

Unit 8: Database

By Tyler McOmish and Dragan Pecanac



8.1: Introduction to Databases

- * An organized collection of related information.
- * An example of a hierarchical database is like the many connections and roots in a tree.
- * Big businesses or businesses with many clients use databases to keep track of information.
- * A field is an area in a database where you can enter information.
- * A record is the information but to be more specific, a record is a unit that consists of information that can be entered into each field.
- * Individual database is for personal records and is usually used by small businesses on personal computers.
- * Company databases are shared allowing updates from a single source.
- * Distributed databases are linked databases from many physical locations, but accessible from a single computer location.
- * Proprietary databases are large and customized and are owned by a single individual or company.
- * A hierarchical database organizes fields and records like the stems, branches, and leaves of a tree.
- * The technical term for fields and records in these databases is called the node.
- * A relational database is structured in information related tables.
- * Advantages of database software are: you can update information, request information, link information stored in different tables together, and link different files within the database.
- * Queries are questions or 'requests' a user can ask using a database language. It allows the user to only see the desired information.
- * SQL (Structured Query Language) is the standard language used to request a database to update and retrieve information or create and delete data.

8.2: Planning and Creating Databases

1. Decide if you need a database, if you don't have much information to store then a simple excel spreadsheet would do the job.
2. Plan how your information will be organized
3. Find Microsoft Access on the computer and open the program.
4. Select "Blank Database" on the pop-up window.
5. You can create a table in Design View, Table wizard or by entering data.

8.3: Managing Records

- * A primary key is a field of information that is used to link the table with another table.
- * To enter data, the table can be switched to datasheet view.
- * To look at table records highlight the field name, go to Records in the top menu bar, select "Sort" and either choose "Sort Ascending" or "Sort Descending".
- * Criteria cell works like a mini program, where you can instruct the database to select fields that are "like" or "not like" a certain entry.
- * A user can find a specific record in a by highlighting the appropriate field and using the find function

8.4: Communication Through Printed Media

- * You can print database pages.
- * The Report Wizard can help users choose the best template for designing the type of report needed you can preview the report using the print preview menu.
- * A spreadsheet gives the user more flexibility in formatting the rows and columns for the best aesthetic impact.