Introduction to Programming



Introduction to Programming provides members with the opportunity to code a program based on a specific topic. This competitive event consists of a presentation component where the program is demonstrated for the judges.

Event Overview

Division: High School (9th and 10th grades only) **Event Type:** Event Type: Team of 1, 2 or 3 members

Event Category: Presentation

Event Elements: Presentation with a Topic

Presentation Time: 3-minute set-up, 7-minute presentation time, 3-minute question & answer time **NACE Connections:** Career & Self-Development, Communication, Critical Thinking, Leadership,

Professionalism, Teamwork, Technology

Equipment Provided by Competitors: Technology and presentation items for preliminary and final round presentation

Equipment Provided by FBLA: Internet access and table for preliminary round presentation; Internet access, table, power, projector & screen for final round presentation

2023-2024 Topic

Create a program that allows students at your school to calculate their grade point average. Use your school's grading scale to calculate both weighted and unweighted grade point averages.

District/Region/Section

Check with your District/Region/Section leadership for District/Region/Section-specific competition information.

State

Check with your State Leader for state-specific competition information.

National

Policy and Procedures Manual

• Competitors should be familiar with the Competitive Events Policy & Procedures Manual, found on the Competitive Events page on www.fbla.org.

Eligibility

- FBLA membership dues are paid by 11:59 pm Eastern Time on March 1 of the current school year.
- Members may compete in an event at NLC more than once if they have not previously placed in the top ten of that event at NLC. If a member places in the top ten of an event at NLC, they are no longer eligible to compete in that event.
- Members must be registered for the NLC and pay the national conference registration fee in order to participate in competitive events.
- Members must stay in an official FBLA hotel in order to compete.



Introduction to Programming

- Each state may submit four entries.
- Each competitor can only compete in one individual/team event and one chapter event (American Enterprise Project, Community Service Project, Local Chapter Annual Business Report, Partnership with Business Project).
- Only competitors are allowed to plan, research, prepare, and set up their presentations.
- Each competitor must compete in all parts of an event for award eligibility.
- All members of a team must consist of individuals from the same chapter.
- Picture identification (driver's license, passport, state-issued identification, or school-issued identification) is required when checking in for competitive events.
- If competitors are late for a presentation time, they will be allowed to compete until such time that results are finalized, or the accommodation would impact the fairness and integrity of the event. Competitive events start in the morning before the Opening Session of NLC.

Recognition

• The number of competitors will determine the number of winners. The maximum number of winners for each competitive event is 10.

Event Administration

- This event has two parts: preliminary presentation and final presentation
- Preliminary Presentation Information
 - Equipment Set-up Time: 3 minutes
 - o **Presentation Time:** 7 minutes (one-minute warning)
 - Question & Answer Time: 3 minutes
 - Internet Access: Provided (Internet access may not be Wi-Fi, so competitors should plan appropriately when selecting devices on which to present. Please note that internet reliability at any conference venue cannot be guaranteed. Always have a backup plan in case internet connections go down.)
 - o Competitors/teams are randomly assigned to sections.
 - The presentation is judged at the NLC. Preliminary presentations are not open to conference attendees. The presentation will take place in a large, open area, with a booth size of approximately 12' x 12'.
 - Competitors present directly from a laptop/device. Screens and projectors are not allowed for use, and competitors are not allowed to bring their own. Power will not be available.
 - Competitors can present with and bring any of the following technology into the
 presentation as long as it fits on the small table in front of the judges' table or is held by
 the competitors:
 - Laptop
 - Tablet
 - Mobile phone
 - External monitor that is approximately the size of a laptop monitor
 - Visual aids and samples related to the project may be used during the presentation;
 however, no items may be left with the judges or audience.



Introduction to Programming

- When the equipment set-up time has elapsed, the timer will automatically start the presentation time.
- If performing as a team, all team members are expected to actively participate in the presentation.
- No animals (except authorized service animals) will be allowed for use in any competitive event.
- Presentation should cover the following aspects of the program:
 - The development, usability and functionality of the program must be demonstrated and explained to the judges.
 - Solution must run standalone with no programming errors.
 - Data must be free of viruses/malware.
 - Competitors must show the judges any of the following that are applicable: readme file, source code, documentation of templates/libraries used, documentation of copyrighted material used.
 - The presentation should follow the rating sheet and include the following:
 - Code Quality: What are the specifics of and the big picture of the code?
 - User Experience: What focus is on the ease-of-use and accessibility of the interface?
 - Functionality: Speak to all aspects of the topic
- Final Presentation Information
 - Equipment Set-up Time: 3 minutes
 - Presentation Time: 7 minutes (one-minute warning)
 - Question & Answer Time: 3 minutes
 - Internet Access: Provided (Internet access may not be Wi-Fi, so competitors should plan appropriately when selecting devices on which to present. Please note that internet reliability at any conference venue cannot be guaranteed. Always have a backup plan in case internet connections go down.)
 - An equal number of competitors/teams from each section in the preliminary round will advance to the final round. When there are more than five sections of preliminary presentations for an event, two competitors/teams from each section will advance to the final round.
 - Final presentations may be open to conference attendees, space permitting. Finalists may not view other competitors' presentation in their event.
 - Competitors can present with and bring any of the following technology into the
 presentation as long as it fits on the small table in front of the judges' table or is held by
 the competitors:
 - Laptop
 - Tablet
 - Mobile phone
 - External monitor that is approximately the size of a laptop monitor
 - The following will be provided for the final round if it occurs in a conference room: screen, power, table, and projector. Competitors using laptops or other devices that do not have an HDMI port will need to provide their own adapters. It is up to final-round competitors to determine if they wish to use the technology provided.



Introduction to Programming

- Visual aids and samples related to the project may be used during the presentation;
 however, no items may be left with the judges or audience.
- When the equipment set-up time has elapsed, the timer will automatically start the presentation time.
- o If performing as a team, all team members are expected to actively participate in the presentation.
- No animals (except authorized service animals) will be allowed for use in any competitive event.
- Presentation should cover the following aspects of the program:
 - The development, usability and functionality of the program must be demonstrated and explained to the judges.
 - Solution must run standalone with no programming errors.
 - Data must be free of viruses/malware.
 - Competitors must show the judges any of the following that are applicable: readme file, source code, documentation of templates/libraries used, documentation of copyrighted material used.
 - The presentation should follow the rating sheet and include the following:
 - Code Quality: What are the specifics of and the big picture of the code?
 - User Experience: What focus is on the ease-of-use and accessibility of the interface?
 - Functionality: Speak to all aspects of the topic

Scoring

- The preliminary presentation score will determine the finalists.
- The final presentation score will determine the winners.
- Judges must break ties. All judges' decisions are final.

Americans with Disabilities Act (ADA)

 FBLA meets the criteria specified in the Americans with Disabilities Act for all competitors with accommodations submitted through the conference registration system by the registration deadline.

Recording of Presentations

- No unauthorized audio or video recording devices will be allowed in any competitive event.
- Competitors in the events should be aware FBLA reserves the right to record any presentation for use in study or training materials.

Penalty Points

- Competitors may be disqualified if they violate the Competitive Event Guidelines or the Honor Code.
- Five points are deducted if competitors do not follow the Dress Code or are late for their assigned presentation time.



Introduction to Programming

ntroduction to Programming Presentation Rating Sheet								
Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned			
Code Quality								
Appropriate use of comments, naming conventions, and proper formatting	No commentary provided	Commentary provided but is not logical	Commentary provided assists the user throughout the demonstration	Commentary provided is logical, useful, and complete				
	0 points	1-6 points	7-8 points	9-10 points				
Appropriate use of classes, modules, and/or components	Identifiers not used	Identifiers are used for programming elements but are incorrectly placed	Identifiers are used and are accurate in all instances	Identifiers exhibit an advanced knowledge of programming				
	0 points	1-6 points	7-8 points	9-10 points				
User Experience								
User interface is intuitive or clear instructions are provided	No instructions provided and is not intuitive	Instructions provided or program is not intuitive	Appropriate & clear instructions are provided	Program is intuitive and clear instructions are provided				
	0 points	1-6 points	7-8 points	9-10 points				
Users can easily navigate between pages	No help menu or navigation system incorporated	Includes basic help menu and usable navigation	Interface contains no spelling errors, has interactive help menu, and has no navigation errors	Program use also includes an intelligent feature such as an interactive Q&A				
	0 points	1-6 points	7-8 points	9-10 points				
User input is validated	User input isn't validated	User input is somewhat validated	User input is validated	Input validation applied on both syntactical and semantic levels				
	0 points	1-2 points	3-4 points	5 points				
Functionality								
Program addresses all parts of the prompt	Program does not address the topic/problem	Program addresses the topic/problem at a minimal level	Program fully addresses the topic/problem	Program fully addresses the topic/problem, and the correlation is explained in the instructions				
	0 points	1-8 points	9-12 points	13-15 points				
Program generates a presentable report	Output reports are not accurate or not available	Output reports are not sufficient to analyze data	Output reports are error free and provide all necessary information to analyze data	Output reports allow user to customize and analyze information				
	0 points	1-2 points	3-4 points	5 points				
Data storage is persistent	Where data is stored is unclear	Where data is stored may not be secure	Data storage is clear, and storage is secure	Data storage includes dynamic backup feature				
	0 points	1-2 points	3-4 points	5 points				



Introduction to Programming

Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Presentation Delivery					
Statements are well-organized and clearly stated	Competitor(s) did not appear prepared	Competitor(s) were prepared, but flow was not logical	Presentation flowed in logical sequence	Presentation flowed in a logical sequence; statements were well organized	
	0 points	1-6 points	7-8 points	9-10 points	
Demonstrates self-confidence, poise, assertiveness, and good voice projection	Competitor(s) did not demonstrate self- confidence	Competitor(s) demonstrated self- confidence and poise	Competitor(s) demonstrated self- confidence, poise, and good voice projection	Competitor(s) demonstrated self- confidence, poise, good voice projection, and assertiveness	
	0 points	1-6 points	7-8 points	9-10 points	
Demonstrates the ability to effectively answer questions	Unable to answer questions	Does not completely answer questions	Completely answers questions	Interacted with the judges in the process of completely answering questions	
	0 points	1-6 points	7-8 points	9-10 points	
	Staff Only: P	enalty Points (5 points for o	dress code penalty and/or 5	points for late arrival penalty)	
			Pr	esentation Total (100 points)	
Name(s):					
School:					
Judge Signature:					Date:

Comments: