

## Exam 98-383: Introduction to Programming using HTML and CSS

Candidates for this exam should be able to recognize and write syntactically correct HTML and CSS, structure data using HTML elements, and create and apply styles using CSS.

Candidates are expected to have had, at minimum, instruction and/or hands-on experience of approximately 150 hours with HTML and CSS, be familiar with their features and capabilities, and understand how to write, debug, and maintain well-formed HTML and CSS code.

*Language version: HTML5 and CSS3*

**Microsoft**  
Technology Associate

### Objective Domain

#### Understand HTML Fundamentals

- **Construct markup that uses metadata elements.**
  - Script; noscript; style; link; meta tags, including encoding, keywords, viewport, and translate
- **Construct well-formed markup that conforms to industry best practices.**
  - DOCTYPE declaration; HTML; head; body; proper syntax, including closing tags and commonly used symbols; comments

#### Understand CSS Fundamentals

- **Analyze the impact of using inline styles, internal style sheets, and external style sheets.**
  - When to use each; precedence when using a combination of inline styles and style sheets
- **Construct and analyze rule sets.**
  - Valid syntax for the CSS rule set; selectors, including class, id, elements and pseudo-class
- **Construct well-formed style sheets that conform to industry best practices.**
  - Reusing rules and rule sets, commenting, testing on multiple browsers, web safe fonts

## Structure Documents Using HTML

- **Construct and analyze markup to structure content and organize data.**
  - Table tags; h1-h6; p; br; hr; div; span; ul; ol; li
- **Construct and analyze markup that uses HTML5 semantic elements.**
  - Semantic tags: header; nav; section; article; aside; footer; details; summary; figure; caption
- **Construct and analyze markup that implements navigation.**
  - Image links; a; target; bookmark; relative vs absolute links; navigating simple folder hierarchies
- **Construct and analyze markup that uses form elements.**
  - Form attributes: action; method; submission methods; accessibility; input types and restrictions; select; textarea; button; output; option; datalist; fieldset

## Present Multimedia Using HTML

- **Construct and analyze markup that displays images.**
  - img and picture elements and their attributes
- **Describe the appropriate use of the img, svg, and canvas elements.**
- **Construct and analyze markup that plays video and audio.**
  - Video; audio; track; source; simple iframe implementations

## Style Web Pages Using CSS

- **Construct and analyze styles that position content.**
  - Positioning, including float, relative, absolute, max-width, overflow, height, width, and align; inline vs block; visibility; box model, including margins and padding
- **Construct and analyze styles that format text.**
  - Font-family; color; font-style; font-size; font-weight; link colors; text formatting, including text alignment, text decoration, and indentation
- **Construct and analyze styles that format backgrounds and borders.**
  - Border-color; border-style; border-width; backgrounds; divs; colors
- **Analyze styles that implement a simple responsive layout.**
  - Units of measure; responsive effects with CSS, including viewport and media query; percentages vs pixels; frameworks and templates; max width