

Your First Database? Turn Dread to Delight!

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Think of the word "database". What comes to mind? Impossible to do? Far too advanced for you? Something to dread like the plague? It's true, databases have received a bum rap - touted as an advanced skill that only computer whizzes can pull off. This needn't be the case. YOU TOO can learn to use databases in your web development with skill, know-how and efficiency. You just need to focus and follow the general principles and protocol.



The first step in any attempt at database development is a thorough needs assessment and an outline of your database requirements specifications. A great resource for helping you plan this process is *Tindall Associate's* article, [Database Requirements Specifications Guidelines](#). Planning the database according to realistic needs is a crucial step in the process. If the resultant database doesn't meet your needs, it's utility is not going to be worth the time and effort it takes to build one. To avoid having to go back to the drawing board, take the time to consult with the potential users and do it right the first time. Make every field and category count!

Expert *Jay Greenspan* provides invaluable direction in database development in his four part article series, [Your First Database](#). There are particular considerations when developing your first (and all subsequent) databases. One, make your fields count! It's easy to sit down and list all the possible field titles you can think of. But, in the real world this often doesn't work. The best way to go about choosing your field is to consider all possibilities, but refine this list down to a few solid gold ones.

Choose field names that are meaningful. Ones that stand on their own, without a shadow of a doubt. Fields that will give you a solid base for the interactions expected from your database. For instance, if you don't really need to know your customer's date of birth, don't include this as a field. Make every single field count for something important! Second, look carefully at how your fields relate to each other. Make them work together like a well-polished orchestra. You have to think "crucial information" and "inter-relationships" to concoct a useful and professional database.

Most web based databases are driven by a computer language called Structured Query Language (SQL). Your server should provide access to this, called [MySQL](#). It is wise to check database and SQL availability with a server vendor before signing up. MySQL is available free but this is not your only option for database software. There are many different database programs available from Microsoft's Access to the quite expensive and challenging Oracle. [Oracle](#) is tough to learn, but once you know how to work with it, your web designer abilities and marketability go up a notch. Usually the database software is integrated with your web environment using your Common Gateway Interface (CGI) capabilities. CGI works great for sites that have modest traffic. But sites with hundreds of hits per day may need an Apache web server embedded along with a PERL interpreter to prevent massive draw on your web resources from constant database reconnections after every transaction. [Apache](#) and Perl allow developers to write applications that don't need constant reloading between transactions and maintain the database's connections or memory between visitors. Apache can be used with or without DBI. [DBI](#) is a database interface module for Perl. DBI is great for defining methods, variables and conventions that provide a consistent database interface independent of the actual database. ColdFusion, is another popular choice for web based database construction. This database-to-Web gateway provides an effective and fairly easy way to make a dynamic web database. Adventurous sorts can also try Visual Java++6.0 to create dynamic, database-driven web sites. This program enables you to use Code-behind HTML to add either client-side or server-side databases.



Once finished your initial database design, it's time for those last final tweaks. Some easy to follow guidelines in what to look for is available from HPO SOFT in their article, [**FileMaker Pro Program Design Author Guidelines**](#). No matter what program you choose, databases require careful planning but are not the sole territory of advanced web design gurus. You too can be successful in creating web-based databases. You'll not only give yourself immense satisfaction, but advance your designer resume considerably.

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