

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.

Competencies

The program must show the development of the topic is logical and creative. The event should assist FBLA members with ensuring that programs run without errors, readme files are complete, interface is logically arranged and contains all necessary information, and that the code is commented at appropriate points. Specifically, the performance should demonstrate critical thinking and problem solving, oral presentation skills, and show an understanding of program languages through an explanation of the program.

Career Cluster(s):

Business, Management, and Administration; Information Technology

Business Education Curriculum Standard(s):

Information Technology, Management

State Eligibility

Each local chapter may enter two (2) programs. Only one member may create the program. The local chapter must be on record in the Pennsylvania state and the FBLA-PBL national offices as having paid dues by January 31 of the current school year. **Members participating in this event may not compete in another competitive event at a Region Leadership Conference.**

This event consists of two (2) parts: a prejudged program and a performance component. Participant(s) are required to complete both parts. The top 10 rated reports from among those submitted will be required to give an oral presentation at the SLC.

At the State Leadership Conference, the chapter adviser must confirm students' participation in the event. Participants who are not confirmed will be disqualified.

State Regulations

Prejudged Program

1. The program must address the topic given.
2. Four (4) 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 deadline on the PA FBLA DATES TO REMEMBER page. Students are reminded to double check all of the CD/DVDs to make sure that each CD/DVD runs; therefore, make sure that the CD/DVD copied correctly. CD/DVDs that do not run will not be evaluated.
3. The CD/DVD must be labeled with the name of the event, state, name of participant, and school.
4. A Statement of Assurance must be included.
5. Entries will be judged according to the rating sheet.
6. The solution must run stand-alone with no programming errors. The judge will copy the contents of the CD/DVD to C:\PAFBLASLCDesktop\. 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.
7. Points will be deducted for any logical errors and entries will be judged according to the rating sheet.

8. Programs must be accompanied by a readme file noting software used; name(s) of participants, school, and the state; source of information; and instructions on running the program.
9. Program should run on Windows 2000 or higher computer including Vista.
10. CD/DVDs should be free of viruses/malware.
11. The program will constitute 70 percent of the final score.

State Procedure

Preconference Requirements

1. The participant(s) must submit the following items:
 - a. An event entry form, which is posted on the PA FBLA web site, certified by the local chapter adviser.
 - b. Four (4) copies of the prejudged program.
2. **The materials must be received by the PA FBLA Executive Director/State Chairman by the deadline date published on the PA FBLA DATES TO REMEMBER document, which is posted on the PA FBLA web site. Failure to submit these documents by the received by date will result in the participants being disqualified.**

Conference Requirements

Oral Presentation

1. Performances should describe the program completely. Specifically, the performance should address the program creation, processes used, and results of the program.
2. The top ten (10) individuals will be scheduled for a final presentation at the SLC.
3. Advisers may not participate during the actual delivery of the presentation, including assisting with setup, operation of audiovisual equipment, etc.
4. Five (5) minutes will be allowed to set up equipment or presentation items and seven (7) minutes to present the case describing the program. The judges will interact with the participant during the presentation.
5. The participant must provide all equipment for the presentation including a copy of the program. Projector screen, table, and power will be provided.
6. A timekeeper will stand at the end of six (6) minutes. When the presentation is finished, the timekeeper will record the time used, noting a deduction of five (5) points for any time over seven (7) minutes.
7. Performances are open to conference members.
8. The presentation will constitute 30 percent of the final score.
9. **The participants must comply with the PA FBLA Dress Code printed on pages 75-76 of these guidelines. If the participants do not comply, the participants will not be admitted to the performance area until he or she is in compliance.**

State Judging

Reports will be screened to determine if chapters have complied with event eligibility and regulations. A panel of judges will then select the winners, and all decisions of the judges are final.

If there is a tie after the pre-judged program portion and the oral presentation portion of the event, ties will be broken based on the following:

First Tiebreaker

- Total points of the *Pre-judged Program rating sheet*.

Second Tiebreaker

- Total points of the *Program Structure and Content* section on the rating sheet.

Third Tiebreaker

- Total points of the *Results* section on the rating sheet.

Tiebreaker implementation examples are found starting on pages 341-343 of this handbook.

State Awards

The state will present a maximum of ten (10) awards at the State Leadership Conference.

National Conference Eligibility

The first- and second-place award winning projects at the State Leadership Conference are eligible for entry at the National Leadership Conference. All NLC qualifiers will be expected to present a seven-minute (7) oral presentation of the project at the NLC. Advisers and participants should refer to the latest edition of the National Chapter Management Handbook for official National Leadership Conference event guidelines.

In the event that the local chapter of the first- or second-place winning project cannot attend the National Leadership Conference or does not wish to have its project submitted for competition at the National Leadership Conference, it is the responsibility of the:

local chapter adviser

- to contact the PA FBLA Executive Director/State Chairman about not participating at the National Leadership Conference.

PA FBLA Executive Director/State Chairman

- to contact the next eligible award winner about participating at the National Leadership Conference.

Desktop Application Programming Program Rating Sheet

Evaluation Item	Not Demonstrated	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Program Readability and Style					
Appropriate names of variable, method, and class names 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 documents	0	1 – 2	3 – 4	5	
Readme file	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 that 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 each for not adhering to Guidelines (maximum of twenty [15] points): <input type="checkbox"/> media labeled incorrectly <input type="checkbox"/> Statement of Assurance not received <input type="checkbox"/> 4 copies of program not received					
Total Points				/150 max.	

School: _____ Region _____

Judge's Signature: _____ Date: _____

Judge's Comments:

VERIFICATION & INITIALS
(scores checked for accuracy)

Co-Competitive Events Coordinator _____

Desktop Application Programming Oral Presentation 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 the oral presentation	0	1 – 5	6 – 10	11 – 15	
Oral presentation delivery, including voice, and self-confidence	0	1 – 3	4 – 7	8 – 10	
Demonstration of ability to effectively answer questions	0	1 – 3	4 – 7	8 – 10	
Subtotal				/100 max.	
Time Penalty: Deduct five (5) points for presentations over seven (7) minutes Time: _____					
Dress Code Penalty: Deduct up to five (5) points at the judge's discretion					
Oral Presentation Score Calculation 30% x _____ oral presentation score = _____					
Program Score Calculation 70% x _____ pre-judged program score = _____					
Final Score (add Oral Presentation Score and Program Score Calculations)				/135 max.	

Names: _____

School: _____ Region _____

Judge's Signature: _____ Date: _____

Judge's Comments:

VERIFICATION & INITIALS
(scores checked for accuracy)

 Chief Administrator _____

 Official Checker _____