

Job Ready Assessment Blueprint

Web Design



Test Code: 2750 / Version: 01

General Assessment Information

Blueprint Contents

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Test Type: The Web Design assessment is included in NOCTI’s Job Ready assessment battery. Job Ready assessments measure technical skills at the occupational level and include items which gauge factual and theoretical knowledge. Job Ready assessments typically offer both a written and performance component and can be used at the secondary and post-secondary levels. Job Ready assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the state of Pennsylvania.



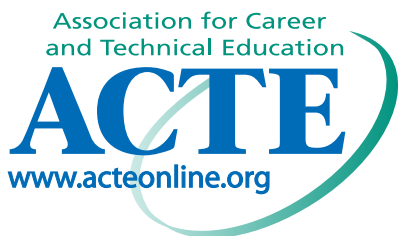
11.0801- Web Page, Digital/Multimedia and Information Resource Design



Career Cluster 11- Information Technology



15-1134.00- Web Developers



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!



NATIONAL COLLEGE CREDIT RECOMMENDATION SERVICE
University of the State of New York - Regents Research Fund

In the lower division baccalaureate/associate degree category, 3 semester hours in Web Design

Written Assessment

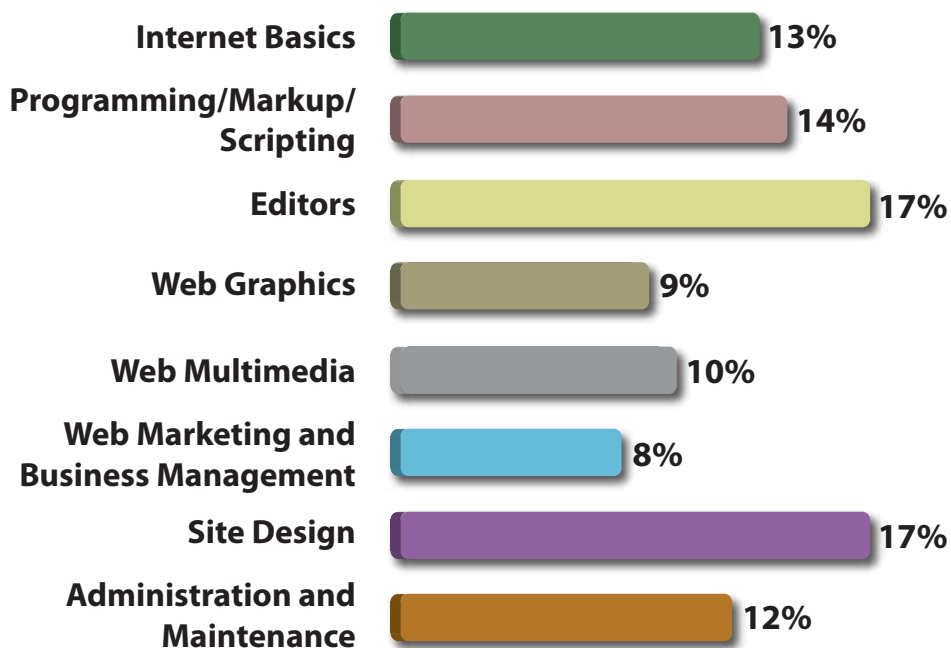
NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours

Number of Questions: 160

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Competencies and Skills Tested in this Assessment

Internet Basics

- Describe how information is physically moved across the Internet
- Describe the use of web browsers and various clients (e.g., email, FTP) within a given context of use
- Explain ways to access the Internet
- Search for information on the Web
- Describe different types of web pages and their uses
- Identify the tools required for web publishing
- Describe the function and components of a URL (how it relates to protocols, addresses, and ports)

Programming/Markup/Scripting

- Describe the difference between popular client-side and server-side programming languages
- Demonstrate the ability to create HTML/XHTML/XML pages
- Explain the function performed by web and application servers in delivering web pages
- Use CSS to differentiate between logic, content, and presentation
- Describe the difference between a scripting language and a markup language

Editors

- Create a website
- Design and implement tables and templates
- Create and use interactive forms
- Enhance site elements by using templates and style sheets
- Design and implement layers, image maps, and navigation bars
- Enhance a website with media objects and images

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Specific Competencies and Skills (continued)

Web Graphics

- Identify and use graphics file formats common to the Internet
- Differentiate between raster and vector images
- Use basic photo editing tools
- Prepare digital images for use on the Web

Web Multimedia

- Add interactive media to a website through the use of rich Internet applications
- Perform non-linear video editing
- Export video output suitable for use on the Web
- Implement multimedia on the Web

Web Marketing and Business Management

- Explain the issues involved in copyrighting, trademarking, and licensing
- Identify the issues related to working in a global environment
- Define web-related mechanisms for audience development (attracting and retaining an audience)
- Define e-commerce terms and concepts



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Specific Competencies and Skills (continued)

Site Design

- Describe software design principles
- Describe design tenets associated with Web 2.0 (e.g., interactive information sharing, interoperability)
- Explain various project management techniques to set goals and perform needs assessment
- Describe the principles behind usable navigation
- Identify problems related to legacy clients
- Describe the mechanics behind dynamic websites and how they differ from static sites
- Incorporate data/objects held in a relational database into a web page
- Design for accessibility, taking into consideration Section 508 of the Rehabilitation Act
- Describe components of various copyright and trademark laws

Administration and Maintenance

- Describe the network hardware infrastructure needed to support a website
- Describe the process of pre-launch site/application functionality testing
- Describe content management tools
- Identify hosting resources and domain management
- Utilize search engine optimization techniques
- Describe the concepts of server log analysis and benchmarks



Sample Questions

What technology is used to specify different layouts for display and print?

- A. JavaScript™
- B. CSS
- C. HTML
- D. XML

Which of the following describes a function that associates an object with an event?

- A. action scripts
- B. triggered scripts
- C. event handler
- D. user event

What graphics are made up of pixels?

- A. vector
- B. bitmapped
- C. exported
- D. imported

Information technology magazines consistently report that a major concern for e-commerce sites is

- A. traffic
- B. pop-up windows
- C. customer data security
- D. advertising

A designer might consider using a database-driven website when

- A. avoiding a CMS build
- B. the client wants a small static site
- C. the content for the site comes from a wide variety of sources
- D. managing a large amount of content

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Sample Questions (continued)

Website editing software facilitates the creation of websites by automatically

- A. correcting the HTML code as work is created
- B. creating the HTML code behind the work
- C. uploading the completed pages to the host
- D. providing the correct layout for every page

A web page displaying at a resolution of 72 dpi contains an image that is 5 inches wide by 4 inches tall. What is the size of this image in pixels?

- A. 5 by 4
- B. 480 by 360
- C. 360 by 288
- D. 360 by 240

To conceal a pop-up menu in JavaScript™, the menu's _____ property must be changed.

- A. navigation
- B. function
- C. visibility
- D. conceal

A site that supports the design principles associated with Web 2.0 will typically

- A. contain content in frames
- B. include animation
- C. consist of rich media
- D. allow for user interaction

During pre-launch testing on a website, it is a good idea to

- A. get the website online as soon as possible and then check to see how it looks
- B. test the site at a resolution of 600 X 800 only, because that is the design standard
- C. invite real users to try and "break" the site before it is uploaded to the host
- D. ask for feedback on site functionality from the website audience

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 3 hours

Number of Jobs: 5

Areas Covered:

13% Create the Cascading Style Sheet (CSS)

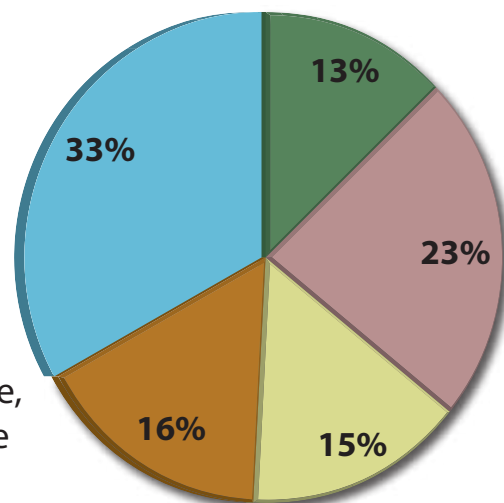
Create cat.css file, place it in web folder; write the CSS rules for the body, heading 1, heading 2, blockquote, and table tags; write CSS pseudo-class statement for the links; and time to complete Job 1.

23% Create the Template

Create the template file and link the CSS file; place table on the template page, assign the correct table properties; place the page heading on the page; place and center the image; prepare the graphic navigation bar; enter placeholders, the text navigation bar and appropriate links; copyright and last updated information; and time to complete Job 2.

15% Create the Home Page

Create index.htm file, link CSS and template files; place the page title, heading, and text content on the page; format headings and paragraph; complete text changes, links, and formatting; place image on page with the appropriate properties; and time to complete Job 3.



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Areas Covered (continued)

16% Create the Form Page

Create form.htm file and link CSS and template files, place the page title, heading, and image on the page; place the form on the page and insert line of instruction; place text fields on form and set form action; validate all form fields; and time to complete Job 4.

33% Create the Content Pages

Create history.htm, description.htm, characteristics.htm, and temperament.htm files and link CSS template files; place page titles, headings, and text content; place and format image on each page; and time to complete Job 5.

Sample Job

Create the Cascading Style Sheet (CSS)

Maximum Time: 40 minutes

Participant Activity: The participant will create a CSS file named cat.css and place it in the Web Design Documents folder. Using the information from the website storyboard, participant will write the CSS rules for the following: body, headings, blockquote, table, and the pseudo-class statements for the links.

