

### **Introduction to Programming**

Introduction to Programming allows members to design and develop a basic computer program based on a given topic. Members demonstrate their coding skills, logic, and creativity by presenting the completed program to a panel of judges.

#### **Event Overview**

Division	High School (9 <sup>th</sup> & 10 <sup>th</sup> grade only)	
Event Type	Team of 1, 2, or 3 members	
<b>Event Category</b>	Presentation	
Event Elements	Presentation with a Topic	

#### **Educational Alignments**

Career Cluster Framework Connection	Digital Technology
NACE Competency Alignment	Career & Self-Development, Communication,
	Critical Thinking, Leadership, Professionalism,
	Technology

#### 2025-2026 Topic

#### **Build a Virtual Pet**

Use your programming skills to create a digital pet that users can name, feed, and care for over time. Your pet should respond to how well it is treated, showing emotions, changing appearance or behavior, and developing based on the user's actions.

To expand your program, include a "cost of care" system to teach users about the financial responsibility of pet ownership. Track things like:

- Food and supply costs
- Vet visits or health care
- Toy or activity purchases
- Budget limits or in-game currency

#### Your program should include:

- Customization (user names the pet, chooses type, etc.)
- Pet care features (feed, play, rest, clean, health check)
- Reactions based on care level (happy, sick, sad, energetic)
- A running total of care-related expenses
- Optional: savings goals or earning systems (e.g., chores or tasks to earn pet care funds)

Encourage creativity in how the pet grows or changes over time: Could it evolve, learn tricks, or earn badges? Use any programming language or environment that demonstrates your understanding of basic logic, variables, conditionals, and functions.



This topic was created in partnership with code.org. Learn more about code.org, resources available, and expanding computer science in your school or district at this link.



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#### District/Region/Section

Check your District's Call to Conference for any district-specific information about presentation events.

#### State

See below for list of required competition items; Colorado FBLA requires the same items set by National FBLA at our State Leadership Conference. Colorado FBLA will also provide the items listed below, excepting power, a projector, or a screen in the finals round. Presentation events will have a 1-minute set-up time. Most presentations will happen in a large ballroom, and all competitors will present to the judges in a preliminary round.

#### **National**

#### **Required Competition Items**

	Items Competitor Must Provide	Items FBLA Provides		
Preliminary	<ul> <li>Conference-provided nametag</li> </ul>	• Table		
Presentation	<ul> <li><u>Photo identification</u></li> </ul>	<ul> <li>Internet Access</li> </ul>		
	Attire that meets the <u>FBLA Dress Code</u>			
	<ul> <li>Technology and presentation items</li> </ul>			
<b>Final Presentation</b>	Conference-provided nametag	• Table		
	<ul> <li><u>Photo identification</u></li> </ul>	<ul><li>Power</li></ul>		
	Attire that meets the FBLA Dress Code	Projector with HDMI cord		
	<ul> <li>Technology and presentation items,</li> </ul>	<ul> <li>Projector screen</li> </ul>		
	including any adapter or cord needed	<ul> <li>Internet Access</li> </ul>		
	beyond an HDMI connection			

#### **Important FBLA Documents**

• Competitors should be familiar with the Competitive Events <u>Policy & Procedures Manual</u>, <u>Honor Code</u>, <u>Code of Conduct</u>, and <u>Dress Code</u>.

#### **Eligibility Requirements**

To participate in FBLA competitive events at the National Leadership Conference (NLC), the following criteria must be met:

- **Membership Deadline**: FBLA national membership dues must be paid to the specific division by 11:59 p.m. Eastern Time on March 1 of the current school year.
- Repeat Competitors: Members may only compete in an event at the NLC more than once if they
  have not previously placed in the top 10 of that event at the NLC. If a member places in the top
  10 of an event at the NLC, they are no longer eligible to compete in that event at future NLCs,
  unless the event has been modified beyond a name change. Chapter events are exempt from
  this procedure.
- **Conference Registration**: Members must be officially registered for the NLC and must pay the national conference registration fee to participate.
- Official Hotel Requirement: To be eligible to compete, competitors must stay within the official FBLA housing block.
- State Entry Limits: Each state may submit up to four entries per event.
- Event Participation Limits: Each member may participate in:
  - One individual or team event, and



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- One chapter event (e.g., Community Service Project or Local Chapter Annual Business Report).
- **Competitor Responsibility**: Only registered competitors are permitted to plan, research, prepare, and set up their presentations. Advisers and others may not assist.
- **Participation Requirement**: To be eligible for an award, each competitor must complete all components of the event at the National Leadership Conference.
- **Team Composition**: All members of a team must be from the same local chapter.
- Identification at Check-in: Competitors must present valid photo identification (physical or digital) that matches the name on their conference name badge. Acceptable forms include a driver's license, passport, state-issued ID, or school ID.
- Late Arrivals: Competitors will be allowed to compete until such time that the results are finalized, or participation would impact the fairness and integrity of the event, as determined by Competitive Events staff. If judges have left the competitive event area, it is no longer possible to compete. Five penalty points will be assessed for late arrivals in any competitive event.
- Event Schedule Notes:
  - Some events may begin before the Opening Session.
  - All schedules are posted in local time for the NLC host city.
  - Schedule changes are not permitted.

#### **Event Administration**

This event consists of two phases: a preliminary presentation and a final presentation.

#### **Preliminary Presentation Details**

#### Timing Structure

- **Equipment Set-Up:** 3 minutes
- **Presentation:** 7 minutes (a one-minute warning will be provided)
- Question & Answer (Q&A): 3 minutes
- Important: Time allocations are exclusive. The presentation must begin immediately after the 3-minute set-up time concludes. Time may not be shifted between segments. Competitors will not interact with judges during the set-up period.

#### Venue & Format

- Presentations occur in-person at the National Leadership Conference (NLC).
- Competitors/teams are randomly assigned to presentation sections.
- Presentations will take place in a large, open area with a designated space of approximately 10' x 10', which includes a table and chairs for the judges.
- The preliminary round is closed to conference attendees and audience.

#### **Technology Guidelines**

- Internet Access: Provided (Please be aware that internet access at conference venues may be unreliable. Always prepare a backup plan in case the connection is lost or does not work with your device.)
- Presentations must be delivered using no more than three personal devices (laptop, tablet, mobile phone, or monitor approximately laptop-sized).
- Projectors and projector screens are not permitted, and competitors may not bring their own.
- Wireless slide advancers (e.g., presentation clickers or mice) are allowed.
- External speakers are not allowed; audio must come directly from the presenting device(s).



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• Electricity will not be available.

#### Non-Technology Items

- Visual aids, samples, notes, and other physical materials related to the project may be used.
- Items may be placed on the provided table or on the judges table, if space allows.
- No items may be left with the judges following the presentation.

#### **Restricted Items**

- Animals, except for authorized service animals.
- Food, which may be used for display only and may not be consumed by judges.
- Links and QR codes, which may be shown but may not be scanned or clicked by judges at any time.

#### Research

- Information must be supported by credible, well-documented sources.
- Any use of copyrighted material, images, logos, or trademarks must be properly documented.

#### **Team Expectations**

• In team presentations, all members must actively participate in the delivery of the presentation.

Event Specific Information: Competitors should incorporate the following aspects in response to the topic

- **Code Quality & Structure:** Demonstrate organized, readable code using clear structure and meaningful function names.
- **User Experience:** Design a program that is easy to navigate with clear instructions for the user
- **Input Validation:** Apply input checks that ensure the data is in the correct format and makes sense.
- **Functionality:** Explain how the program solves the assigned problem and connects to the topic.
- Data & Logic: Use appropriate data structures and logical flow to support program goals.
- **Documentation:** Include all required documentation and credit any external resources used:
  - o A readme file that explains how to use the program
  - o The source code
  - A list of any templates or libraries used
  - Clear credit for any outside resources

#### **Final Presentation Details**

#### **Timing Structure**

- Equipment Set-Up: 3 minutes
- **Presentation**: 7 minutes (a one-minute warning will be provided)
- Question & Answer (Q&A): 3 minutes
- **Note**: Each time segment is exclusive. Once the 3-minute set-up period ends, the 7-minute presentation time begins automatically. Competitors may not shift time between segments. Competitors will not interact with judges during the set-up period.

Advancement to Finals



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- The top-scoring competitors or teams from each preliminary section will advance to the final round in equal numbers.
- The number of competitors or teams advancing to the final round depends on the number of preliminary sections:
  - 2 sections: Top 6 from each section advance
  - 3 sections: Top 4 from each section advance
  - 4 sections: Top 3 from each section advance
  - 5 sections: Top 3 from each section advance
  - More than 5 sections: Top 2 from each section advance

#### **Audience & Viewing Rules**

- Final presentations may be open to conference attendees, depending on space availability.
- Finalists may not view other presentations in their own event.

#### **Technology Guidelines**

- Internet Access: Provided (Please be aware that internet access at conference venues may be unreliable. Always prepare a backup plan in case the connection is lost or does not work with your device.)
- Presentations must be delivered using no more than three personal devices (laptop, tablet, mobile phone, or monitor approximately laptop-sized).
- If the final round takes place in a conference room, the following equipment will be provided: a projector, projector screen, power access, and a table.
- Competitors using laptops or devices without an HDMI port must bring their own compatible adapters.
- It is the responsibility of final-round competitors to decide whether or not to use the provided technology.
- Wireless slide advancers (e.g., presentation clickers or mice) are allowed.
- Electricity will not be available.

#### Non-Technology Items

- Visual aids, samples, notes, and other physical materials related to the project may be used.
- Items may be placed on the provided table or on the judges table, if space allows.
- No items may be left with the judges following the presentation.

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- **User Experience:** Design a program that is easy to navigate with clear instructions for the user.
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  - o A readme file that explains how to use the program
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#### Scoring

- Preliminary round scores are used to determine which competitors or teams advance to the final round from each section.
- Final round scores determine the final rankings and top award winners.
- Judges are responsible for breaking all ties in both preliminary and final rounds.
- All judging decisions are final. Results announced at the National Leadership Conference are considered official and will not be changed after the conclusion of the National Leadership Conference.

#### **Penalty Points**

- Competitors may be disqualified if they violate the Code of Conduct or the Honor Code.
- Five points are deducted if competitors do not follow the Dress Code or are late to their assigned presentation time.

#### Recognition

• A maximum of 10 entries (individuals or teams) may be recognized per event.

#### Americans with Disabilities Act (ADA)

FBLA complies with the Americans with Disabilities Act (ADA) by providing reasonable
accommodations for competitors. Accommodation requests must be submitted through the
conference registration system by the official registration deadline. All requests will be
reviewed, and additional documentation may be required to determine eligibility and
appropriate support.

#### **Recording of Presentations**

- Unauthorized audio or video recording is strictly prohibited in all competitive events.
- FBLA reserves the right to record presentations for educational, training, or archival purposes.
   Competitors should be aware that their presentations may be recorded by FBLA-authorized personnel.



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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 comments provided	Comments provided but are not logical	Comments provided assist judges throughout the demonstration	Comments provided are logical, useful, and complete	
	0 points	1-6 points	7-8 points	9-10 points	
The program is modular in a way that makes logical, readable sense	The program is written as one large block with no use of functions, methods, or modular structure.	Some attempt is made to break the program into sections, but the structure is unclear, inconsistent, or difficult to follow.	The program uses a modular structure with clear functions or methods. Each part of the program is organized in a way that makes sense and supports readability.	The program is highly organized with well-named, purposedriven functions or modules. The structure makes the code easy to read, understand, and maintain, showing a strong understanding of clean programming practices.	
	0 points	1-6 points	7-8 points	9-10 points	
User Experience	ı	T			
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 validation attempted, but does not catch important edge cases or is not done correctly	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	1-6 points	7-8 points	9-10 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	1-6 points	7-8 points	9-10 points	
Data storage	There is no storage of data	Variables are used inconsistently, or in a way that is unclear	Variable name and usage is clear. Variables store data that updates when necessary. Each variable performs only one job, and the correct data type is used	More complex data storage such as arrays and lists are used where appropriate and variable scope makes sense	



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	0 points	1-2 points	3-4 points	5 points	
Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Documentation					
Comprehensive documentation is included: readme file, source code, templates/libraries used, and attribution for any open-source or copyrighted material.	No documentation is provided, or required components are missing entirely.	Some documentation is provided, but it is incomplete, unclear, or missing key parts (such as attributions or templates used).	Documentation is mostly complete and includes a readme file, source code, and list of templates/libraries. Proper attribution is given where required.	Documentation is thorough, well-organized, and complete. All required components are included, clearly labeled, and professionally presented. Proper credit is clearly given for all external resources.	
	0 points	1-9 points	10-16 points	17-20 points	
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	
Consistently displays confidence, poised body language, engaging eye contact, and effective voice projection.	Did not demonstrate any of the listed skills	Demonstrated 1-2 of the listed skills (confidence, body language, eye contact, or voice projection)	Demonstrated 3 of the listed skills (confidence, body language, eye contact, or voice projection)	Demonstrated all skills, enhancing the overall presentation	
	0 points	1-6 points	7-8 points	9-10 points	
Demonstrates the ability to effectively answer questions	Does not respond to questions or responses are completely off- topic.	Provides incomplete or unclear answers that show limited understanding.	Responds accurately and clearly to most questions, showing adequate understanding.	Responds confidently with clear, accurate, and thoughtful answers that enhance the overall presentation.	
	0 points	1-6 points	7-8 points	9-10 points	
Presentation Protocols					
Adherence to Competitive Events Guidelines	Competitor(s) Did Not Follow Guidelines	Execution Aligned with Guidelines: (All criteria must be met)  ✓ Used only allowable technology devices (sizing specs followed; maximum of three  ✓ Presentation aligned with the assigned topic  ✓ Maintained professional boundaries during set-up time (no interaction with judge   ✓ Did not leave materials behind after the presentation  ✓ Links or QR codes were displayed appropriately (not clicked or scanned by judges   ✓ Audio was presented without external speakers (preliminary round)  ✓ Avoided use of food or live animals			
	0 points	0 points 10 points			
	·	Only: Penalty Points (5 po	•	or 5 points for late arrival penalty)	
				Presentation Total (130 points)	
Name(s):					<u> </u>
School:					
Judge Signature:					Date:

Comments: