

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

- explanation of the program is logical and systematic
- 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
- effectively answer questions

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.

1. 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.
2. Participants failing to submit materials for receipt in the State Office by March 5 will be disqualified.
3. Participants must be selected in accordance with the regulations of the local chapter and state association.
4. Participants must not have won first place at a State Business Leadership Conference nor entered this event at a prior National Leadership Conference.
5. Participants failing to report on time for the event will not be permitted to compete.
6. 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 to be eligible. 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.

2012 STATE BUSINESS LEADERSHIP 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, DVDs, and CDs.

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 name type entry)
- First name, last name, email address, phone number, street address, city, state, and zip code

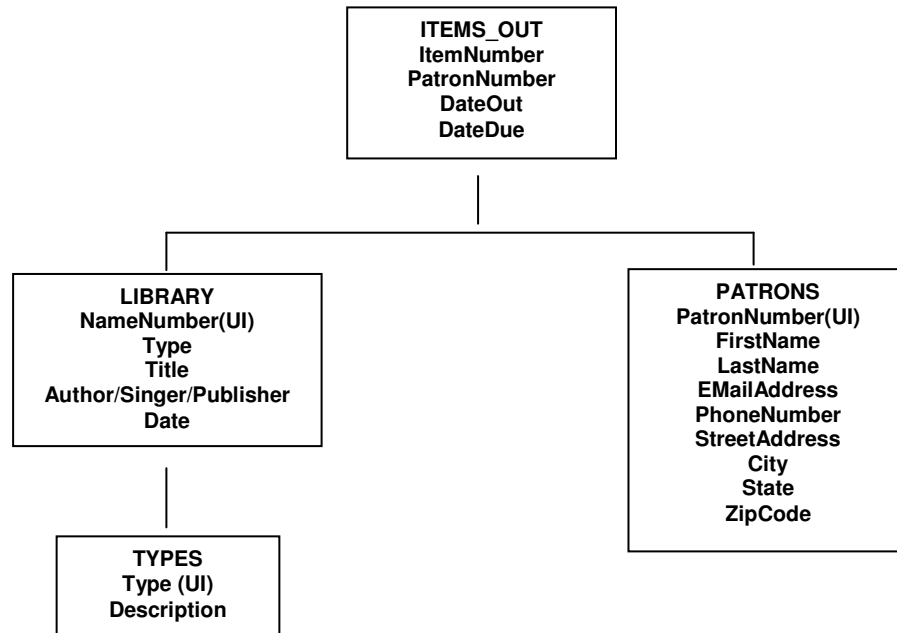
Finally, you must keep track of the items that have been borrowed from the lending library. You will create a data file that tracks these items called ITEMS_OUT with a record for each item borrowed containing four fields as follows:

- 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 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)



This topic will also be used for competitions at the national level.

PROGRAM GUIDELINES

Prejudged Program

- 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 must be received in the state office for judging by March 5 along with a Statement of Assurance. The solution must run standalone with no programming errors. The judge will copy the contents of the CD/DVD/USB to C:\NLCDesktop\l. The program must be designed so that the program will run when copied to a hard drive with this path. Label the media with the school, participant name, state, and event.
- The participant may choose any programming language.
- 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.
- The program will constitute 70 percent of the final score.

Performance

- 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 Program score will be used to break a tie.
- 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 and remove equipment or presentation items.
- The individual will have seven (7) minutes to describe the program.
- A timekeeper will stand at six (6) minutes and again at seven (7) minutes. When the presentation is finished, the timekeeper will announce the time used. Judges will note 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.
- Performances are open to conference attendees who are not participants of this event.

JUDGING

Programs will be reviewed by a panel of judges to determine if chapters have complied with event eligibility and regulations. The judges will then select the winners. A panel of judges will evaluate the oral presentations. Final rank is determined by totaling the written program scores and the oral presentation scores. The program score will be used to break a tie. All decisions of 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
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					
Thoughts and 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:					
Dress Code Penalty Deduct five (5) points when dress code is not followed.					
Penalty Deduct five (5) points for failure to follow guidelines.					
Total Points					/100 max.
Prejudged Score					/200 max.
Final Score (add total score and prejudged score)					/300 max.

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

Judge's Comments:

VERIFICATION
(scores checked)
 Administrator



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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 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	1-10	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	8-14	15-20	
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).					
<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					/200 max.
Student Name(s):					
School:					
Judge's Signature:				Date:	

Judge's Comments:

VERIFICATION
(scores checked)
 Administrator