# 🏃 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.*

## Eligibility

Each state chapter may enter three (3) participants who are from active local chapters, on record in the national center as having paid dues by March 1 of the current school year.

## Overview

This event consists of two (2) parts: a prejudged program and a performance component. Participant(s) are required to complete both parts to be eligible to win an award. 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.

All entries will participate in the preliminary performance to explain the project development and implementation

## 2014 National Topic

*You have been contracted to develop the conference registration program for the 2014 FBLA National Fall Leadership Conferences—Washington, DC, November 7-8; Minneapolis, MN, November 14-15; and New Orleans, LA, November 21-22. Your program will allow chapters to register members, advisers, and guests for one of the three NFLCs. It also will allow each registered participant to preregister for the workshops they will attend during the conference.*

*You may use any programming language you desire to develop your program, but your program must read from and write to comma separated text files (\*.txt). Your program must have a graphical user interface (not run from a command prompt) and must contain sample data. You must submit your code as text files (i.e., paste your code into a Notepad document and save as a \*.txt file – place all text files of code in a folder called TEXTCODE). You also must supply all necessary supplemental programs/updates/add-ons necessary to run your program (full installs – not links to downloads). The program must run from a*

*stand-alone executable file and should not require installation (i.e., your executable should not install the application on a computer—just run the program).*

### DATA FILES

*For this program you will create five 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.*

*Participants can register for any of the three NFLC conferences. You will create a data file called CONFERENCES that contains one record for each of the three conferences. This data file should contain four fields as follows:*

- *unique code for the conference (abbreviation)*
- *location of conference*
- *begin date of conference*
- *end date of conference*

*There are three different types of conference participants: members, advisers, and guests. You will create a data file called TYPE that contains one record for each of the three participant types. This data file should contain two fields as follows:*

- *unique code for the participant type (single letter)*
- *description of participant type*

*It is necessary to keep track of all the conference participants; therefore, you will need to create a data file called PARTICIPANTS that contains one record for each registered participant. This data file should contain six fields as follows:*

- *unique number for each participant (can be an auto number)*
- *conference code (must match a code from the CONFERENCES data file)*
- *participant type (must match a code from the TYPES data file)*
- *participant first name*
- *participant last name*
- *chapter number*

*In order to allow participants to preregister for workshops, you must keep track of the workshops for each conference. You will create another data file called WORKSHOPS that will contain data on every workshop offering at all three NFLCs and will contain one record for each workshop time. This data file should contain six fields as follows:*

- *unique number for each workshop (can be an auto number)*
- *conference code (must match a code from the CONFERENCES data file)*
- *workshop name*
- *workshop description*
- *workshop date*
- *workshop start time*

*Desktop Application Programming guidelines continued*

*Finally, you must keep track of the workshop registrations. You will create a data file that tracks these registrations called WKSHP_REGISTRATIONS with a record for each workshop registration containing two fields as follows:*

• *workshop ID (populated from the WORKSHOPS data file)*

• *participant ID (populated from the PARTICIPANTS data file)*

## Reports

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

• All conference participants filtered by conference (i.e., select conference and only see associated records) sorted by each of the following:

  • participant type, last name

  • chapter number, participant type, last name (i.e., generate a chapter registration confirmation – each chapter should begin on a new page)

• Participant list for each workshop sorted by last name (each workshop should begin on a new page)

• Participant schedule showing all preregistered workshops, opening and closing sessions, and other major conference events (suggested formats include grid/matrix or agenda – each participant should begin on a new page)

Ideally, this topic will also be used for competition at the state level. Chapters should check with their state chair/state adviser to confirm the topic to be used for their state competition.

## Program Guidelines
### ❏ Prejudged Program
• The participant may choose any programming language.
• Two (2) DVDs or USB flash drives containing the executable object, data, program documentation (including but not limited to, execution instructions, system requirements, and text files for all program code--see http://en.wikipedia.org/wiki/Software_documentation) and support files needed to run the executable file to be received by the national center for judging

by the second Friday in May along with a Statement of Assurance. The solution must run standalone with no programming errors. Label the media with the school, participant name, state, and event.

• Program must run on Windows XP or higher.
• Data must be free of viruses/malware. Any entry with contaminated data will not be judged.
• Program produced for this event must be prepared by the participant without help.

## Performance Guidelines
### ❏ Preliminary Performance
• A maximum of fifteen (15) finalists—or an equal number from each group—will advance to the final round. The prejudged program score will be used to break a tie.
• Five (5) minutes will be allowed to set up and remove equipment or presentation items.
• The individual/team members must perform all aspects of the presentation (e.g., set up, speaking, operating audiovisual equipment). Other chapter representatives may not provide assistance.
• The following will be provided: screen, power, table, and projector. Participants that will be utilizing Apple products or other devices that do not have a VGA port will need to provide their own adapters.
• The individual will have seven (7) minutes to describe the program.
• At the end of six (6) minutes, a timekeeper will stand until noticed and hold up a colored time card indicating one minute is left. At seven (7) minutes the timekeeper will stand and hold up a colored time card indicating time is up. 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.
• Following each presentation, judges will conduct a three (3) minute question-answer period.
• Visual aids and samples related to the project may be used; however, no items may be left with the judges or audience.
• Preliminary performances are not open to conference attendees.

### ❏ Final Performance
The final guidelines are the same as the preliminary guidelines described above. The final performance is open to conference attendees who are not participants in the final round in the event.

## 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

*Desktop Application Programming guidelines continued*

- ❑ understanding of the programming logic and coding is evident
- ❑ design process effectively communicated
- ❑ tips, techniques, and tools used are presented including identifying the most difficult programming task(s) completed and explanation of the scenario/logic used to overcome and implement these tasks
- ❑ professional presentation
- ❑ self-confidence apparent through knowledge of content and articulation of ideas
- ❑ answer questions effectively

**NBEA Standards Reinforced by Event**
- Information Technology: computer architecture; operating systems, environments, and utilities; systems analysis and desivgn; communications and networking infrastructures; network applications
- Management: technology and information management

**Career Clusters**: Business Management and Administration; Information Technology

**REFERENCE: Desktop Application Programming—Production RATING SHEET-17.**
**REFERENCE: Desktop Application Programming—Performance RATING SHEET-18.**

# FBLA 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 identifiers used for variables, constants, arrays, objects, etc. | 0 | 1–3 | 4–7 | 8–10 | |
| Commentary provided line-by-line and/or section is readable, useful, and complete | 0 | 1–7 | 8–14 | 15–20 | |
| General program documentation is readable, useful, and complete (i.e. execution instructions, system requirements, etc.) | 0 | 1–7 | 8–14 | 15–20 | |
| **Program Structure and Content** | | | | | |
| Program is concise, does not contain unnecessary complexity or repetitive blocks of code (uses functions and sub routines as necessary) | 0 | 1–7 | 8–14 | 15–20 | |
| Appropriate data types are used for data storage to avoid drain on system resources | 0 | 1–7 | 8–14 | 15–20 | |
| Program follows a logical sequence to accomplish required tasks (unusual approaches are well documented) | 0 | 1–3 | 4–7 | 8–10 | |
| **Results** | | | | | |
| Program produces desired results (free of logic errors) | 0 | 1–7 | 8–14 | 15–20 | |
| Program handles user and/or data input errors well (coded to avoid run-time errors) | 0 | 1–7 | 8–14 | 15–20 | |
| Resulting output/feedback (onscreen and/or printed reports, alert/error messages, etc.) were useful | 0 | 1–10 | 11–20 | 21–30 | |
| **Usability** | | | | | |
| Program provides instructions or a help menu for user assistance | 0 | 1–3 | 4–7 | 8–10 | |
| User is able to navigate the program intuitively using a logical sequence (appropriate tab order for user input, asks for input in a logical sequence, etc.) | 0 | 1–3 | 4–7 | 8–10 | |
| Program interface, feedback, reports, etc. are free of spelling, punctuation, and grammatical errors | 0 | 1–2 | 3–4 | 5 | |
| Program aesthetics maintain user interest | 0 | 1–2 | 3–4 | 5 | |
| **Subtotal** | | | | | **/200 max.** |

**Penalty Points:** Deduct five (5) points for not adhering to Guidelines (maximum of fifteen [15] points).
□ 2 copies of media not received   □ Statement of Assurance not received   □ media labeled incorrectly

| **Total Points** | **/200 max.** |
|---|---|

Name(s): _____

School: _____     State: _____

Judge's Signature: _____     Date: _____

Judge's Comments:

# FBLA DESKTOP APPLICATION PROGRAMMING
**Performance Rating Sheet**
❑ Preliminary Round    ❑ Final Round

| Evaluation Item | Not Demonstrated | Does Not Meet Expectations | Meets Expectations | Exceeds Expectations | Points Earned |
|---|---|---|---|---|---|
| **Content** | | | | | |
| 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** | | | | | |
| Statements are well-organized and clearly stated; appropriate business language used | 0 | 1–2 | 3–4 | 5 | |
| Demonstrates self-confidence, poise, and good voice projection | 0 | 1–2 | 3–4 | 5 | |
| Demonstrates the ability to effectively answer questions | 0 | 1–3 | 4–7 | 8–10 | |
| **Subtotal** | | | | | **/100 max.** |

| | |
|---|---|
| **Time Penalty** Deduct five (5) points for presentation over seven (7) minutes. Time: | |
| **Penalty** Deduct five (5) points for failure to follow guidelines. | |
| **Dress Code Penalty** Deduct five (5) points when dress code is not followed. | |
| **Total Points** | **/100 max.** |
| **Prejudged Score** | **/200 max.** |
| **Final Score** (add total score and prejudged score) | **/300 max.** |

Name:

School:                                    State:

Judge's Signature:                         Date:

Judge's Comments: