

Introduction to Student Project One-Beta University:

Read about the project described here, and also read the sample project (The Art Gallery) for this chapter. Use the sample project as a model in carrying out the steps for your project. If you can do so, interview people who are familiar with the environment described in your project. Based on your interviews, the written description, and your own analysis of the project, do the following four steps. Remember that you should not make any assumptions about the internal structure of the database at this point. Your reports, forms, and transactions should be based on the user's needs, not on what you think the eventual structure of the database might be. **Do not create a database at this point.** These steps can be done by hand or using a word processor, a spreadsheet, or a similar tool.

- **Step 1.1. (MLO 1.12, 1.13) Write out the format of every source document that provides information to be stored in the database.**
- **Step 1.2 (MLO 1.14) Write out the format of every routine report to be produced using the database. Do not make any assumptions about how records actually appear in the database, or what programming may be involved in producing the report.**
- **Step 1.3 (MLO 1.15) Describe or sketch the input and output screens for routine transactions to be performed using the database. Assume the data from the source documents is already stored in some unknown form, and do not include screens for transactions that simply insert new records, update existing records, or delete existing records.**
- **Step 1.4 (MLO 1.16) Write out an initial list of assumptions for the project.**

Project One: Beta University Annual Fund

- General Description

The Development Office of Beta University seeks to obtain donations for its Annual Fund from a variety of donors. The fund collects over ten million dollars each year. Donors include

graduating seniors, alumni, parents, faculty, administrators, staff, corporations, or other friends of the university. There are approximately 100,000 potential donors. The Annual Fund is directed by Suzanne Hayes, who is responsible for raising funds and keeping track of donations. Suzanne wishes to create a database to help with both of these major responsibilities.

- Basic Operations

Suzanne tries to raise funds in several ways during each fiscal year, which extends from July 1 to June 30. Each fall, all potential donors to the Annual Fund receive personalized letters from her, emphasizing their close ties to Beta University by specifying their affiliation, whether they are alumni (with class years), parents (with their children's years), faculty, administrators, staff, and so on. The letters contain reply envelopes and forms that are preprinted with the donor's name, address, and affiliation information. The donors can fill in the amount they are pledging to contribute that year, and the method of payment they choose. Instead, they can link to a university website where the same information can be entered. Payment can be sent as a single check in the envelope, or donors can provide their credit card numbers to pay in a single lump sum. They can also choose deferred payments over a period of a year, or they can arrange for one or more automatic payments from a bank or other financial institution. Often, the employer of the donor and/or of the donor's spouse has a program to make a matching gift to the university, and the donor provides the employer contact information. A letter acknowledging the gift and thanking the donor is sent as soon as the pledge is received. Suzanne is responsible for following up with the employer to collect the matching gift, which is paid in a single lump sum by the corporation.

Several fundraising events are held during the year. In addition to raising funds from the fees attendees pay to participate in the event, Suzanne solicits donations at a fall carnival, a holiday dinner dance, and a spring golf outing, among other events. Each class has a class

coordinator who helps by contacting members of the class. An special appeal letter from the class coordinator is sent to ask for larger donations from reunion classes, those who are marking an important anniversary of graduation – whether five years, ten years, etc. – prior to their reunion celebration weekend. Each spring there is a phonothon during which current students and other volunteers call other potential donors and solicit pledges. All alumni who have not contributed by the end of May receive telephone calls from their class coordinator asking them for a donation. If the class coordinator is unable to call his or her classmates, Suzanne or volunteers makes these calls instead.

The donations are categorized by the group they are from (alumni, parents, etc), by the year of the donor or the donor's child(if applicable) and by size. There are ten “donor circles”, that are categorized by the size of the gift – President's Circle for gifts over \$50,000, Platinum Circle for gifts over \$25,000, and so on. Gifts under \$100 are not listed as belonging to a circle. An annual report listing all donors by category, year and donor circle is published and mailed to all actual and potential donors during the summer. The report does not list the actual amount each person contributed.

- Information Needs

At present, Suzanne has a mailing list on a word processor that is used to generate labels and letters to potential donors. She would like to be able to personalize the letter further by adding a reminder of the amount of money the donor gave the previous year. A spreadsheet is used to keep track of pledges and donations. Large pledges from individual donors are ordinarily paid in monthly installments rather than in one payment, but currently there is no way to keep track of those payments. When a database is developed, Suzanne would like to be able to send reminders if payments are over a month late.

- Forms and Reports

Suzanne receives a list of graduating seniors with complete contact information each year.

She also has a list with names and contact information for parents of current and past students that is updated each year, as well as lists of faculty, administrators, and staff.

An Annual Fund Gift form is sent with all letters soliciting funds, with blanks for the donor to fill in the applicable information. The same form is available on the college website.

Beta University Annual Fund Gift

Donor Name, Donor Address, Category (a check list specifying senior, alumnus/alumna, parent, administrator, etc.), Year of Graduation, Date of Pledge/Gift, Amount Pledged, Amount Enclosed, Payment Method, Number of Payments Chosen, Credit Card Number, Matching Corporation Name, Matching Corporation Address, Name of Spouse (if matching gift is from spouse's employer), Spouse's Matching Corporation Name, Spouse's Matching Corporation Address

When pledges are received by class representatives or during the phonathon, the same information is collected on similar forms.

Reports needed include

Annual Report to Donors This report was described previously. It lists names only, not amounts. However, the names have to be categorized as indicated. The report also includes summaries, including the total amount raised from all sources, the total for each class, the percent participation for each class, the total for each category, the grand total for each donor circle, and the class total for each donor circle. It is an important fundraising tool for the following year's drive, since it is mailed to each potential donor.

Monthly Report This is an internal report that Suzanne uses to evaluate the progress of the fundraising for the year so far. It gives the totals and percentages of pledges and gifts received for the current month in all categories.

Payments Due Report Suzanne would like a report each month listing the pledge payments that were due that month but were not received. It should list the donor's name and address, the amount due, the date due, the amount of the pledge, the amount received so far, and the date of the previous payment, if any.

Event Report Suzanne would like to generate reports showing who attends each of the fundraising events, and what pledges and gifts were received from the attendees.

Class Representative Contact List For each class representative, Suzanne would like a list of classmates to be contacted, including the name, address, telephone number, last year's donation information, and this year's donation information.

Phonothon Volunteer Contact List Each volunteer caller is given a list with information about the potential donors to call, including the name, telephone number, address, category, year (if applicable), and last year's donation information.

In addition to the forms and reports listed here, there are several others that would be useful. Do steps 1.1 – 1.4 based on the information provided here and any additional applicable assumptions you need to make about the operations of the Annual Fund.

Solutions

Step 1.1. (MLO 1.12, 1.13) Write out the format of every source document that provides information to be stored in the database.

Donors Info:

Name:

Gender:

Date of Birth:

Address:

City:

State:

Affiliation to the university:

Preferred Phone:

Preferred Email:

Pledges Form:

Pledges total of:

Paid:

- At once
- Monthly
- Yearly

Payment Info:

Payment Type:

Debit/Credit:

Card Number:

Name on the Card:

MM/YY:

CVS:

Deferred or Automatic:

Event Registration:

Full Name:

Are you a donor? If yes.. Enter donor ID down here

Donor ID:

If not a donor

Email Address:

Phone Number:

Gender:

Age:

How did you hear about us? Will have a drop down with different options

Would you like to be a donor?

Matching gifts

Donor ID:

Donor Name:

Donor Employer:

Employer Contact: Name _____ Email _____ Phone: _____

Amount:

Donation receipt form

Date of Donation:

Donators Name:

Donators Address:

Donators contact: Email _____ Phone: _____

Total Amount of Donation:

· **Step 1.2 (MLO 1.14) Write out the format of every routine report to be produced using the database. Do not make any assumptions about how records actually appear in the database, or what programming may be involved in producing the report.**

Event Report:

Event Name:

Event Date:

Attendee Name	ID	Amount pledged	Amount paid	Remaining

Annual Report

Attendee Name	ID	Donor Circle	Amount donated	Year

Total Donation: _____

Monthly Report

Donor Circle	Pledged amount	Number of donors	Amount donated	Late Amount (it's late haven't been paid)

Month:

Total received:

Step 1.3 (MLO 1.15) Describe or sketch the input and output screens for routine transactions to be performed using the database. Assume the data from the source documents is already stored in some unknown form, and do not include screens for transactions that simply insert new records, update existing records, or delete existing records.

Input Donor ID

Name:

Gender:

Date of Birth:

Address: City:

State:

Pledged Amount:

Amount Paid:

Matching gift details:

Input Event Name

Total amount of attendees(Donor):

Total amount of attendees(Not Donor):

Total Donation Collected:

Total cost of the event:

Input Event Name and Donor ID

Name:

Donation Circle:

Donation Made at the event:

Step 1.4 (MLO 1.16) Write out an initial list of assumptions for the project.

- Donors can invite people for the events and the guests can donate without becoming an official donor
- Each donor has a unique id whenever they become a donor
- Assuming the school is in the U.S currency for the donation is dollar even the donor is from a different country