Sets

Alpha Five is a Relational Database

Much as the above collage combines separate pictures into a single graphic, sets combine separate tables so that, in most cases, they can be viewed as a single table.

PLEASE TAKE A MOMENT TO READ THIS

Understanding Sets

There are two types of databases: Flat and Relational. In a Flat Database, the tables stand alone. Each file must carry all necessary information. For example, the Customer file would carry name and address information. The Invoice file would also have to carry the name and address of the Customer. A Flat Database is satisfactory for a simple address book.*

Alpha Five is a Relational Database.† In a Relational Database, tables that **relate to each** other may be linked together in order to save disk space and to increase accuracy. This type of database is far more sophisticated and capable of complicated relationships. For example:

- The **Speakers** table holds the names and addresses of speakers. It was also structured to include a field called **Speaker_Id**. We defined this field as Auto Increment, so each speaker will have a unique ID.
- The **Seminars table** was also structured with a field called **Speaker ID**. We can use this ID number to link the tables together like a button links two sides of a jacket together.

Joining the tables together saves disk space because the speaker's name and address is not repeated in the Registration table. It is more accurate because a change of address for a speaker is entered only in the Speakers table.

REMEMBER THIS!

These linked tables are called a Set. **In most cases the linked tables act as a single table.**

HINT!

The relationship between the tables is referred to as **parent and child**. The Set may also contain **grandchild** links.

*. Microsoft Works is an example of a Flat Database.

†. Microsoft Access is also a Relational Database.