

COMPUTER GAME & SIMULATION PROGRAMMING—*NEW!*

Interactive computer games and simulations have achieved broad acceptance and implementation in a wide variety of business and educational disciplines. Buried within many of these programs is a message that advances the player's experience from simple entertainment to edutainment. This event tests the programmer's skill in designing a functional interactive simulation/game that will both entertain and educate/inform the player.

PROJECT COMPETENCIES

- program addresses the topic and is appropriate for the audience
- required information is effectively communicated
- user interface is intuitive and responsive to program operations
- navigation is logical and designed to lead the player to the intended objective
- program demonstrates a finished and well tuned product free of artifacts and glitches
- gameplay incorporates both entertainment and edutainment play within topic specifications
- game world graphics, text treatment, and special effects show creativity and cohesiveness of design
- artistry, character, overall layout, color choice and design is creative and appealing to the target audience
- program contains some element of skill, chance, competition or random actions that will inspire replay more than once
- player interactions with other characters, objects, obstacles and iconic graphics are appropriate to the topic and create a feeling of immersion within the game world
- storyline is sufficient to engage player and communicate a clear thought process and an intended, planned direction with formulation and execution of a firm idea
- player tasks are non-trivial and receive appropriate rewards
- copyright laws are followed

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. Participants must be members of an active local chapter and on record in the FBLA state and national offices as having paid dues by February 15.
2. Participants must be selected in accordance with the regulations of the local chapter and the state association.
3. Participants must not have won first place at a previous State Business Leadership Conference nor entered this event at a previous National Leadership Conference.
4. Participants failing to report on time for the event will not be permitted to compete.
5. 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 event. Participants are required to complete all 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.

2010 SBLC TOPIC

The topic to be developed in this presentation and submitted for competition at the 2010 State Business Leadership Conference will be:

You will develop an entertaining simulation/game where the protagonist navigates hazards/obstacles involving lack of knowledge, confidence, or experience that can be overcome with FBLA inspired powerups. Powerups should highlight FBLA benefits that increase the player's knowledge, confidence, and/or experience needed to overcome realistic challenges a student might face at school, college, or the workplace. The audience is for middle and high school.

The presentation will be developed prior to the SBLC and will be used when giving the business presentation. The same topic will be used at the National Leadership Conference.

GUIDELINES

Prejudged Program

1. The participant may choose any 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.
2. Two (2) copies of the program must be sent to the state office to be received by March 5 for judging.
3. The program must contain minimally the following:
 - a. Minimum of five missions/tasks/levels to be completed before winning or completing the game.
 - b. Must be graphical in nature, not text based.
 - c. Must allow for at least a two player perspectives such as First Person, Third Person, Top-Down, Side-Scrolling, etc.
 - d. Must run on a Windows XP or higher computer, using the keyboard and mouse for player controls.
 - e. Must run on range of 1024x780 or higher.
4. Two (2) DVDs or USB flash drives containing the executable object, data or support files needed to run the executable file must be received by the state office for judging by March 5 along with a Statement of Assurance and a readme file. Label the media using a marker with the school, participant name, state, and event.
5. All data and programs should be contained in a master folder name STATE_SCHOOL where your state and school are listed in that folder name format. Outside of the master folder, create a shortcut to the executable. If the program requires a runtime player, create a shortcut outside the master folder to launch the runtime player installer.
6. Readme file must be submitted as a hard copy and sent with the DVDs or flash drives. Contained in the readme file is a statement noting the name of the participant, school and state; design software program(s) used and instructions on running the program and installing the executable and a runtime program if needed.
7. Program must include an initial title page with the game title, user interface control instructions, and active buttons for Play and Quit.
8. Program must include a quit command programmed to the escape key. This is needed if the player wants to end the game before completing.
9. Program must run on Windows XP or higher computer.
10. Data must be free of viruses/malware. Any entry with contaminated data will not be judged.
11. Program produced for this event must be prepared by the participant without help.

Performance

1. Up to fifteen (15) finalists scoring highest on the prejudged program will proceed to the oral presentation.
2. The participant must provide all equipment for the presentation, including a copy of the program. A screen will be provided.
3. Five (5) minutes will be allowed to set up and remove equipment or presentation items.
4. The individual has seven (7) minutes to present the program. The judges will interact with the participant during the presentation.
5. A timekeeper will stand at six (6) minutes and again at seven (7) minutes.
6. Visual aids related to the project may be used; however, no items may be left with the judges.
7. Performances are open to conference attendees except performing 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. A panel of judges will select the winners. 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 in national competition.



COMPUTER GAME & SIMULATION PROGRAMMING

Production Rating Sheet

| Evaluation Item | Not Demonstrated | Does Not Meet Expectations | Meets Expectations | Exceeds Expectations | Points Earned |
|---|------------------|----------------------------|--------------------|----------------------|------------------|
| Program Readability and Support | | | | | |
| Storage media, uploaded folder and shortcuts formatted properly | 0 | 1-2 | 3-4 | 5 | |
| Source code or ANSI flowchart identifies core programming with adequate commenting to identify intent of programming blocks | 0 | 1-3 | 4-7 | 8-10 | |
| Instructions clear and executable launches from shortcut without modification | 0 | 1-2 | 3-4 | 5 | |
| Program Structure and Game Play | | | | | |
| Program addresses the topic | 0 | 1-3 | 4-7 | 8-10 | |
| Required information is effectively communicated and its appropriate for the audience | 0 | 1-3 | 4-7 | 8-10 | |
| User interface is intuitive and responsive to program operations | 0 | 1-3 | 4-7 | 8-10 | |
| Navigation is logical and designed to lead the player to the intended objective | 0 | 1-5 | 6-10 | 11-15 | |
| Game play incorporates both entertainment and edutainment play within topic specifications | 0 | 1-3 | 4-7 | 8-10 | |
| Game world graphics, text treatment, and special effects show creativity and cohesiveness of design | 0 | 1-3 | 4-7 | 8-10 | |
| Artistry, character, overall layout, color choice and design is creative and appealing to the target audience | 0 | 1-3 | 4-7 | 8-10 | |
| Program contains some element of skill, chance, competition or random actions that will inspire replay more than once | 0 | 1-3 | 4-7 | 8-10 | |
| Player interactions with other characters, objects, obstacles, and iconic graphics are appropriate to the topic and create a feeling of immersion within the game world | 0 | 1-5 | 6-10 | 11-15 | |
| Storyline is sufficient to engage player and communicate a clear thought process and an intended, planned direction with formulation and execution of a firm idea | 0 | 1-5 | 6-10 | 11-15 | |
| Player tasks are non-trivial and receive appropriate rewards | 0 | 1-5 | 6-10 | 11-15 | |
| Program Implementation and Tuning | | | | | |
| Program demonstrates a finished and well tuned product free of errors, artifacts and glitches | 0 | 1-3 | 4-7 | 8-10 | |
| The program handled user and/or data input errors well | 0 | 1-3 | 4-7 | 8-10 | |
| Appropriate logic and data types used | 0 | 1-3 | 4-7 | 8-10 | |
| Algorithms reliable and straightforward | 0 | 1-3 | 4-7 | 8-10 | |
| Unusual approaches should be well documented | 0 | 1-3 | 4-7 | 8-10 | |
| Resulting outputs, screens, and messages were useful | 0 | 1-3 | 4-7 | 8-10 | |
| Subtotal | | | | | /200 max. |
| Penalty Points Deduct five (5) points each for not adhering to Report 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 <input type="checkbox"/> no readme file | | | | | |
| Total Points | | | | | /200 max. |

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

Judge's Comments:

VERIFICATION
(scores checked)
 Administrator



COMPUTER GAME & SIMULATION PROGRAMMING

Performance Rating Sheet

 Preliminary Round

 Final Round

| 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 | |
| Participant(s) demonstrate self-confidence, poise, and good voice projection | 0 | 1-2 | 3-4 | 5 | |
| Demonstrated 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. | | | | | |
| Production Score | /200 max. | | | | |
| Final Score | /300 max. | | | | |

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

Judge's Comments:

VERIFICATION
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 Administrator