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:** 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

**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.
- 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
- **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.)
- 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.
- When the equipment set-up time has elapsed, the timer will automatically start the presentation time.
Introduction to Programming

- 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.
  - 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

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 Presentation Rating Sheet

<table>
<thead>
<tr>
<th>Expectation Item</th>
<th>Not Demonstrated</th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate use</td>
<td>No commentary</td>
<td>Commentary provided but is not logical</td>
<td>Commentary provided assists the user throughout the demonstration</td>
<td>Commentary provided is logical, useful, and complete</td>
<td></td>
</tr>
<tr>
<td>of comments,</td>
<td>provided</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>naming</td>
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<tr>
<td>conventions,</td>
<td></td>
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<tr>
<td>and proper</td>
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</tr>
<tr>
<td>formatting</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>User Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User interface is intuitive or clear instructions are provided</td>
<td>No instructions provided and is not intuitive</td>
<td>Instructions provided or program is not intuitive</td>
<td>Appropriate &amp; clear instructions are provided</td>
<td>Program is intuitive and clear instructions are provided</td>
<td></td>
</tr>
<tr>
<td>User can easily navigate between pages</td>
<td>No help menu or navigation system incorporated</td>
<td>Includes basic help menu and usable navigation</td>
<td>Interface contains no spelling errors, has interactive help menu, and has no navigation errors</td>
<td>Program use also includes an intelligent feature such as an interactive Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>User input is validated</td>
<td>User input isn’t validated</td>
<td>User input is somewhat validated</td>
<td>User input is validated</td>
<td>Input validation applied on both syntactical and semantic levels</td>
<td></td>
</tr>
<tr>
<td><strong>Functionality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program addresses all parts of the prompt</td>
<td>Program does not address the topic/problem</td>
<td>Program addresses the topic/problem at a minimal level</td>
<td>Program fully addresses the topic/problem</td>
<td>Program fully addresses the topic/problem, and the correlation is explained in the instructions</td>
<td></td>
</tr>
<tr>
<td>Program generates a presentable report</td>
<td>Output reports are not accurate or not available</td>
<td>Output reports are not sufficient to analyze data</td>
<td>Output reports are error free and provide all necessary information to analyze data</td>
<td>Output reports allow user to customize and analyze information</td>
<td></td>
</tr>
<tr>
<td>Data storage is persistent</td>
<td>Where data is stored is unclear</td>
<td>Where data is stored may not be secure</td>
<td>Data storage is clear, and storage is secure</td>
<td>Data storage includes dynamic backup feature</td>
<td></td>
</tr>
</tbody>
</table>

**Points Earned:**

- 0 points
- 1-6 points
- 7-8 points
- 9-10 points
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<tbody>
<tr>
<td>Presentation Delivery</td>
<td></td>
<td></td>
<td></td>
<td>Presentation flowed in a logical sequence; statements were well organized</td>
<td></td>
</tr>
<tr>
<td>Statements are well-organized and clearly stated</td>
<td>Competitor(s) did not appear prepared</td>
<td>Competitor(s) were prepared, but flow was not logical</td>
<td>Presentation flowed in logical sequence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 points</td>
<td>1-6 points</td>
<td>7-8 points</td>
<td>9-10 points</td>
<td></td>
</tr>
<tr>
<td>Demonstrates self-confidence, poise, assertiveness, and good voice projection</td>
<td>Competitor(s) did not demonstrate self-confidence</td>
<td>Competitor(s) demonstrated self-confidence and poise</td>
<td>Competitor(s) demonstrated self-confidence, poise, and good voice projection</td>
<td>Competitor(s) demonstrated self-confidence, poise, good voice projection, and assertiveness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 points</td>
<td>1-6 points</td>
<td>7-8 points</td>
<td>9-10 points</td>
<td></td>
</tr>
<tr>
<td>Demonstrates the ability to effectively answer questions</td>
<td>Unable to answer questions</td>
<td>Does not completely answer questions</td>
<td>Completely answers questions</td>
<td>Interacted with the judges in the process of completely answering questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 points</td>
<td>1-6 points</td>
<td>7-8 points</td>
<td>9-10 points</td>
<td></td>
</tr>
</tbody>
</table>

**Staff Only:** Penalty Points (5 points for dress code penalty and/or 5 points for late arrival penalty)

**Presentation Total (100 points)**

<table>
<thead>
<tr>
<th>Name(s):</th>
<th>School:</th>
<th>Judge Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>