How to Choose Database Software

A database is a structured system for collecting, retrieving and displaying information. It includes records for each entry, and fields within each record to define information like names, addresses, and other identifying information. Many databases are based on SQL, or Structured Query Language, which is a programming language used to create relational databases. A database is useful for automating and simplifying many business functions. The size and complexity of the database program you choose depends on your present and future needs. Learn how to choose database software to find a system that easily meets your specifications and needs.

1. **Determine what you want the database to do.** Base your decision on how the software meets the needs of your organization, rather than familiarity with the platform that the program is developed in.
2. **Make sure the database is large enough with room for growth.** Most likely, multiple users will need access to the database at the same time, so the database should support multiple users. Even if you start with a single user, plan for growth of your organization, and expect others to need access to data.
3. **Decide between custom and off-the-shelf database software.** Microsoft Access and SQL server are common packages that are easy to use for building a simple database. If you need more advanced designs, it may be better to purchase a system that contains most of the features you need and have it customized, rather than build a custom application.
4. **Take the time to research all options.** While it can be overwhelming and time consuming to examine products in detail, it can take much longer to try and get a database to work if it just doesn't meet your needs.
5. **Consider web enabled options.** Databases hosted on an Internet site have a smaller footprint, without the need for a server and related expenses like support and backup.
6. **Include free database software in your investigation of how to choose a database software.** Simple programs like MySQL are free, or very

inexpensive, and are useful for many small applications. They can be customized while still saving on overall expense.

7. **Think about who will be using the database software.** It should be simple enough for the most inexperienced user, with features to ensure that data is entered correctly and checked for errors. Ideally, the database should offer the ability to customize interfaces for power users and administrators.

8. **Look for security features.** Any database that stores private information should be protected from intruders. Companies that collect credit card information are required to encrypt data stored in databases and meet other requirements.

9. **Find out whether you need a non-relational database.** Most database platforms are relational databases that use structure or schema, based on tables and fields that related to each other and include common elements. Non-relational databases are useful for capturing values from non-standard elements like web content, emails and documents.

10.   **Spend some time learning the basics of databases.** Knowing the lingo will make it easier to communicate with vendors and compare options. Get to understand the types of databases and platforms, including Microsoft Access and SQL server as well as free database options.