2023-24 Competitive Events Guidelines

Management Information Systems

Management Information Systems provides members with the opportunity to gain knowledge around outlining a small business' environment and needs. This competitive event consists of an objective test and a role play scenario.

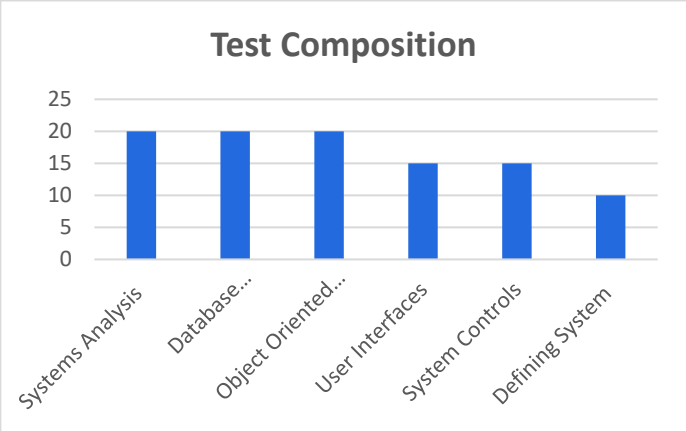
Event Overview

Division: High School
Event Type: Team of 1, 2 or 3 members
Event Category: Role Play Event
Event Elements: Objective Test and Role Play
Objective Test Time: *50 minutes*
Role Play Time: *20-minute preparation time, 7-minute presentation time*
NACE Connections: Career & Self-Development, Communication, Leadership, Professionalism, Teamwork

Equipment Provided by Competitors: Pencil for objective test
Equipment Provided by FBLA: One piece of scratch paper per competitor for objective test; Two notecards and pencils for each competitor, flip chart paper, and secret problem/scenario for role play

Objective Test & Role Play Competencies

- Systems Analysis & Design (Systems Development Life Cycle)
- Database Management and Modeling Concepts
- Object Oriented Analysis and Design
- User Interfaces
- System Controls
- Defining System and Business Requirements



District

Testing will take place prior to the District Leadership Conference. Check the Call to Conference for your District for specific instructions and deadlines.

State

Any events with a test will have an online testing component on-site at the State Leadership Conference. Students will need to have access to a personal device (preferably a laptop) to be connected to the Internet for online testing. Role play presentations will happen in a large ballroom, and all competitors will present in the preliminary round.

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 program year.
- Members may compete in an event at the National Leadership Conference (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.
- 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 to be eligible to compete.
- Each state may submit four entries per event.
- Each member 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).
- 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.
- Competitors cannot be replaced or substituted in between the objective test and role play time.
- Picture identification (physical or digital driver's license, passport, state-issued identification, or school-issued identification) is required when checking in for competitive events.
- If competitors are late for an objective test or 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 event schedules cannot be changed. Competitive events start in the morning before the Opening Session of the 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 is two rounds: objective test and role play
- Objective Test
    - **Objective Test Time:** 50 minutes
    - **Objective Test Questions:** 100 questions
    - This event is an objective test administered online at the NLC.
    - No reference or study materials may be brought to the testing site.
    - All electronic devices such as cell phones and smart watches must be turned off before competition begins.
    - Competitors on a team must test individually, starting within minutes of each other. Individual test scores will be averaged for a team score.
- Interactive Role Play Presentation

- **Preparation Time:** 20 minutes
- **Presentation Time:** 7 minutes (one-minute warning)
- **Question & Answer:** None
- The top 15 scoring teams will advance to the role play final round.
- The role play will be a problem or scenario that includes a decision-making problem outlining a small business' environment and needs. The role play will be given to the competitors at the beginning of their assigned preparation time.
- Two notecards will be provided to each competitor and may be used during event preparation and role play presentation. Information may be written on both sides of the notecards. Notecards will be collected following the role play.
- No additional reference materials or props or visuals are allowed.
- If participating as a team, all team members are expected to actively participate in the role play.
- Role plays are interactive presentations; the judges may ask questions throughout the presentation.
- Role play presentations are not open to conference attendees.
- Competition ethics demand that competitors do not discuss or reveal the role play until the event has ended.

Scoring

- The team-averaged objective test score determines the top 15 teams advancing to role play round.
- The role play round scores only will be used to determine winners.
- Objective test scores will be used to break a tie.

Recording of Presentations

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

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.

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 testing or presentation/role play time.

Electronic Devices

- All electronic devices such as cell phones and smart watches must be turned off.

Study Guide: Test Competencies and Tasks

A. Systems Analysis & Design (Systems Development Life Cycle)

1. Demonstrate knowledge of the key functions and subsystems of the network system.
2. Demonstrate knowledge of the system life-cycle approach and identify and explain the steps in the system's development life cycle.
3. Identify the functions of systems analysts.
4. Select basic fact-gathering techniques to be used and conduct a preliminary investigation.
5. Record facts gathered through the system investigation.
6. Define the scope of the systems project.
7. Identify time, technology, and resource constraints.
8. Perform appropriate diagnostic tests.
9. Investigate system alerts.
10. Design system output, system input, files, and processing.
11. Analyze the interaction of the operating system and hardware architecture.
12. Justify the communications selections for the system (e.g., single PCs, LANS, and/or WANS).
13. Identify the system components and their relationships.
14. Specify the workflow system.
15. Develop programming specifications and program the system.
16. Test and document the system.
17. Design a framework for evaluating information system function and individual applications.
18. Compare the capabilities of an application with the requirements it is intended to meet.
19. Identify alternative outcomes of the application verification process.
20. Evaluate processes and outcomes including the results and probabilities of errors.
21. Modify inputs, outputs, and processing to refine an application.
22. Determine needed follow-up actions including recommendations for new features or enhancements to existing tools.

B. Database Management and Modeling Concepts

1. Demonstrate knowledge of the features, functions, and architecture of a database management system.
2. Identify the uses of a DBMS in business organizations.
3. Demonstrate knowledge of how a DBMS ensures data integrity through transaction-control techniques.
4. Trace the evolution of DBMS models and their implementation.
5. Produce single- and multiple-level control break reports and subtotal and final totals.
6. Write programs that allow the user to make a menu choice, that require statements to be executed multiple times, and that access multiple files.
7. Design an information system within a database environment.
8. Build database applications and distribute data across a distributed DBMS.
9. Analyze/model organizations using Entity-Relationship and Object technologies.
10. Create/update and query a relational database using Structured Query Language.
11. Manage and monitor implementation of a database management system.
12. Identify and document problems and propose solutions that are congruent with application requirements.
13. Apply databases to actual situations and business problems.
14. Create conceptual data models.
15. Identify and select logical and physical structures appropriate for specific applications.
16. Create and normalize a logical data model in accordance with established company policy.

17. Plan, develop and normalize a database schema.
18. Explain the options for converting legacy records to electronic database management systems.

C. Object Oriented Analysis and Design

1. Identify and define object-oriented programming terminology.
2. Describe the fundamental object-oriented principles and identify the characteristics and uses of object-oriented processing.
3. Describe the object-oriented software development process.
4. Explain the purpose, activities, and artifacts of the following Object-Oriented Software Development workflows: requirements gathering, requirements analysis, architecture, design, implementation, testing, and deployment.
5. Choose an object-oriented methodology that best suits the project.
6. Create a project vision document from the results of interviews and risk analysis.
7. Document the system in the System Requirements Specifications.
8. Create and refine the diagram for a software system based on the System Requirements Specifications.
9. Identify the key abstractions based on the analysis.
10. Describe the Analysis Model, the Architecture Model and the Component (Design) Model.
11. Construct the problem domain model.
12. Create the Analysis Model using Robustness analysis.
13. Distinguish between architecture and design.
14. Create the Architecture workflow artifacts.
15. Create an architecture model for presentation.
16. Create a solution model for GUI and Web UI application.
17. Refine the attributes, relationships, and methods of the Domain model.
18. Apply design patterns (e.g., composite, strategy, observer, and abstract factory) to the Solution Model.
19. Model complex object state using state chart diagrams.

D. User Interfaces

1. Define hardware-software interface issues for a system.
2. Describe interface techniques and standards.
3. Demonstrate knowledge of version management and interface control.
4. Assess the impact of changes that affect interfaces.
5. Integrate human factors and user interfaces in visual design.
6. Develop user interfaces.
7. Develop programs that interface with a data store.
8. Understand the characteristics of potential users, their tasks, and their environments.
9. Relate to the ways in which the users define themselves and their roles (e.g., jobs, tasks, and tools they use).
10. Conduct tasks analysis to review the workflow and other aspects of the user's job.
11. Interpret the results of tasks analysis.
12. Select techniques that are appropriate to a project and the user's environment.
13. Analyze and document data by creating representations such as workflows, task hierarchies, and task scenarios.
14. Reorganize results using such techniques as affinity diagrams and insight sheets to clarify relationships.
15. Form the design using storyboarding, sketching, and video presentations.

16. Test and document user interface usability.

E. System Controls

1. Set up/maintain user accounts on multiple systems.
2. Provide technical product support and facilitate the delivery of technical services.
3. Manage inventory and assets.
4. Participate in evaluation of the total system.
5. Identify new application requirements within the system.
6. Document presentation problems.
7. Analyze historical data to identify trends.
8. Formulate technical procedures.
9. Prepare documentation manuals.
10. Prepare required reports.
11. Apply data structure concepts to the storage and retrieval of data (e.g., map a model, create, and enter records and logical files).
12. Query a database and create reports and/or files from queries.
13. Transfer files between mid-range and microcomputer systems.
14. Implement hardware and software network security solutions (e.g., VPN, SSL, and firewall).
15. Maintain technical industry knowledge.

F. Defining System and Business Requirements

1. Identify information technology needed to support given sets of tasks and activities for individuals, workgroups, and the organization.
2. Define the role of Information Systems within strategic plan for the total company.
3. Develop a short-range Information System plan and a continuous improvement plan.
4. Determine functional structures (internal vs. outsourcing).
5. Establish goals and objectives for an Information System.
6. Define mission and critical success factors.
7. Formulate Information System operating procedures.
8. Identify hierarchical and flow models of the organization.
9. Define the roles and function of Information System personnel within the organization.
10. Identify drivers and inhibitors of information technology change in the organization.
11. Describe how information technology affects worker-management relationships.
12. Explain how information technology has contributed to worker productivity and teamwork.

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Management Information Systems Role Play Presentation Rating Sheet

Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Demonstrates understanding of the role play and defines problem(s) to be solved	*No description or role play synopsis provided; no problems defined*	*Describes and provides role play synopsis OR defines the problem(s)*	*Describes and provides role play synopsis AND defines the problem(s)*	*Demonstrates expertise of role play synopsis AND definition of the problem(s)*	
	0 points	1-8 points	9-12 points	13-15 points	
Identifies alternatives and the pro(s) and con(s) of each	*No alternatives identified*	*Alternative(s) given but pro(s) and/or con(s) are not analyzed*	*At least two alternatives given, and pro(s) and con(s) are analyzed*	*Multiple alternatives given and multiple pros and cons analyzed for each*	
	0 points	1-9 points	10-16 points	17-20 points	
Identifies logical solution and aspects of implementation	*No solution identified*	*Solution provided, but implementation plan not developed*	*Logical solution and implementation plan provided and developed*	*Feasible solution and implementation plan developed, and necessary resources identified*	
	0 points	1-9 points	10-16 points	17-20 points	
Demonstrates knowledge and understanding of the event competencies: Business size and scope / systems analysis and design / object-oriented analysis and design / user interfaces / system controls / defining systems	*No competencies demonstrated*	*One or two competencies are demonstrated*	*Three competencies are demonstrated*	*Four or more competencies are demonstrated*	
	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	
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	1-2 points	3-4 points	5 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 Points (5 points for dress code penalty and/or 5 points for late arrival penalty)	
				Presentation Total (100 points)	

Name(s):		
School:		
Judge Signature:		Date:

Comments: