

Desktop Application Programming

Certain types of accounting processes require that each record in the file be processed. Desktop Application Programming focuses on these procedural style processing systems. This event tests the programmer's skill in designing a useful, efficient, and effective program in the area described below.

2012 State & National Conference Topic

The 2012 program is:

Your school has a lending library with resources to assist students with preparing for student organization competitive events and career related projects. You have been contacted to create an application that keeps track of the items in the lending library. Types of items in the library include, but are not limited to, books, magazines, DVD's, and CD's.

For this program you will create four comma separated data files as described below. You must save your data files as text (.txt) files. You will need to choose appropriate data types to store and manipulate your data while running the program.*

Data Files:

You must be able to differentiate between different types of items. To help with this, you will create a data file called TYPES that contains one record for each type of item in the lending library. This data file should contain two fields as follows:

- *Unique code for the type of item (abbreviation)*
- *Description of type*

It is necessary to keep track of all the items you have in the lending library; therefore, you will need to create a data file called LIBRARY that contains one record for each item in the lending library. This data file should contain five fields as follows:

- *Unique number for each item in the lending library (can be an auto number)*
- *Type of item (must match a code from the TYPES data file)*
- *Title of the item*
- *Author/singer/publisher (author(s) or singer(s) where available otherwise publisher in the case of magazines, movies, etc.)*
- *Published date (month/year)*

In order to determine who is borrowing items from the lending library, you will create another data file called PATRONS. The PATRONS data file will keep track of all people who can potentially borrow items from the lending library and will contain one record for each person. This data file should contain nine fields as follows:

- *Unique number for each patron (can be an auto number or a user type entry)*
- *First name, last name, e-mail address, phone number, street address, city, state, and zip code*

Desktop Application Programming continued...

Finally, you must keep track of the items that have been borrowed from the lending library. You will create a data file that tracks these items called ITEMS_OUT with a record for each item borrowed containing four fields as follows.

- *Item number (populated from the LIBRARY data file)*
- *Patron number (populated from the PATRONS data file)*
- *Date checked out*
- *Date due (two weeks after check out date)*

Reports:

Your program should run the following reports which should be viewable on a screen and in print formatted with the specifications listed for each report:

- *All lending library items sorted by title and type*
- *All items checked out sorted by date due (each date should print on a separate sheet), type, and patron (each patron should print on a separate sheet)*

Competencies

This event consists of two (2) parts: a prejudged program and a performance component. Participant(s) are required to complete both parts. The program must address the topic given. Performances should describe the program completed. Specifically, the performance should address the program creation, processes used, and results of the program.

Project participants ensure topic is developed logically and creatively, code is commented at appropriate points, interface is a logical arrangement and contains all necessary information, program runs without error, and readme file is complete.

Participants qualifying for the performance will want to focus on critical thinking and problem solving, oral presentation skills, explanation of the program, and understanding of program language.

Business Education Curriculum Standards:

Information Technology, Management

Eligibility

Each chapter may enter members who are on record in the FBLA-PBL Online Membership System as having paid dues by the officially published deadline for the current school year.

No member may have competed in this event at a previous National Leadership Conference.

Procedure

Prejudged Program

Two (2) CD/DVDs containing the executable object, source file(s) saved as .txt file(s), sample data file student used, and a readme file must be received by the state office by the published SBLC registration deadline. The CD/DVDs must be labeled using a felt-tip marker with the name of the event, name of participant and school.

Desktop Application Programming continued...

Entries will be judged according to the rating sheet.

The solution must run stand-alone with no programming errors. The judge will copy the contents of the CD/DVD to C:\NLCDesktop\. The program must be designed so that the program will run when copied to a hard drive with this path. The judge will use a file with the same name and layout as given in the problem but with different data.

Points will be deducted for any logical errors and entries will be judged according to the rating sheet.

Programs must be accompanied by a readme file noting software used; name(s) of participants, school, and state; source of information; and instructions on running the program.

Program should run on Windows 2000 or higher computer including Vista. CD/DVDs should be free of viruses/malware.

The program will constitute 70 percent of the final score.

Preliminary Performance

The top ten (10) individuals—or an equal number from each group—will be scheduled for a final presentation. The participant must provide all equipment for the presentation including a copy of the program. Projector screen, table, and power will be provided.

Five minutes (5) will be allowed to set up equipment or presentation items.

The individual has seven (7) minutes to present the case describing the program. The judges will interact with the participant during the presentation. A timekeeper will stand at six (6) minutes. When each participant is finished, the time used will be recorded.

Preliminary performances are not open to conference attendees.

Final Performance

The final guidelines are the same as the preliminary guidelines described above; and the final performance is open to conference attendees, except performing participants in the event.



Desktop Application Programming Performance Rating Sheet

Preliminary Round Final Round

Evaluation Item	Not Demonstrated	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Explanation of Project					
Description of the problem	0	1-2	3-4	5	
Description of the planning process used to design the program	0	1-3	4-7	8-10	
Description of program documentation	0	1-3	4-7	8-10	
Description of input/output and program parameters	0	1-5	6-10	11-15	
Description of how the program flows	0	1-7	8-14	15-20	
Description of program structures	0	1-5	6-10	11-15	
Description of usefulness of the program	0	1-2	3-4	5	
Delivery					
Organization of oral presentation	0	1-2	3-4	5	
Oral presentation delivery, including voice and self-confidence	0	1-2	3-4	5	
Demonstration of ability to effectively answer questions	0	1-3	4-7	8-10	
Subtotal					/100 max.
Dress Code Penalty Deduct five (5) points when dress code is not followed.					
Total Performance Points					x 30%
Program Points					x 70%
Total Points					/135 max.

Names: _____

School: _____

Judge's Name: _____

Judge's Signature: _____ Date: _____

Judge's Comments: