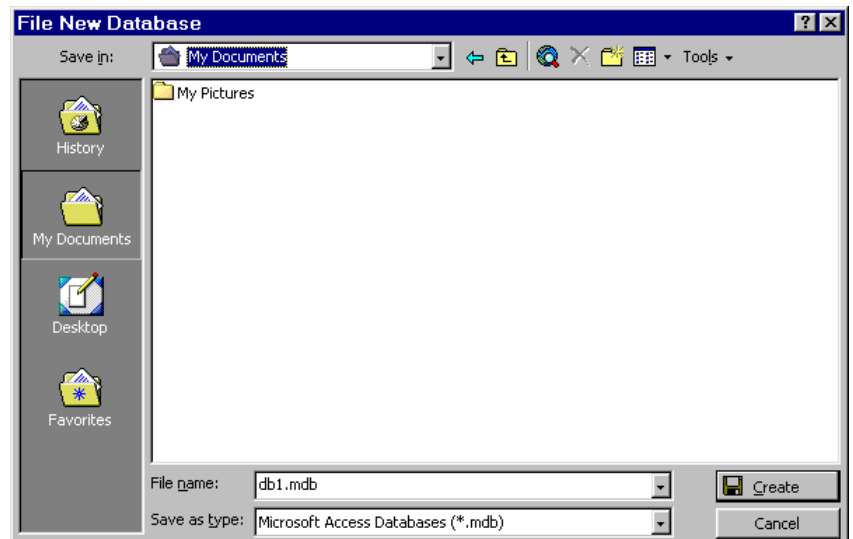


*Note: The screens for different version of MS Access will look different.*

The database name will default to db1.mdb, but can be change to any name desired. If a db1.mdb exists in the folder, the name will default to db2.mdb, etc.

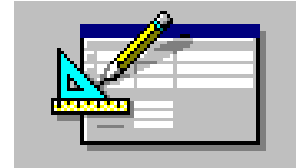


*Note: Databases created in MS Access 97 or a lower version, once saved in a version can not be resaved as a previous version. MS Access 2000 and newer versions have a special feature found under the Database Utilities that will convert the current version database to a previous version.*



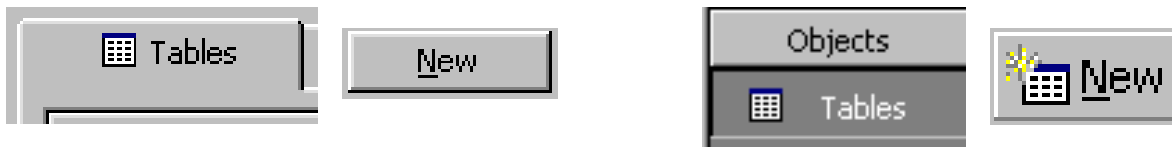
## Tables

### Creating Tables



To create a new table, from the table tab, click on the new

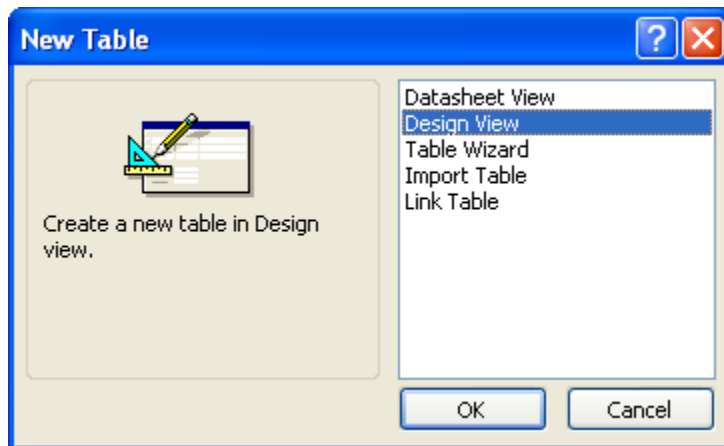
button.



*Note: there is a different look between the versions of MS Access*

Choose the design view.

When the ok button is clicked, a dialog box will appear allowing the creation of the fields for the table.



## Fields

**Text** (Default) Text or combinations of text and numbers, as well as numbers that don't require calculations, such as phone numbers. Up to 255 characters.

**Memo** Lengthy text or combinations of text and numbers. Up to 65,535 characters.

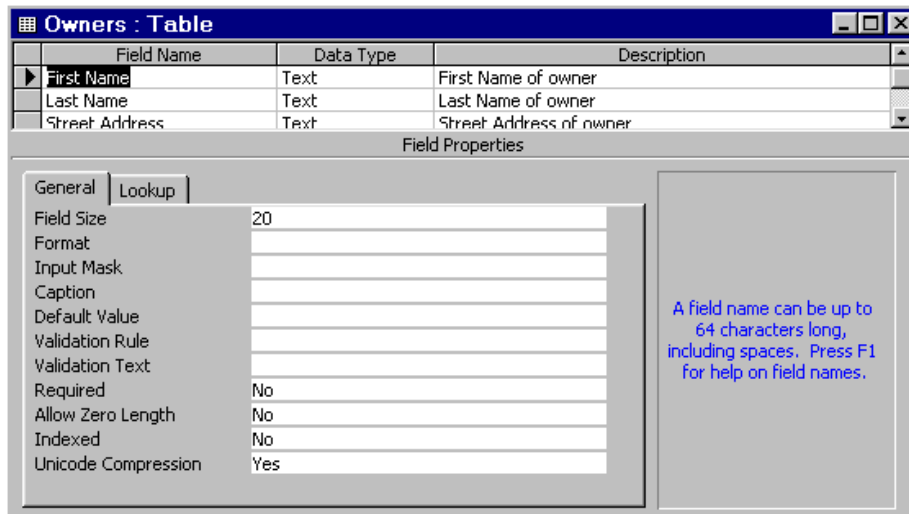
**Number** Numeric data used in mathematical calculations

**Date/Time** Date and time values for the years 100 through 9999.

**Currency** Currency values and numeric data used in mathematical calculations involving data with one to four decimal places. Accurate to 15 digits on the left side of the decimal separator and to 4 digits on the right side.

**AutoNumber** A unique sequential (incremented by 1) number or random number assigned by Microsoft Access whenever a new record is added to a table. AutoNumber fields can't be updated.

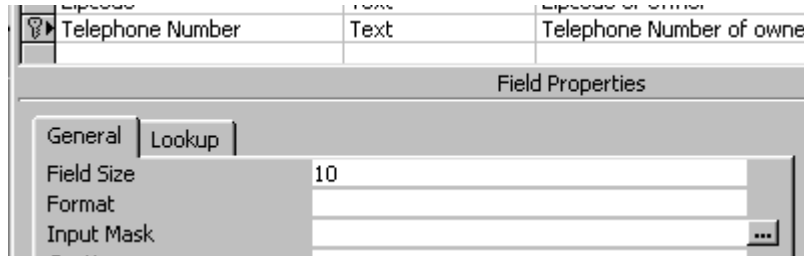
**Yes/No** Yes and No values and fields that contain only one of two values (Yes/No, True/False, or On/Off).



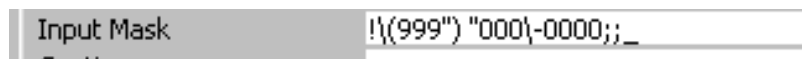
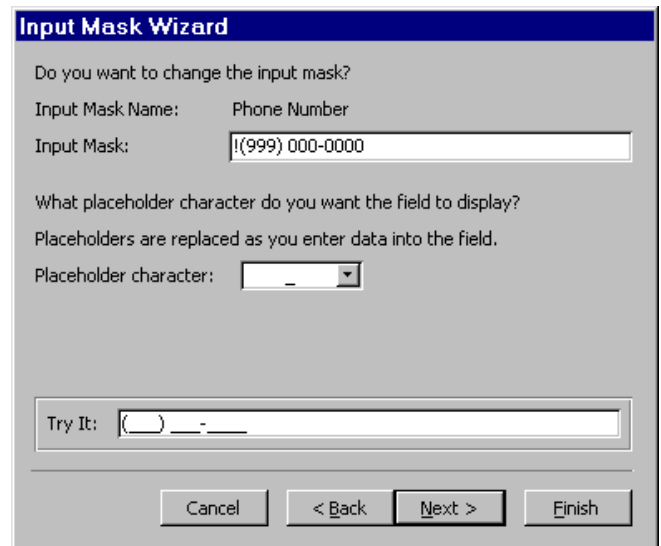
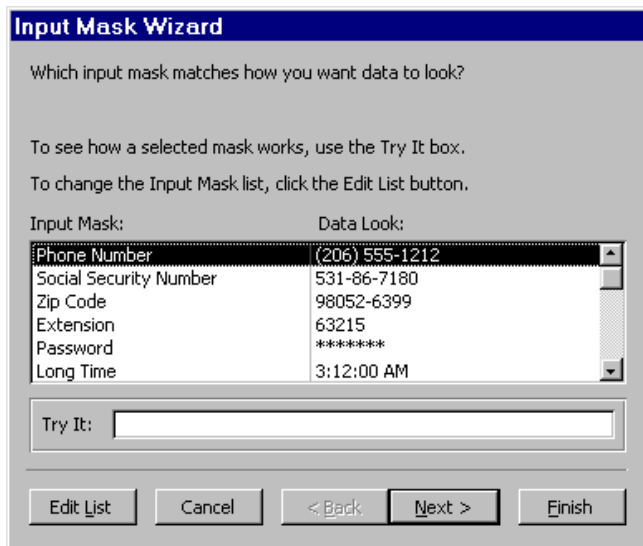
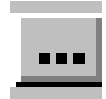
## Masking

A mask will restrict the data entry to a preset format. It can also add in symbols.

To create a mask, click on the field, then in the lower half of the screen, click in Input Mask.

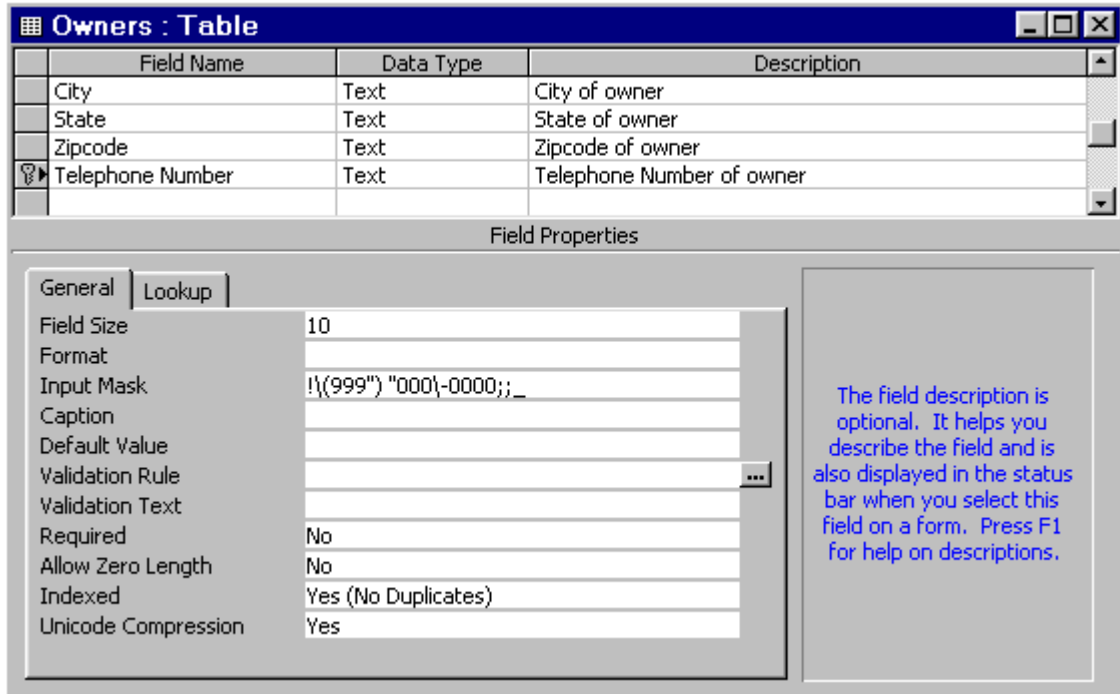


A button with an ellipse in it will appear on the right. When the button is clicked, a wizard will be launched.



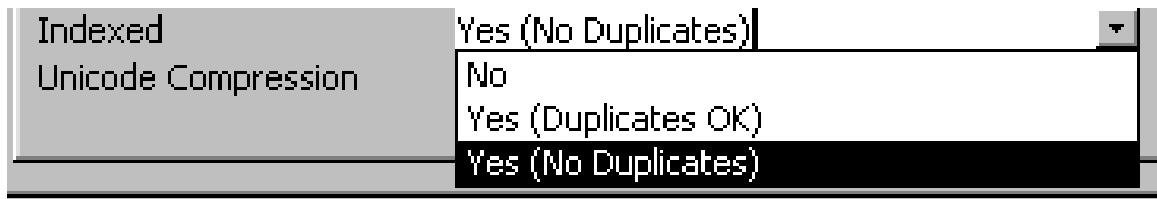
### Setting Primary Keys

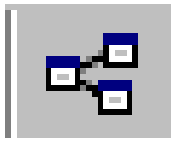
The Primary Key should be a field in which the data will always be unique.



### Create Indexing

An Index is automatically created when a primary key is set. An index can be created without making it a key.





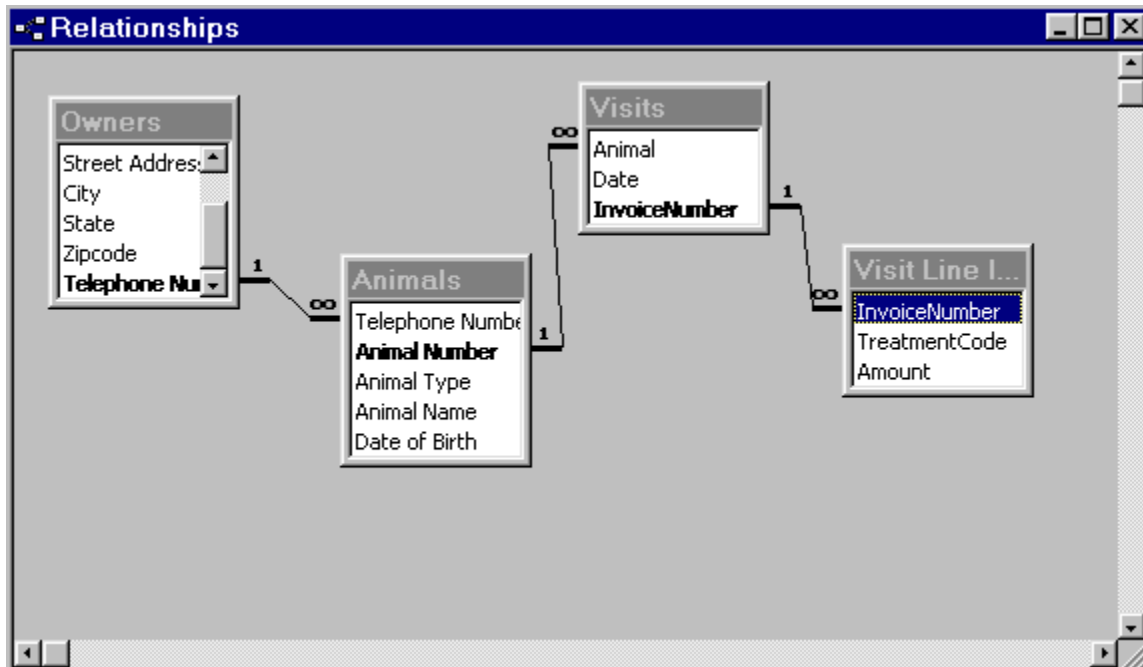
## Relationship

Setting the Relationship between tables allows information to be pulled from a table based on the key of the table.

To create a relationship, from the menu choose Tools, Relationship.

Add the tables to the Relationships screen.

To create the relationship, drag the key field of one table and drop it on the matching field of another table. (Drag the one to the many.)



Setting “Enforce Referential Integrity” forces the system to check any number/text entered into the field against the relating table. A number can not be entered into the second table unless it exists in the first table.

Table/Query:	Related Table/Query:
Owners	Animals
Telephone Number	Telephone Number

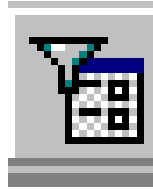
Enforce Referential Integrity  
 Cascade Update Related Fields  
 Cascade Delete Related Records

Relationship Type: One-To-Many

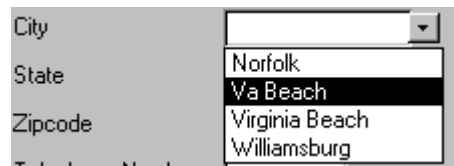
## Filter By Form

Data can be filtered in a form rather than using a query if the filtering does not need to be saved.

Use the filter by form button to bring up the filter form. This form will look just like the data entry screen.

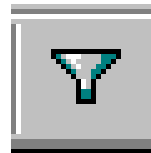


Use the drop down boxes to choose the filtering criteria.



Click on the filter tool to filter the form.

This filtering will show only the record that meet the criteria. Select the filtering tool again to see all records.



## Filter By Selection

Filter by Selection allows a quick filter based on the current field. To filter the records, be in the desired field that meets the criteria then select the filter by selection tool.

