Tony White Designs, Inc. Custom Database System Design Steps

Our goal is to provide you with a custom database system that fits your needs. A well-designed database system will have the following characteristics:

- It is easy for the user to enter and modified data.
- It is easy to navigate around the system and to search for information.
- The database is designed to run well on the hardware that is being used.
- The layouts fit the monitors being used.
- It is easy to view the information in a variety of ways, either on screen or printed out.
- Repetitive and/or complicated tasks should be programmed to be made easy and efficient for the user to perform.
- The structure and the programming of the database system should be so consistent and clear that how the system works can be readily understood.
- The structure of the database should reflect the principals of relational database design theory and incorporate an entity relationship model that reflects the business processes that the project requires.
- The graphical user interface should make the database easy and enjoyable to use.
- The system should protect the data from loss or corruption.

It is very important that a database system be designed correctly from the beginning. This requires proper planning, and close collaboration and communication between the developer and the users.

These are the steps that we follow to ensure a successful database design project:

- Gather information from the various users about the requirements for the project. This includes everything from the big picture strategic objectives to the features and reports that will be needed by the individual users.
- Communicate to the users our understanding of what is being requested, to insure that there is clarity before beginning each development cycle.
- Create a data model that reflects user requests.
- Gather a second round of input using the data model as a guide.
- Develop a prototype that reflects the requests that have been made. Demonstrate the prototype to the users and gather additional feedback in preparation for the next development cycle. Repeat as necessary. As the development cycle progresses, the form of the system will take shape. At the same time, the users are becoming familiar with the system and how it operates.
- At the end of the development cycle all parties pick a time to begin using the system. We like to do this when we are fully available to quickly respond to any issues that come up.

Many of the systems that we build have a user interface that reveals the structure of the system. The result is that by using the system, the users learn how it works and how to get the most out of it.

When the system enters the phase of active use, any remaining bugs will be revealed and quickly repaired. There will often be a number of features requests that result from real world usage. The design of the system will provide the option of subsequent enhancements.

Tony White Designs, Inc. • Computer Consulting • Database Design • Custom Solutions
118 Remsen Street, Brooklyn, NY 11201 • Tel: 718-797-4175 tony_white@twdesigns.com