WEB DESIGN AND DEVELOPMENT

PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of web design and development.

ELIGIBILITY (TEAM OF TWO)

Open to a team of two active NYS SkillsUSA members enrolled in programs using web design or web development as an occupational objective.

CLOTHING REQUIREMENTS

NYS SkillsUSA Business Professional
- White polo shirt (plain or with SkillsUSA or SkillsUSA NY monogram) or White dress shirt with plain black tie with no pattern or a SkillsUSA black tie, or business like white collarless shirt or white shirt with small plain collar.
- Black dress slacks (accompanied by black dress socks or black or skin-tone seamless hose) or black dress skirt (knee-length, accompanied by black or skin-tone seamless hose).
- Black leather shoes that are not backless or open toe

Note: **Contestants must wear their contest clothing to the contest orientation meeting. Also bring #2 pencil, resume, and safety assurance form.**

EQUIPMENT AND MATERIALS

1. Supplied by technical committee:
   a. Table space for two computers, with two chairs, 110-volt electrical outlet
2. Supplied by the competitor team:
   a. Two multiple outlet surge protectors
   b. Sketch pad for storyboarding
   c. Computers with 5 gHz Wi-Fi and Wi-Fi 6 connection
   d. All coding will be done using a server-based environment supplied by Web Professionals Global.
   e. Design and development tools necessary to wireframe and document a complete website.
   f. See "Resume Requirement" below for guidelines. Additionally, and as part of the competition, competitors will submit a hard copy of their resume at orientation.

Note: Computers must be preloaded with fully licensed editing software and competitors must have administrative rights to the computers to implement changes if required. All software should be pre-installed and tested prior to arriving at the competition to ensure the system has permission settings to connect to the internet outside of the school's network. Internet access may be predominately available only on a 5GHz band. Please ensure your device for the competition can connect to a 5GHz band or, if applicable, bring an appropriate 5GHz adaptor.

RESUME REQUIREMENT

Competitors must create a one-page resume to submit at orientation.

DEVICES

Cell phones or other electronic devices not approved by the NYS Chairperson will be collected by the contest chair during the competition. Chairpersons will announce their acceptance by listing it on their standard or at the orientation meeting. In case of emergencies advisors should allow the competitors to take their phones to the contest areas.
If the competitor uses their device in a manner which compromises the integrity of the competition, the competitor's score may be penalized.

SCOPE OF THE COMPETITION

The competition is defined by industry standards and set by the current industry technical committee.

KNOWLEDGE PERFORMANCE

All competitors are required to take the NYS SkillsUSA professional development test at orientation.

The competition consists of a written exam assessing the team's general knowledge of definitions, software, processes, and procedures relevant to web design and development in such areas as: graphics, design, layout, programming, code, and process. Competitors are also required to take the SkillsUSA professional development test.

This team event includes topics such as: programming (HTML, JavaScript, CSS), web graphics, website design (usability), website management, project management and Web accessibility. Legal issues surrounding the field of web design will also be considered a part of this competition.

SKILL PERFORMANCE

Competitors will receive a PDF document that provides an overview of a web design project to be completed as the skill performance assessment.

COMPETITION GUIDELINES

Web Design Project
1. The project requires a team of two: a web designer and web developer. The team of two is to develop a project using industry standard design and development techniques.
2. Attention will be paid to the quality of code and the quality of the website development process.
3. The national technical committee will provide an online coding environment (no templates can be utilized).
4. All entries to the competition must be created by the teams during the competition.
5. Teams will be issued a work order during the orientation meeting. Each team's website will be constructed at the competition site for evaluation and continual work on the day of the competition.
6. Specific schedules outlining equipment setup, storyboarding and specific judging criteria will be distributed during the orientation meeting.
7. All copyright laws are to be followed.
8. Violations will result in disqualification.
9. Competitors will have access via the Internet to any sites which they wish to reference during the competition.

STANDARDS AND COMPETENCIES

WEB 1.0 — Use appropriate and thematic graphic elements that contribute to the understanding of concepts, ideas, and relationships of the web design to related standards of Certified Web Designer Associate-apprentice.

1.1. Demonstrate a consistent and appropriate variation in the use of type sizes.
1.2. Demonstrate an appropriate use of colors.
1.3. Incorporate objects and background images.
1.4. Use color, graphics, navigation design and consistency from page to page
1.5. Identify the critical elements of web design.
1.6. Explain the use of copyright, intellectual property and trademark laws related to web design.

WEB 2.0 — Illustrate the use of various multimedia tools in the web design and layout, which are clearly thought out, appropriately used and error-free to contribute to the best explanation of concepts, ideas, and relationships to related standards of CWDSA-apprentice.

2.1. Use animation if appropriate as a part of the final product.
2.2. Choose appropriate tools for supporting the development of concepts, ideas, and relationships.
2.3. Optimize the usage of graphic files and proper file management (folder structure).
2.4. Incorporate electronic images, photo files and scanned images into the final product.
2.5. Incorporate a good blend of audio and video files.
2.6. Use hyperlinks and anchors.
2.7. You may be asked to create a corporate identity and design.

WEB 3.0 — Design a website navigation that is well architected, easy to use and consistent throughout the site with considerations made to programming and compatibility to related standards of CWDSA-apprentice.

3.1. Demonstrate the use of contemporary web browsers.
3.2. Design a standards-based site that supports many common web browsers.
3.3. Ensure the capability of code structure and design.
3.4. Apply HTML, CSS, and JavaScript to create a well-crafted website.
3.5. Format and document the code.

WEB 4.0 — Create a process with incorporated strategies and organizational tools that help persons access the site at different levels to related standards of CWDSA-apprentice.

4.1. Design activities with a scaffolding of information from basic knowledge to higher-level thinking.
4.2. Contribute to the richness of the process
    4.2.1. Help others experience different perspectives.
    4.2.2. Share responsibilities in accomplishing a task.