

Computer Game & Simulation Programming

Computer Game & Simulation Programming provides members with the opportunity to design and implement a computer game based on a specific topic. Interactive computer games and simulations have achieved broad implementation in a wide variety of business and educational disciplines.

Event Overview

Division: High School

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 **Equipment Provided by FBLA:**

- State Look for updates from California FBLA before the conference
- National Internet access and table for preliminary round presentation; Internet access, table, power, projector & screen for final round presentation

2023-2024 Topic

Create an adventure game with a storyline incorporating FBLA goals, concepts, and/or history. The game must:

- Be playable on the student device using Windows 10, Mac OS, or a modern web browser.
- Be compatible with a maximum ESRB rating of E10+.
- Be secure and bug-free.
- Include:
 - o A hero
 - o At least one villain
 - Use of arrow keys for movement and can incorporate other keys for other actions
 - Scoring (examples include points system, leaderboards, etc.)
 - Win/lose screens
 - At least two levels of play

FBLA Future Rusiness Leaders of America

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FBLA Goals

- Develop competent, aggressive business leadership.
- Strengthen the confidence of students in themselves and their work.
- Create more interest in and understanding of American business enterprise.
- Encourage members in the development of individual projects that contribute to the improvement of home, business, and community.
- Develop character, prepare for useful citizenship, and foster patriotism.
- Encourage and practice efficient money management.
- Encourage scholarship and promote school loyalty.
- Assist students in the establishment of occupational goals.
- Facilitate the transition from school to work.

State

- Number of Competitors per Chapter: Each local chapter may enter one team of one (1), two (2) or three (3) members.
- At the State Leadership Conference, Computer Game & Simulation Programming consists of two parts:
 - o a pre-judged 7-minute presentation
 - o and a live, 7-minute final presentation for the top-8 teams.
- Competitors are required to complete all parts for award eligibility.
- The top four (4) places in state competition will represent California at the National Leadership Conference.
- Middle school members who place in the top four **cannot** compete at the National Leadership Conference, per national guidelines.

• Scoring:

- <u>Pre-judged Presentation:</u> A panel of judges will score the projects using the presentation sheet. The "presentation delivery" portion of the rating sheet will not be used to judge the prejudged submission, so members can focus on their project content. All decisions of the judges are final.
- o <u>Live Presentation:</u> A panel of judges will score the performances using the presentation sheet. All decisions of the judges are final.
- o <u>Final Score</u>: Only the live presentation score will be used to determine the final score. The pre-judged presentation score will not be used.
- Five points will be deducted if competitors do not follow the dress code. If multiple team members are not in dress code, each team member will receive a five (5) point penalty.
- o Five points may be deducted for each instance of not following guidelines.

• Project Guidelines:

- No animals (except authorized service animals) will be allowed for use in any competitive event.
- o Presentation should cover the following aspects of the program:
 - Choosing a programming language or game/animation engine to create a standalone executable program that will display creativity, programming skill, and convey the message of the topic.



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- The development, usability and functionality of the program must be demonstrated and explained to the judges.
- Data must be free of viruses/malware.
- Must be graphical in nature, not text based.
- Must have an initial title page with the game tittle, user interface control instructions, and active button for Play and Quit.
- Must have a quit command programmed to the escape key.
- 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:
 - Concept and Design of the Game: What are the game rules? Are they easy to understand? Do the rules address all aspects of the game?
 - Implementation of the Concept & Design: What process was used to turn the concept and design into software? How was the art/sound built?
 - User Experience: Does the user have a good experience with the interface?

• Pre-judged Guidelines:

- o <u>Deadline:</u> Advisers must submit a URL of their chapter's pre-judged presentation in Blue Panda by 4:59 p.m. Pacific on **February 23, 2024**.
- Video submissions should be URLs. The 7-minute videos should follow the digital submission guidelines established at the 2020 National Leadership Experience.
- o Key digital submission guidelines include:
 - Members must be in FBLA Dress Code while recording the video.
 - Videos shall be submitted in one take. This means that only one video per competitor/team may be submitted. The submission shall not be edited
 - Members may use projectors/presentations (example: PowerPoints), should they choose to use them.
 - Members can share their computer screen, but members must still be seen in the recording at all times.
- Competitors are responsible for ensuring the URL is viewable by judges. If judges are unable to view the video, the pre-judge score will be zero.

• Live Presentation Guidelines:

- o **Equipment Set-up Time:** 3 minutes
- o **Presentation Time:** 7 minutes (one-minute warning)
- o Question & Answer Time: 3 minutes
- o Internet Access: Provided
- Pre-judged materials, 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.
- o When the equipment set-up time has elapsed, the timer will automatically start the seven-minute presentation time.



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- o If performing as a team, all team members are expected to actively participate in the presentation.
- o Competitors may not view other competitors' presentations in their event.

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.
- 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
 - o **Equipment Set-up Time:** 3 minutes
 - o **Presentation Time:** 7 minutes (one-minute warning)
 - Question & Answer Time: 3 minutes
 - o **Internet Access:** Provided (Internet access may not be Wi-Fi, so competitors should plan appropriately when selecting devices on which to present. Please



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note that internet reliability at any conference venue cannot be guaranteed. Always have a backup plan in case internet connections go down.)

- o 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'.
- o Competitors/teams are randomly assigned to sections.
- 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.
- o 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
- o 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.
- o 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.
- o Presentation should cover the following aspects of the program:
 - Choosing a programming language or game/animation engine to create a standalone executable program that will display creativity, programming skill, and convey the message of the topic.
 - The development, usability and functionality of the program must be demonstrated and explained to the judges.
 - Data must be free of viruses/malware.
 - Must be graphical in nature, not text based.
 - Must have an initial title page with the game tittle, user interface control instructions, and active button for Play and Quit.
 - Must have a quit command programmed to the escape key.
 - 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:
 - Concept and Design of the Game: What are the game rules? Are they easy to understand? Do the rules address all aspects of the game?
 - Implementation of the Concept & Design: What process was used to turn the concept and design into software? How was the art/sound built?



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- User Experience: Does the user have a good experience with the interface?
- Final Presentation Information
 - o **Equipment Set-up Time:** 3 minutes
 - o Presentation Time: 7 minutes (one-minute warning)
 - o Question & Answer Time: 3 minutes
 - o 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.
 - o 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.
 - o 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.
 - o Presentation should cover the following aspects of the program:
 - Choosing a programming language or game/animation engine to create a standalone executable program that will display creativity, programming skill, and convey the message of the topic.
 - The development, usability and functionality of the program must be demonstrated and explained to the judges.
 - Data must be free of viruses/malware.
 - Must be graphical in nature, not text based.
 - Must have an initial title page with the game tittle, user interface control instructions, and active button for Play and Quit.



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- Must have a guit command programmed to the escape key.
- 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:
 - Concept and Design of the Game: What are the game rules? Are they easy to understand? Do the rules address all aspects of the game?
 - Implementation of the Concept & Design: What process was used to turn the concept and design into software? How was the art/sound built?
 - User Experience: Does the user have a good experience with the interface?

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.



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Computer Game & Simulation Programming Presentation Rating Sheet (Pre-judged)					
Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Concept & Design					
Game addresses all parts of the prompt	Concept and/or topic are not addressed	Concept and/or topic not fully developed	Fully addresses the concept and/or topic	User with no knowledge of the concept and/or topic can identify it based on use of project	
	0 points	1-8 points	9-12 points	13-15 points	
Game rules are well- defined and clearly explained	Rules contain substantial errors affecting game play	Rules contain errors that have minimal impact on game play	Rules are error free as discovered through basic game play	At least one advanced rule feature available	
	0 points	1-2 points	3-4 points	5 points	
Game is challenging, but can be completed	Game is overly simplistic and/or cannot be completed	Game can be completed but is simplistic	Game is challenging and can be completed	User can navigate the game with rules as defined and several outcomes are available for completion	
	0 points	1-2 points	3-4 points	5 points	
Implementation					
Describes programming languages, graphic design tools, game engines or other software used	Program documentation not provided	Program documentation contains errors	Program documentation is error free	Program documentation invites use of advanced features	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are appropriate for concept and/or topic	No graphic design principles applied	Graphics are distracting/busy	Graphics are appropriate for the concept/topic	Graphics enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are consistently applied	Graphics & assets not available	Graphics & assets not consistent	Graphics & assets consistently applied	Graphics & assets consistently applied and enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are visually appealing and engaging	No design principles applied	Color, contrast, background, typography, sound and design are distracting or busy	Color, contrast, background, typography, sound, and design are appropriate for the concept or topic	Color, contrast, background, typography, sound, and design enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
User Experience				 	
Title screen functions and provides clear instructions	No title screen provided	Title screen has limited instructions and/or functionality	Title screen functions and provides clear instructions	Title screen provided, but allows user to execute without instructions	
	0 points	1-2 points	3-4 points	5 points	
Users can easily navigate between pages	Experience intended for the game is not defined	User can navigate the game but experience and purpose are not defined	User can navigate and complete the game following the rules	Game includes an operating multi-player function	
	0 points	1-6 points	7-8 points	9-10 points	



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Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Game controls and mechanics are intuitive	Controls & mechanics aren't present	Controls & mechanics not fully present	Controls and mechanics are intuitive	Controls and mechanics are intuitive and enhance the user experience	
	0 points	1-6 points	7-8 points	9-10 points	
Staff Only: Penalty Points (5 points for dress code penalty and/or 5 points for late arrival penalty)					
Presentation Total (70 points)					
Name(s):					
School:					
Judge Signature:					Date:

Comments:



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Computer Game & Simulation Programming Presentation Rating Sheet (State Final and National)					
Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Concept & Design					
Game addresses all parts of the prompt	Concept and/or topic are not addressed	Concept and/or topic not fully developed	Fully addresses the concept and/or topic	User with no knowledge of the concept and/or topic can identify it based on use of project	
	0 points	1-8 points	9-12 points	13-15 points	
Game rules are well- defined and clearly explained	Rules contain substantial errors affecting game play	Rules contain errors that have minimal impact on game play	Rules are error free as discovered through basic game play	At least one advanced rule feature available	
	0 points	1-2 points	3-4 points	5 points	
Game is challenging, but can be completed	Game is overly simplistic and/or cannot be completed	Game can be completed but is simplistic	Game is challenging and can be completed	User can navigate the game with rules as defined and several outcomes are available for completion	
	0 points	1-2 points	3-4 points	5 points	
Implementation					
Describes programming languages, graphic design tools, game engines or other software used	Program documentation not provided	Program documentation contains errors	Program documentation is error free	Program documentation invites use of advanced features	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are appropriate for concept and/or topic	No graphic design principles applied	Graphics are distracting/busy	Graphics are appropriate for the concept/topic	Graphics enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are consistently applied	Graphics & assets not available	Graphics & assets not consistent	Graphics & assets consistently applied	Graphics & assets consistently applied and enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
Graphics and game assets are visually appealing and engaging	No design principles applied	Color, contrast, background, typography, sound and design are distracting or busy	Color, contrast, background, typography, sound, and design are appropriate for the concept or topic	Color, contrast, background, typography, sound, and design enhance the user experience	
	0 points	1-2 points	3-4 points	5 points	
User Experience		ı		T	
Title screen functions and provides clear instructions	No title screen provided	Title screen has limited instructions and/or functionality	Title screen functions and provides clear instructions	Title screen provided, but allows user to execute without instructions	
	0 points	1-2 points	3-4 points	5 points	
Users can easily navigate between pages	Experience intended for the game is not defined	User can navigate the game but experience and purpose are not defined	User can navigate and complete the game following the rules	Game includes an operating multi-player function	
	0 points	1-6 points	7-8 points	9-10 points	



Computer Game & Simulation Programming

Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Game controls and mechanics are intuitive	Controls & mechanics aren't present	Controls & mechanics not fully present	Controls and mechanics are intuitive	Controls and mechanics are intuitive and enhance the user experience	
	0 points	1-6 points	7-8 points	9-10 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	
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: Penalty Po	oints (5 points for dress	code penalty and/or 5 poi	nts for late arrival penalty)	
			Prese	ntation Total (100 points)	
Name(s):					
School:					
Judge Signature:					Date:

Comments: