

# Introduction to Databases

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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, which is 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**.

FileMaker Pro is an **OPEN DATABASE**.

Some databases that we use in everyday life are the telephone book, a dictionary, an atlas, a bus timetable, etc. When you use an internet browser such as Microsoft Internet Explorer you are actually using a database program that searches through linked databases around the world.

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.

## Loading FileMaker Pro

- 1 Load FileMaker Pro 10 and you should receive the QUICK START dialogue box.
- 2 From this dialogue box you can create a new database file, open an existing database or obtain FileMaker Pro help.

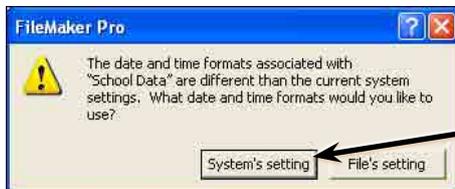


3 In this case we wish to use an existing database so click on the OPEN DATABASE icon then click on the BROWSE FILES button.

## Opening a Sample File

A database about students in a make believe school has been prepared for you. It needs to be opened from the FMP10 SUPPORT FILES folder. You may need to find out from your teacher where the FMP10 SUPPORT FILES are located.

- 1 Access the FMP10 SUPPORT FILES, open the CHAPTER 1 folder, select the SCHOOL DATA file and select OPEN.



2 If a DATE and TIME warning dialogue box appears, select SYSTEM'S SETTINGS.

## Saving the File

FileMaker Pro automatically saves your work as you enter data so you need to save the file before you start using it.

- 1 Display the FILE menu and select SAVE A COPY AS.
- 2 Access your STORAGE folder and create a NEW FOLDER called FMP10 FILES.
- 3 Save the file in the folder as SCHOOL DATA COPY.

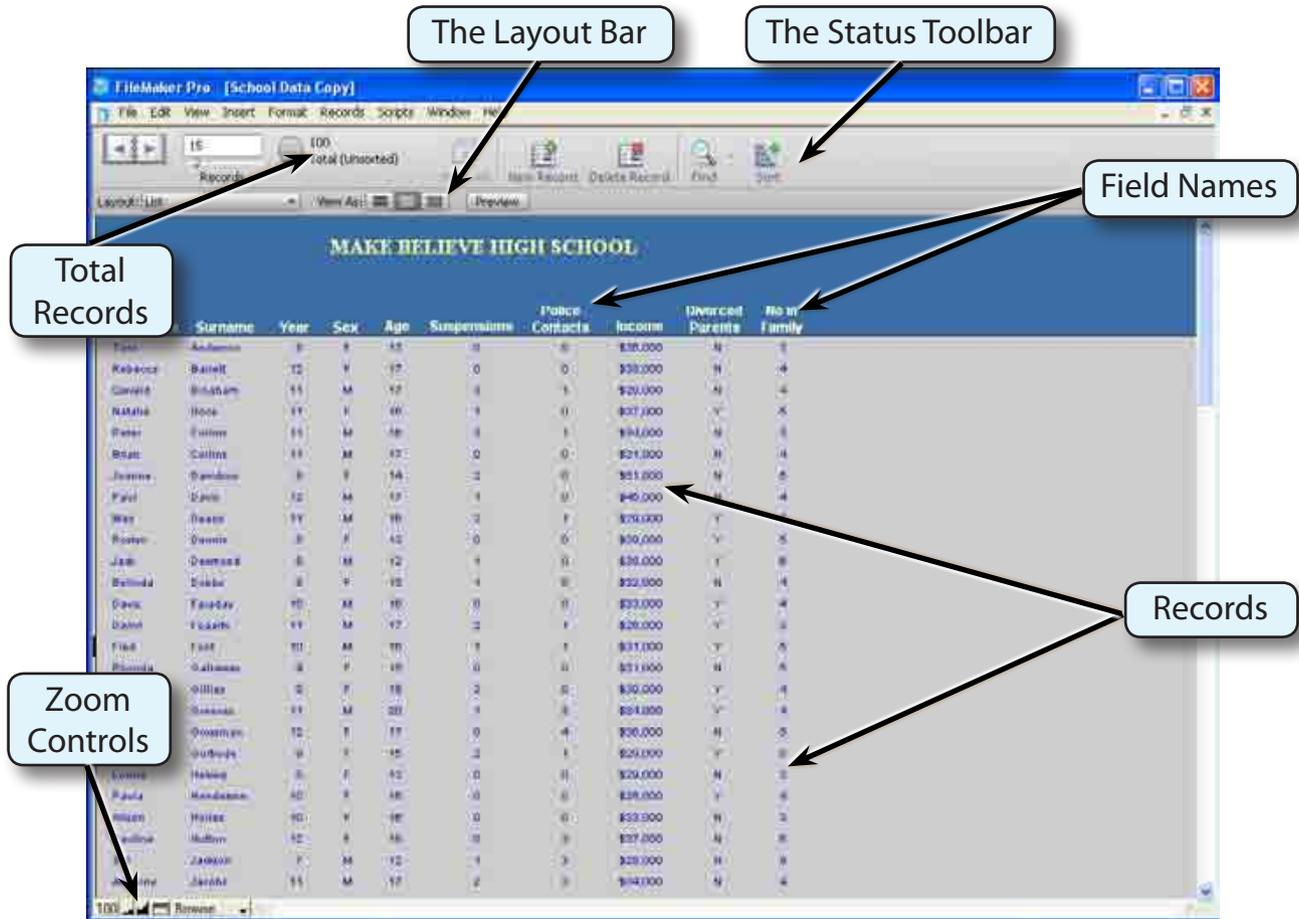
## Opening the Saved file

The SCHOOL DATA COPY file now needs to be opened from your FMP10 FILES folder. If you continued to use the SCHOOL DATA file, the next person to open the SCHOOL DATA file would have your changes present.

- 1 Display the FILE menu and select CLOSE to close the prepared file.
- 2 Display the FILE menu again and select OPEN.
- 3 Access the FMP10 FILES folder, select the SCHOOL DATA COPY file and select OPEN.

## Looking at the Data

- 1 The file opens in a view called BROWSE MODE. Scroll through the records to look at the data that is present
- 2 Find the sections of the screen labelled in the diagram at the top of the next page.



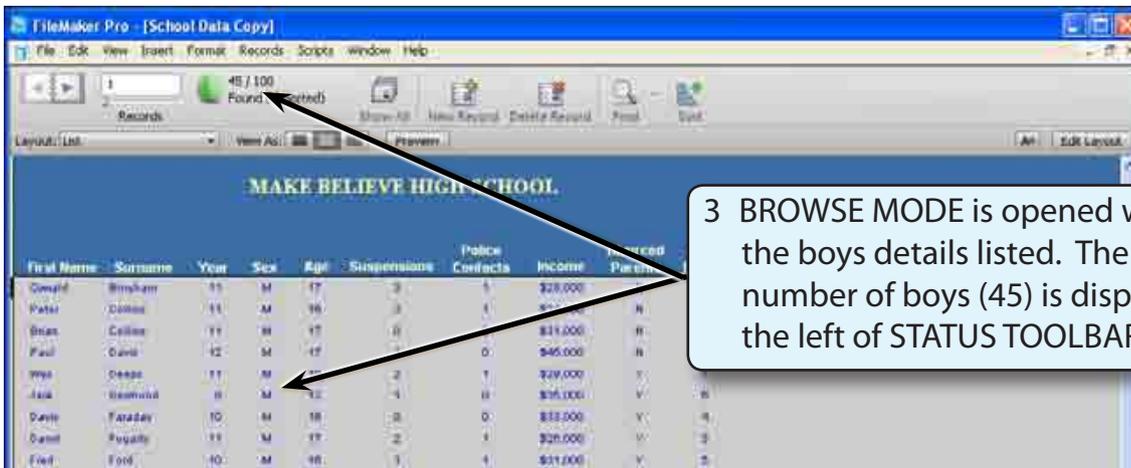
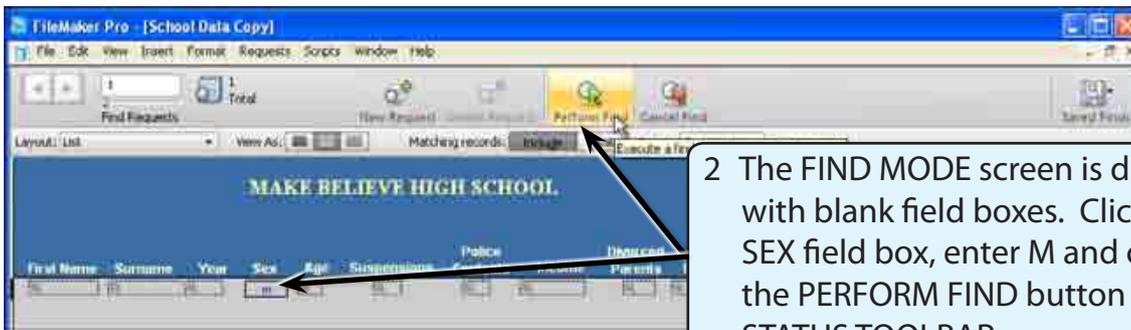
**NOTE:** Each person's details is called a **RECORD**. The sections within each person's details are called **FIELDS**.

## Searching the Data

The purpose of a database is to make it easy for you to find information from it. For example, how many boys do you think there are at Make Believe High School? You would not want to count them manually.

### A Finding the Number of Boys at the School

- 1 Click on the **FIND** button in **STATUS TOOLBAR** to set the screen to **FIND MODE**. You can also display the **VIEW** menu and select **FIND MODE** (or press **CTRL+F** or **COMMAND+F**).



**NOTE:** FIND MODE is used to search the database.  
BROWSE MODE displays the results of the search.