VOLUNTEERS INTERNATIONAL

Congratulations! As the newest database design expert at Data Base Consultants (DBC), you have been assigned to create a database design for the Volunteers International (VI) to manage its member records and information about the activities of the local clubs.

Background information

Volunteers International is a volunteer organization whose purpose is to help people in their local communities and in other places in the world. VI has two types of activities: 1) fund raising events and 2) service projects. Fund raising events raise money for their service projects locally and internationally.

VI has national offices in many countries throughout the world. Each national office oversees the local clubs in that country. The membership information and activities of these local clubs are reported on a regular basis to the national office in each country.

The national office in the United States has asked Data Base Consultants to create a database to maintain its records of members, local clubs, and club activities (U.S. only). You have been assigned to provide the logical design for their database. A committee has been elected to oversee the new database. The VI Data Base Committee is your client, and you will report the results of all your work to this committee.

Design information

You have interviewed all the people involved, and you have gathered the following information.

1. VI maintains a central roster of all members with their local addresses and telephone numbers (business, home, FAX, cell phone, etc.).
2. A member can belong to only one club at a time. A history is maintained for members who move from one club to another with the date of joining and leaving with a reason for leaving.
3. VI maintains a list of the talents of the members so that members can be contacted when a skill is needed. A member may have many talents. VI uses a standardized list of talents that members may have.
4. VI uses a standard list of local offices and national offices that members may hold.
5. Each local club has its own officers who are elected from the group of local members. VI maintains a list of the current officers for each club as well as a history of past officers with the years served in each office. Officers are elected annually. Members may hold the same office many times and may be re-elected to the same office in consecutive years. [No term limits.]
6. Any local member may be elected to a national office. VI maintains a list of the current national officers with their addresses and telephone numbers.
7. VI maintains a history of past national officers and the years each member served in each office. Officers are elected annually and may be re-elected to office. [No term limits.]
8. VI keeps a record of the fund raising events that each club has with a short description of the event and the amount of money raised.
9. VI keeps a record the total annual amount of money raised by each club. The grand total for all clubs for each year is also recorded. These records are maintained for several years so that they can compare fund raising events and clubs to find trends and to determine the effectiveness of the events.
10. Fund raising events usually (but not always) have some costs. VI would like to know how much each fund-raising event cost and the names of the members who worked on it.
11. VI keeps a record of every service project that each club has with a short description of the project and the cost of the project, if any, along with the names of the members who worked on it.
12. VI gives service awards each year for outstanding volunteers. These are standard awards that are given every year. An award is given to only one person.
13. VI maintains a history of the awards given each year with the volunteer’s name and home club.

**OUTPUT QUERIES REQUIRED**

The completed system must be able to satisfy the following queries:

###### Category A

1. List all local clubs with the address and phone number in alphabetical order by club name.
2. List all members with their addresses phone numbers and date of joining in order by member last name and first name.

###### Category B

1. List all fund raising projects by date with the name, description, cost, and any revenues raised. Provide totals on cost and revenue attributes.
2. List all awards (not the members who received them) with the name and description.

Category C

1. List all current members by club with their date of joining and the number of years they have been members of their current club. Order by club and member name.
2. List all service projects that each club has undertaken with the name, description, and costs, by club and date. Provide total on cost.
3. List the service projects along with the members who participated in them. Service projects should be by date and the members by name.

**Category D**

1. List all current local officers for each club. List the clubs in alphabetical order and the names in alphabetical order along with the name of the office.
2. List all current national officers in alphabetical order with the names their home clubs.
3. List all members with the local offices they have held over their entire time of membership.

**Category E**

1. For each member, list all service projects and fund-raising projects they have participated in. The list should be by club, member name, and project in historical order. Format for ease of review by club officers and each member.
2. Show a history of all national offices with the members who held that office and their current local clubs. The list should be in order of office and then year (e.g., all past presidents by year with the member name and local club).

**INPUT QUERIES REQUIRED**

**Category F Simple One Table Input**

1. Create input forms by wizard for following tables:

CLUB, MEMBER, AWARD, and TALENT.

**Category G Input with One Additional Table Lookup**

A table lookup, or list of value (LOV), offers the user a list of choices from the related table. The user may click on the item selected and the application will store the PK from the master table in the FK field of the related table. The user never needs to know the value of the key and only sees the associated description. (You may choose to show both the key and the associated description.)

1. Enter an OFFICE record with a lookup for club.
2. Enter a PROJECT record with a lookup for club.
3. Enter a PHONE recode with a lookup for member.

**Category H Input with Two Additional Table Lookups**

1. Add a MEMBER\_AWARD record with lookups for member and award.
2. Enter an OFFICER record with lookups for member and office.
3. Enter a MEMBERSHIP record with lookups for member and club.

**Category I Input with Table Lookups on Composite Primary Key**

1. Enter a MEMBER\_PROJECT record with lookups for member and project.
2. Enter a MEMBER\_TALENT record with lookups for member and talent.

**Category J Update Records**

1. Ability to modify or delete records, in addition to adding records for above tables.**Use the following relations for this project.**

**CLUB** (CLUB\_ID, CLUB\_NAME, STREET\_ADDRESS, CITY, STATE, ZIPCODE, PHONE)

**MEMBER** (MEMBER\_ID, FIRST\_NAME, LAST\_NAME, STREET\_ADDRESS, CITY, STATE, ZIPCODE)

1. **PHONE** (PHONE\_ID, MEMBER\_ID, PHONE\_TYPE, PHONE\_NUMBER)
2. FK MEMBER\_ID 🡪 MEMBER

**MEMBERSHIP** (MEMBERSHIP\_ID, MEMBER\_ID, CLUB\_ID, JOIN\_DATE, END\_DATE, REASON)

1. FK MEMBER\_ID 🡪 MEMBER
2. FK CLUB\_ID 🡪 CLUB
3. **TALENT** (TALENT\_ID, TALENT\_NAME, DESCRIPTION)
4. **MEMBER\_TALENT** (MEMBER\_ID, TALENT\_ID)
5. FK MEMBER\_ID 🡪 MEMBER
6. FK TALENT\_ID 🡪 TALENT
7. **AWARD** (AWARD\_ID, AWARD\_NAME, DESCRIPTION)

**MEMBER\_AWARD** (MEMBER\_AWARD\_ID, MEMBER\_ID, AWARD\_ID, AWARD\_DATE)

1. FK MEMBER\_ID 🡪 MEMBER
2. FK AWARD\_ID 🡪 AWARD
3. **OFFICE** (OFFICE\_ID, CLUB\_ID, OFFICE\_NAME, DESCRIPTION)
4. FK CLUB\_ID 🡪 CLUB
5. **OFFICER** (OFFICER\_ID, OFFICE\_ID, MEMBER\_ID, YEAR)
6. FK OFFICE\_ID 🡪 OFFICE
7. FK MEMBER\_ID 🡪 MEMBER

**PROJECT** (PROJECT\_ID, CLUB\_ID, PROJECT\_NAME, DESCRIPTION, PROJECT\_DATE, COST, REVENUE)

1. FK CLUB\_ID 🡪 CLUB
2. **MEMBER\_PROJECT** (MEMBER\_ID, PROJECT\_ID)
3. FK MEMBER\_ID 🡪 MEMBER
4. FK PROJECT\_ID 🡪 PROJECT