Database Environment

A. Client Profile

WFHB is a small, community-based radio station run by a network of over 200 volunteers, creating music and news programming for all of south central Indiana. Along with volunteers, the organization consists of a small paid staff. For the fund drive, volunteers are responsible for recording donor information (e.g. mailing address, pledge amount, etc.) and mailing pledge notifications, reminders, and bills. The station also gives gifts (e.g. shirts, mugs, etc.) to members who pledge over a certain dollar amount. Thank you notes are sent to all pledging members. Pledge and member information is currently recorded by hand, creating many opportunities for error on the part of the volunteers recording this information. The station manager then enters this information into an Excel Spreadsheet. A detailed diagram of the organization’s information flow/business process before the database implementation is shown in Figure 1.

WFHB would benefit from the database in several ways:

1. It will provide a unified, centralized system for entering and storing member, pledge, and payment information.
2. It will reduce the risk of errors they were susceptible to while using a paper-based system.
3. It will reduce the amount of time necessary to record information related to a pledge, increasing the efficiency of their pledge drives.
4. It will allow them to automate many of their business processes, such as sending receipts, sending thank you notes, and tracking the receipt of gifts.
5. It will enable the Station Manager to gather statistical data about the pledge drives, including total contributions, average contributions, contributions by member type, number of pledges at a certain pledge level, etc.

The database will store large amounts of data based around the station’s semi-annual fund drives:

- **Contact information** – information related to individual members, business donors, and volunteers (including items such as name, address, and phone number) will be stored in the database. This table will contain information for all types of contacts (i.e. members, volunteers, and businesses) since one contact can have multiple roles. Information determining the type of contact will also be recorded.
- **Pledge information** – records connected to contact information will store pledge amounts, date & time of pledge, gifts received from pledge, and method of billing (i.e. pay now/pay later) for every pledge that the station receives.
- **Payment information** – data related to payments of pledge amounts will be stored, including payment type (i.e. credit card, cash, etc.), payment amount, and date of payment. Each payment is connected to the relevant pledge so updated balances can be calculated and stored in the database. Credit card numbers and bank account information are temporarily stored in secured tables until payments have been processed (performed at the end of each business day).
B. Data Flow Diagram

A diagram of how the database implementation will fit into the station’s information flow/business processes is shown in Figure 2.

---

Figure 1. Information flow/business processes before database implementation.
Figure 2. Information flow/business processes after database implementation.
C. User Profile

There are three different groups of users who will use the database for various tasks:

Volunteers – the largest and most varied user group will be the volunteers. Employing over 200 volunteers, the radio station relies upon this user group to enter pledge and member information as well as accepting cash and check payments. Volunteers consist mostly of members of the Bloomington community. They bring various levels of experience working with computers and database entry from the new user to the experienced computer user. Volunteers vary widely in age, race, and gender. Volunteers will use the database infrequently so it must be easy for them to learn and remember. Tasks should be low in risk as volunteers will be dealing with calculations involving money.

Membership Coordinator (volunteer) – the Membership Coordinator is also a volunteer position, but this person has more responsibility than other volunteers. This person is responsible for performing follow-up actions, including mailing receipts, sending thank you notes, and keeping track of gifts received. This requires the Membership Coordinator to run several different queries to obtain the correct information and export it to Excel so it can be used to mail members the appropriate materials. Initially, the database’s learning curve may be higher for this position, but because of their frequent use of the system, this is acceptable. Appropriate queries will be activated by command buttons on the main menu. All parts of each query will automatically update appropriate information, making the Membership Coordinator’s use of the system more efficient than the current process for follow-up actions.

Staff – the paid staff consists of a Station Manager (Mark Lowe) and several Program Coordinators. The Station Manager will be the only staff member using the database. He will use the database for multiple reasons. One of the main tasks the Station Manager performs is the processing of credit card and automatic debit payments. This information is secure, and the Station Manager is the only person with access to it. Not only will he process these payments, but he is also responsible for purging the data after the payments are processed. The Station Manager may periodically perform some of the tasks that the volunteers perform. However, his main role will be to teach new volunteers how to use the database. This will require excellent knowledge of the database so he can answer volunteers’ questions and problems. He will also be responsible for making any changes after the database has been implemented (e.g. if the premium levels change). Mark has good knowledge of computers and databases so he will be able to learn the ins and outs of the database quickly.