Chapter
1

Introduction to Microsoft Access

Data is simply a collection of characters (that is, letters, numbers and symbols) which, on their own, have no particular meaning. When data about a particular topic is stored it is said to be a database. A database allows data to be processed into information, something that can be communicated and understood.

There are two different types of databases:

- those that already contain data and just allow you to obtain information from them. You are not able to make any changes to the data. These are called CLOSED DATABASES.
- those that allow you to enter and change the data and process it. These are called OPEN DATABASES.

Microsoft Access is an OPEN DATABASE.

Some databases that we use in everyday life include: the telephone book, a dictionary, an atlas, a bus timetable, etc. Data within a database is usually divided into categories or sections, called FIELDS. The fields that the telephone book is divided into are:

Surname, Initials, Street Number, Street Name, Suburb, Telephone Number

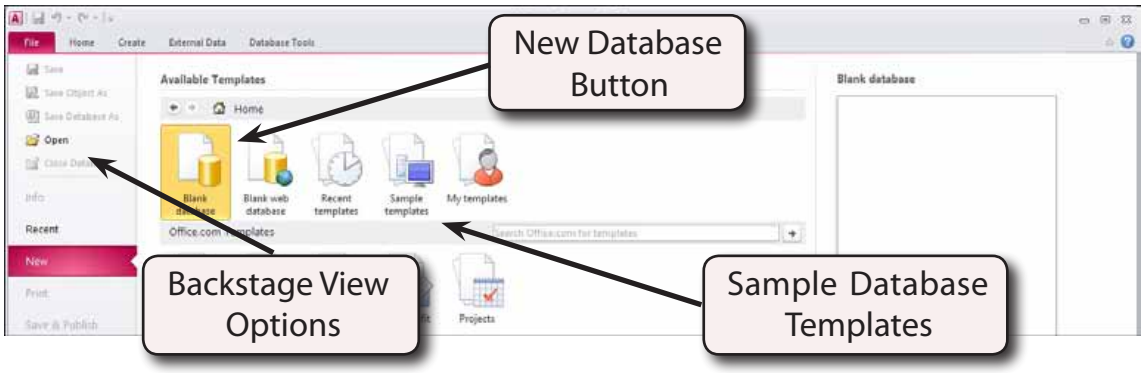
These **FIELDS** can vary in length depending on how much data (characters) needs to be placed into them. For example, an Initials field does not need as much space as a Surname field.

One complete set of fields is termed a **RECORD**. For example, each subscriber's details in the phone book is a record. There are over 1 000 000 records in the Melbourne telephone book.

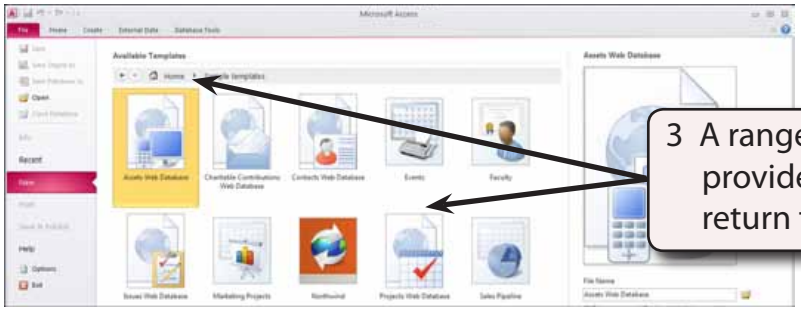
A group of records on a particular subject is called a FILE. For example, the phone book is divided into two **FILES**, white pages and yellow pages.

Getting Started With Microsoft Access

1 Load Microsoft Access and you should receive the BACKSTAGE VIEW with the NEW section selected. The following diagram labels BACKSTAGE VIEW sections.



2 Click on the SAMPLE TEMPLATES icon in the AVAILABLE TEMPLATES section.

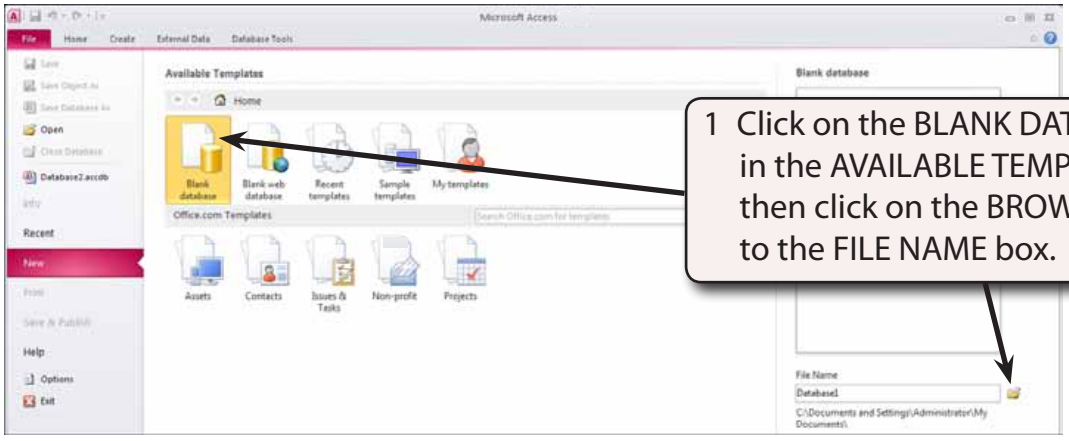


3 A range of preset database types are provided. Click on the HOME link to return to the NEW options.

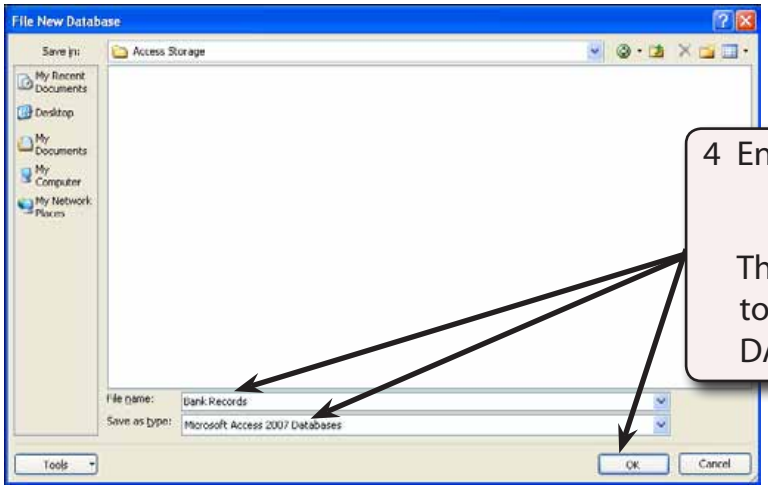
NOTE: Once you are familiar with creating Access databases you can use these templates to quickly setup the type of database you require. You can also find templates online using the OFFICE.COM TEMPLATES section.

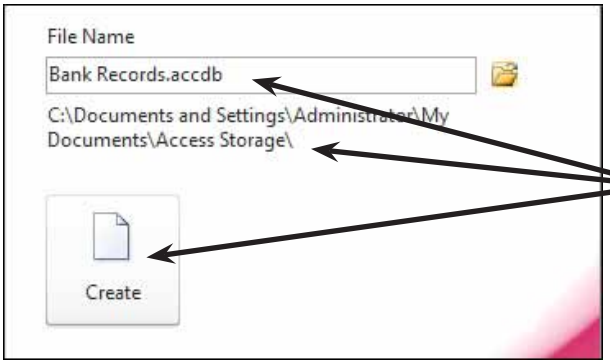
Starting a New Blank Database

To learn how to create your own database, a database for a bank will be created.



2 Microsoft Access automatically saves your work as you enter data so the program needs to know where to save the file before you create it.

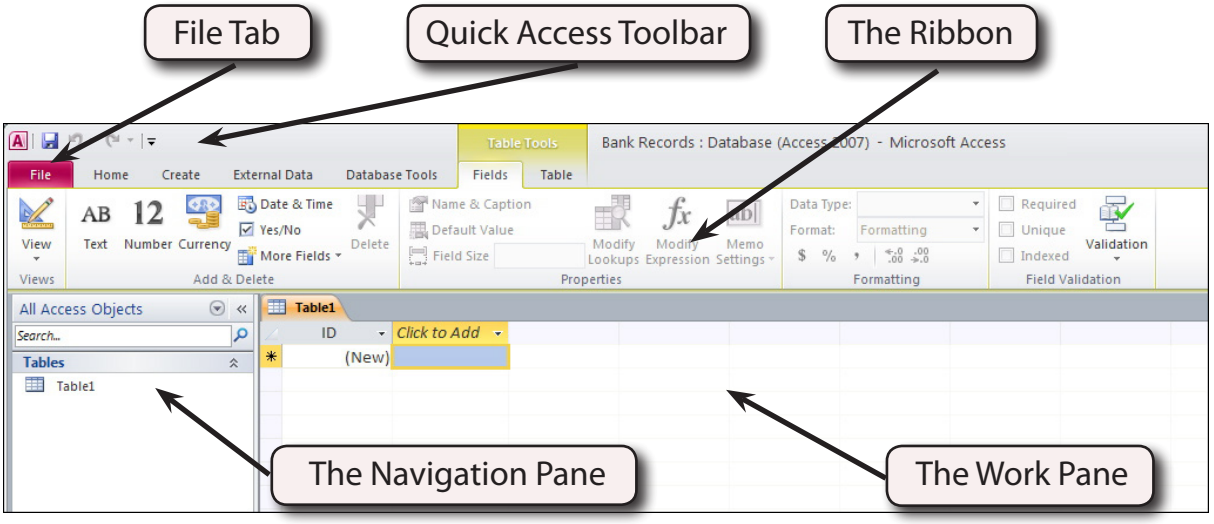




5 You will be returned to the BACKSTAGE VIEW with the file name and path inserted at the bottom right. Click on CREATE to start the database.

The Database Screen

The database screen has a number of sections which are labelled in the following diagram.



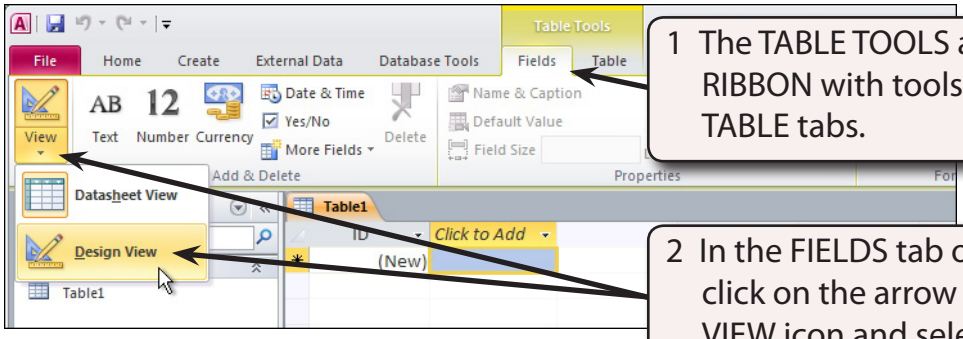
An Access database is made up of **TABLES** where you enter the data, **QUERIES** where you ask questions of the data, **FORMS** where you make the data easier to view and edit, and **REPORTS** where you print the data. These sections will be covered in the next few chapters.

Creating a Table

Tables (or lists) are the main way of displaying data in Microsoft Access. All data is stored in tables. The one database can have many different tables, but each table should concentrate on the one subject. For example, the products that a company sells or the customers that the company has. The **ROWS** in the table represent the **RECORDS** of the database. The **COLUMNS** represent the **FIELDS**.

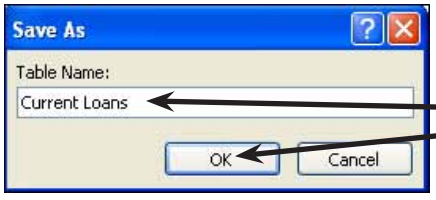
Let's create a database for a bank that records the names, addresses and annual incomes for clients taking out personal loans. The first step in creating a database is to enter the FIELDS (the categories or sections into which the data is divided).

You can type the field names directly into the Work pane area like you would in a spreadsheet. However, it is easier when you first starting learning Access to enter the table in DESIGN VIEW.



1 The TABLE TOOLS are displayed in the RIBBON with tools in the FIELDS and TABLE tabs.

2 In the FIELDS tab of the TABLE TOOLS click on the arrow at the base of the VIEW icon and select DESIGN VIEW.

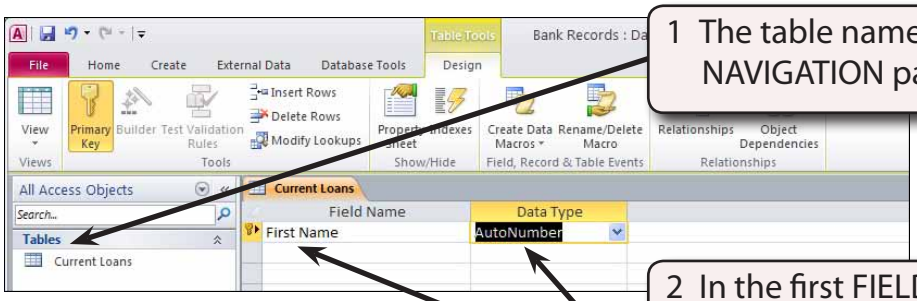


3 You will be asked to save the table, enter the Table Name:

Current Loans

and select OK.

A Entering a Text Field



1 The table name is displayed in the NAVIGATION pane.

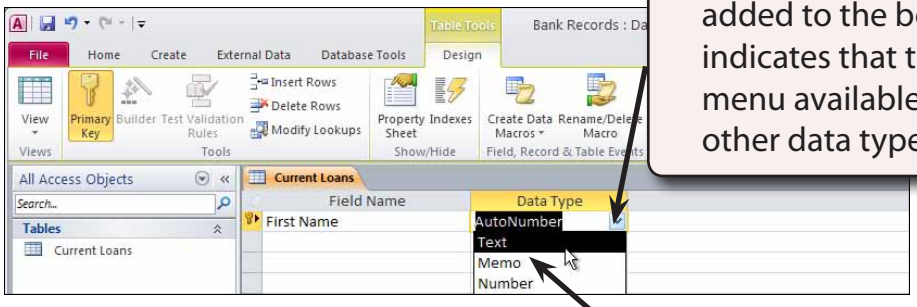
2 In the first FIELD NAME box (or cell) enter the field name:

First Name

and press the TAB key to move the cursor to the DATA TYPE column.

NOTE: DESIGN VIEW allows you to enter the field names, their data type (for example, text, number, date/time, etc.) and to make comments to remind users about what the field stores.

3 In the DATA TYPE column you will be provided with the AUTONUMBER TYPE as the program is expecting a record number or code number field. In this case we are creating a simple database so the field will need to be set to TEXT.



4 Notice that there is a down arrow added to the box (or cell). This indicates that there is a drop-down menu available containing a list of other data types to select from.

5 Click on the down arrow and select TEXT.