

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.

PROJECT COMPETENCIES

- development of topic is logical and creative
- code is commented at appropriate points
- interface is a logical arrangement and contains all necessary information
- program runs without error
- readme file is complete

PERFORMANCE COMPETENCIES

- critical thinking and problem solving
- oral presentation skills
- explanation of the program
- understanding of program language

NBEA STANDARDS REINFORCED BY EVENT

Information Technology: computer architecture; operating systems, environments, and utilities; systems analysis and design; communications and networking infrastructures; network applications
Management: technology and information management

CAREER CLUSTER(S): *Business, Management and Administration; Information Technology* ELIGIBILITY

Each local chapter may enter one (1) participant in this event. All participants must be members of the active local chapter on record in the FBLA state and national offices as paying dues by February 15.

1. Participants must be on record in the state and national offices as having paid dues by February 15.
2. Participants must be selected in accordance with the regulations of the local chapter and state association.
3. Participants failing to report on time for the event will not be permitted to compete.
4. Participants must adhere to the dress code established by the Board of Directors, or they WILL NOT be permitted to participate in the competitive event.

OVERVIEW

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.

2009 STATE BUSINESS LEADERSHIP CONFERENCE TOPIC

The 2009 program is:

You have been hired by the national office of Future Business Leaders of America - Phi Beta Lambda.

You will design a program to keep the data current allowing the addition and change of records. Each record in the master file contains the members' number, name, school, year joined, a code for active/non-active, and amount owed.

You will design a report that will produce a list of members from the master file that has the member number, member name, year joined, and amount owed. Include only the members owing a balance. The report footer should include the total number of non-active members, the total number of active members, total of members owing, and the total amount owed. Print page headings and column headings at the top of each page, allowing for 45 detail lines per page and at the end of the report, the footer information as described below.

You may design your master file, update program, and report output as you see fit.

Example:

*Future Business Leaders of America - Phi Beta Lambda
Current Account Balances*

xx/xx/xx

Page: xx

<i>MEMBER NUMBER</i>	<i>MEMBER NAME</i>	<i>SCHOOL NAME</i>	<i>YEAR JOINED</i>	<i>ACCOUNT BALANCE</i>
xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxx	999.99
xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxx	999.99
xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxx	999.99
xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxx	999.99

Total non-active members xxxxxx

Total active members xxxxxx

Total Balance 9,999.99

This is the layout of the master file that the judges will use to check your program. It will use fields of a fixed length with fields space-filled with a "dat" extension.

Master File Layout

File name: sblc2009.dat

Field lengths:

8 bytes	For Member Number
20 bytes	For Member Name
25 bytes	For School Name
4 bytes	For Year Joined
1 byte	For Active/Non-Active Code
5 bytes	For Amount Owed (3 digits before the decimal, 2 digits after)

Sample file data:

12345678	Kenneth Wardman	Westfirst High School	2007I12500
21569210	Jeff Foxworthy	Northeast High School	2008A02500
87656743	Hillary Kerry	Spring Community College	2006I02475
00098768	Everett Lovell	Yale University	2007A02200
12309876	Dawn Montana	CollyerUniversity California Ber	2008I02099
48121620	Freddie MacArther	Westfirst High School	2006A00000

PROGRAM GUIDELINES

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 for judging by March 10 along with a Statement of Assurance. The CD/DVDs must be labeled with the name of the event, state, name of participant and school.
- 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.

PERFORMANCE GUIDELINES

- Based on the highest prejudged project scores a maximum of fifteen (15) individuals will be selected to make an oral presentation at the SBLC.
- The participant must provide all equipment for the presentation including a copy of the program. 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.
- Performances are open to conference attendees, except performing participants of this event.

JUDGING

Projects and performances will be evaluated by a panel of judges. All decisions by the judges are final.

STATE AWARDS

The number of awards presented at the State Business Leadership Conference is determined by judges and/or number of entries. The maximum number will be five (5).

NATIONAL ENTRIES

Washington State may enter two (2) state winners for national competition.



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Performance Rating Sheet

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 the 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					/150 max.
Dress Code Penalty Deduct five (5) points when dress code is not followed.					
Total Performance Points					_____ x 30% =
Program Points					_____ x 70% =
Final Score					/135 max.

Student Name(s):			
School:		State:	
Judge's Signature:		Date:	

Judge's Comments:

VERIFICATION
(scores checked)
 Administrator



DESKTOP APPLICATION PROGRAMMING

Production Rating Sheet

Evaluation Item	Not Demonstrated	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Program Readability and Style					
Appropriate names of variables used	0	1-2	3-4	5	
Commentary provided line-by-line and/or section is readable, useful, and complete	0	1-5	6-10	11-15	
General program documentation readable, useful, and complete	0	1-7	8-14	15-20	
Input/output and program parameters properly documented	0	1-2	3-4	5	
Readme file contains name, state, school, instructions, and algorithm	0	1-2	3-4	5	
Program Structure and Content					
Program is concise, does not contain unnecessary complexity	0	1-2	3-4	5	
Appropriate data types used	0	1-2	3-4	5	
Algorithms reliable and straightforward Unusual approaches should be well documented	0	1-5	6-10	11-15	
Algorithms did not impose any special limitations not described in the program instructions	0	1-3	4-7	8-10	
Results					
Program was error free	0	1-3	4-7	8-10	
The program handled user and/or data input errors well	0	1-5	6-10	11-15	
Program functioned as required and meets requirements	0	1-7	8-14	15-20	
Resulting outputs, screens, and messages were useful	0	1-7	8-14	15-20	
Subtotal					/150 max.
Penalty Points Deduct five (5) points for not adhering to Guidelines.					
<input type="checkbox"/> 2 copies of media not received <input type="checkbox"/> Statement of Assurance not received <input type="checkbox"/> media labeled incorrectly					
Total Points					/150 max.

Student Name(s):			
School:		State:	
Judge's Signature:		Date:	

Judge's Comments:

VERIFICATION
(scores checked)
 Administrator