OneVoice Network DBMS

Task 1.1

OneVoice Network is a Christian non-governmental organization with the aim of winning souls for Christ and building up the youth. They organize several Christian programs for secondary school, and university students having about 1000 plus attendees for events organized. OneVoice recruits people from these secondary schools and universities every year to be representatives(reps) in their various schools helping out in the organization of events. Some reps become members of OneVoice after the program while others do not. OneVoice also undertake certain developmental projects. Members help organize both developmental projects and events while Reps organize only events.

OneVoice is made up 14 different departments in the organization. OneVoice needs to keep record of their reps, members, sponsors and attendees of various programs organized. Managing this information manually has proved to be tedious and sometimes containing duplicate information. OneVoice currently has about 200 members with their membership rate increasing every year as different reps sign up to become members. Members meet monthly. They also pay dues to aid the running of the organization. Tracking of these dues manually has been challenging due to the increasing number of members.
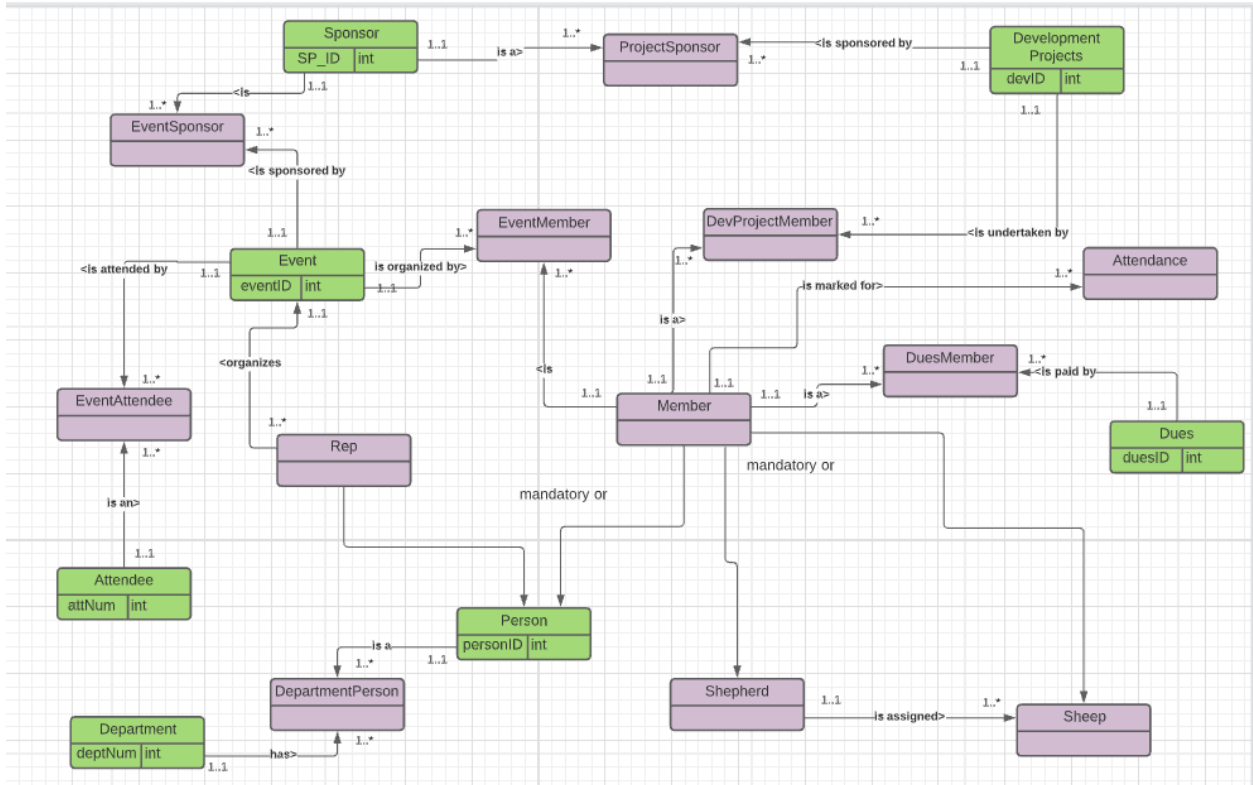
Some events organized by OneVoice are ticketed events. Unfortunately, selling of tickets for these events has been tough due to the different geographical locations of people. Due to the huge cost in organizing events and undertaking projects, certain sponsors come on board to help with their resources.

OneVoice Network, being a Christian organization seeks for its members to grow in the Christian Faith. The organization developed a Shepherding system where some people who are mature in the Faith are designated as Shepherds to help others referred to as Sheep grow in the Faith. Assigning of Shepherds has been challenging as one has to manually go through the list of all members and assign them.

OneVoice Network needs to manage all these operations efficiently. This DBMS seeks to aid the organization to do that. The DBMS will:

1. Track the payment of dues of members.

2. Track attendance of members to meetings.

3. Aid in selling of tickets.

4. Assigning Shepherds.

5. Track details of Developmental Projects.

6. Track details of Events.

7. Track details of Members.

8. Track details of reps.

Task 1.2

1. Person:(firstname, middlename, lastname, gender, DOB, contact, residential_address, nationality)

2. Members: (church, university, level, occupation, nameofFather, occupationofFather, hometown, contactofFather, nameofMother, occupationofMother, contactofMother, yearofjoining)

3. Rep: (seniorhigh, year of completion)

4. Dues: (installment, amountpaid)

5. DuesMember: (totalamount, paymentdate, modeofPayment)

6. Shepherd: (traininglevel, noofSheep)

7. Sheep: (maturitylevel,)

8. Attendance: (attStatus, month)

9. Department: (deptName, deptHead,)

10. DepartmentPerson: (noofDeparments)

11. Attendee: (firstname, lastname, gender, DOB, contact, nationality, residential_address,)

12. EventAttendee: (dateofticketpurchase, priceofticket, amountpaid, modeofpayment)

13. Eventss: (EventName, location)

14. EventSponsor: (eventbudget, paymentdate)

15. Sponsor: (spName, typeofsponsorship, amountpaid)

16. ProjectSponsor: (projectbudget, paymentdate)

17. DevelopmentProjects: (ProjectName, location)

18. DevProjectMember: (noofProjects, projectlead, projectrole)

19. EventMember: (noofEvents, projectlead, eventrole)

Enterprise Rules

Member and Event Member

1. A member is a one or more Event Member.

2. An Event Member is a Member.

Event Member and Event

1. An Event is organized by one or more EventMembers.

2. An EventMember organizes an event

Member and DevProjectMember

1. A member is a one or more DevProjectMember.

2. A DevProjectMember is a Member.

DevProjectMember and Development Projects

1. A Development Project is undertaken by one or more DevProjectMembers

2. A DevProjectMember undertakes a Development Project

Member and Attendance

1. A member is marked for one or more Attendance

2. Attendance is marked for a member

Dues and Dues Member

1. Dues is paid by one or more DuesMember

2. A DuesMember pays dues

Member and DuesMember

1. A Member is a one or more DuesMember.

2. A DuesMember is a Member.

Person and DepartmentPerson

1. A person is a one or more DepartmentPerson

2. A DepartmentPerson is a Person

DepartmentPerson and Department

1. A Department has one or more DepartmentPerson

2. A DepartmentPerson has a Department

Attendee and Event Attendee

1. An Attendee is a one or more EventAttendee.

2. An EventAttendee is an Attendee.

Event and EventAttendee

1. An Event is attended by one or more EventAttendee.

2. An EventAttendee attends an Event.

Event and EventSponsor

1. An Event is sponsored by one or more EventSponsors

2. An Eventsponsor sponsors an Event.

Rep and Event

1. A rep organizes an event.

2. An Event is organized by one or more reps.

Sponsor and EventSponsor

1. A Sponsor is a one or more EventSponsor

2. An EventSponsor is a Sponsor

Sponsor and ProjectSponsor

1. A Sponsor is a one or more ProjectSponsor

2. A ProjectSponsor is a Sponsor

DevelopmentProjects and ProjectSponsor

1. A DevelopmentProject is sponsored by one or more ProjectSponsors

2. A ProjectSponsor sponsors a DevelopmentProject.

Shepherd and Sheep

1. A Shepherd is assigned 1 or more Sheep.

2. A sheep is assigned to a Shepherd.

Specialization Generalization:

Person, Rep and Member

1. Mandatory or (A Person is a rep or member).

Member,Shepherd and Sheep

1. Mandatory or (A Member is either a Shepherd or Sheep).

Assumptions

1. A member can be in more than one department.

Task 2.1

Primary Key is denoted by bold and underlined while foreign key is italicized.

1. Person:(**personID#**, firstname, lastname, gender, DOB, contact, residential_address, nationality)

2. Department: (**deptNum**#, deptName, deptHead,)

3. Dues: (**duesID#**, installment, amountpaid)

4. Eventss: (**eventID#**, EventName, location)

5. DevelopmentProjects: (**devID#**,ProjectName, location)

6. Sponsor: (**spID#**, spName, typeofsponsorship, amountpaid)

7. Attendee: (**attNum#**, firstname, lastname, gender, DOB, contact, nationality, residential_address,)

8. Members: (*personID#*, church, university, level, occupation, nameofFather, occupationofFather, hometown, contactofFather, nameofMother, occupationofMother, contactofMother, yearofjoining)

9. Rep: (*personID#*, *eventID#,* seniorhigh, year of completion)

10. DuesMember: (*personID#*, *duesID#,* totalamount, paymentdate, modeofPayment)

11. Shepherd: (**IDshep**, *personID#*, traininglevel, noofSheep, zone)

12. Sheep: (*personID#*, *IDshep#,* maturitylevel, zone)

13. Attendance: (*personID#,* attStatus, meetingDay)

14. DepartmentPerson: (*personID#*, *deptNum#,* noofDeparments)

15. EventAttendee: (*attNum#, eventID#,* dateofticketpurchase, priceofticket, amountpaid, modeofpayment)

16. EventSponsor: (*eventID#, spID#,* eventbudget, paymentdate)

17. ProjectSponsor: (*spID#*, *devID#*, projectbudget, paymentdate)

18. DevProjectMember: (*personID#, devID#*, noofProjects, projectlead, projectrole)

19. EventMember: (*eventID#, personID#,* noofEvents, eventlead, eventrole)

Link to video

https://youtu.be/HN8CR3fJEhk