

## DEMONSTRATE WEB DESIGN SKILLS

**UNIT CODE:** CT/OS/CS/CR/10/6/B

### UNIT DESCRIPTION

This unit covers the competencies required to demonstrate web design skills. It involves understanding HTML basics, using HTML elements, demonstrating web page formatting, applying styles, understanding JavaScript basics, using JavaScript data types, using JavaScript functions and using JavaScript libraries.

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b> These describe the <b>key outcomes</b> which make up <b>workplace function</b> .	<b>PERFORMANCE CRITERIA</b> These are <b>assessable</b> statements which specify the required level of performance for each of the elements. <i>(Bold and italicized terms are elaborated in the range.)</i>
1. Understand HTML basics	1.1 HTML is defined 1.2 <i>Terminologies used in HTML</i> are defined 1.3 A HTML file is created 1.4 <i>HTML core elements</i> are explained 1.5 HTML core elements are added to the file
2. Use HTML elements	2.1 <i>Basic HTML elements</i> are explained 2.2 Basic HTML elements are added to a HTML document 2.3 <i>Attributes</i> are defined 2.4 Attributes are added to elements
3. Demonstrate web page formatting	3.1 <i>Layout elements</i> are explained 3.2 Layout elements are added to the HTML document 3.3 <i>Layout element attributes</i> are added to the HTML document
4. Apply styles	4.1 <i>Style concepts</i> are explained 4.2 Internal styles are applied 4.3 External CSS file is created
5. Understand JavaScript basics	5.1 Purpose of JavaScript is highlighted 5.2 JavaScript syntax is outlined 5.3 Access to HTML element attributes is demonstrated using JavaScript Document Object Model (DOM) 5.4 Changing HTML element attributes is demonstrated using DOM
6. Use JavaScript data types	6.1 <i>JavaScript data types</i> are explained 6.2 Operations on the data types are demonstrated 6.3 <i>Operations on arrays</i> are demonstrated

7. Use JavaScript functions	7.1 Structure of a JavaScript function is explained 7.2 A JavaScript function is created 7.3 A JavaScript function is invoked 7.4 Values are returned using functions
8. Use JavaScript libraries	8.1 Concept of libraries is explained 8.2 JQuery framework is explained 8.3 Installation of JQuery is demonstrated 8.4 Referencing of JQuery is demonstrated 8.5 JQuery syntax is demonstrated 8.6 <b><i>JQuery events</i></b> are explained 8.7 DOM Manipulation with JQuery is demonstrated

## RANGE

This section provides work conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
Terminologies used in HTML may include but not limited to:	<ul style="list-style-type: none"> <li>• Document</li> <li>• Stylesheet</li> <li>• Element</li> <li>• Attribute</li> </ul>
HTML core elements may include but not limited to:	<ul style="list-style-type: none"> <li>• &lt;head&gt;</li> <li>• &lt;title&gt;</li> <li>• &lt;body&gt;</li> <li>• &lt;html&gt;</li> </ul>
Basic HTML elements may include but not limited to:	<ul style="list-style-type: none"> <li>• &lt;p&gt;</li> <li>• &lt;br&gt;</li> <li>• &lt;h1&gt;</li> </ul>
Attributes may include but not limited to:	<ul style="list-style-type: none"> <li>• src</li> <li>• alt</li> <li>• href</li> </ul>
Layout elements may include but not limited to:	<ul style="list-style-type: none"> <li>• &lt;header&gt;</li> <li>• &lt;nav&gt;</li> <li>• &lt;section&gt;</li> <li>• &lt;footer&gt;</li> </ul>

Variable	Range
Layout element attributes may include but not limited to:	<ul style="list-style-type: none"> <li>• Class</li> <li>• Id</li> <li>• name</li> </ul>
Style concepts may include but not limited to:	<ul style="list-style-type: none"> <li>• Background</li> <li>• Padding</li> <li>• Alignment</li> <li>• Border</li> </ul>
JavaScript data types may include but not limited to:	<ul style="list-style-type: none"> <li>• Strings</li> <li>• Numbers</li> <li>• Booleans</li> </ul>
Operations on arrays may include but not limited to:	<ul style="list-style-type: none"> <li>• count ()</li> <li>• pop()</li> <li>• push ()</li> </ul>
JQuery events may include but not limited to:	<ul style="list-style-type: none"> <li>• Mouse events</li> <li>• Keyboard events</li> <li>• Form events</li> <li>• Document / window events</li> </ul>

## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

### Required skills

The individual needs to demonstrate the following skills:

- Communications (verbal and written);
- Time management;
- Problem solving;
- Planning;
- Decision Making;
- Research;

### Required knowledge

The individual needs to demonstrate knowledge of:

- HTML basics
- HTML elements
- Web page formatting
- Styling
- JavaScript basics
- JavaScript data types
- JavaScript functions

- JavaScript libraries

## EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and understanding and range.

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 Created a HTML document</li> <li>1.2 Added attributes to HTML documents</li> <li>1.3 Formatted a web page</li> <li>1.4 Added styles to a web page</li> <li>1.5 Explained the importance of JavaScript</li> <li>1.6 Use JavaScript to change HTML elements</li> <li>1.7 Demonstrated event handling in JQuery</li> </ul>
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> <li>2.1 Access to relevant workplace where assessment can take place</li> <li>2.2 Appropriately simulated environment where assessment can take place</li> </ul>
3. Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Oral questioning</li> <li>3.2 Practical demonstration</li> <li>3.3 Observation</li> <li>3.4 Written test</li> </ul>
4. Context of Assessment	<p>Competency may be assessed</p> <ul style="list-style-type: none"> <li>4.1 Off the job</li> <li>4.2 on the job</li> <li>4.3 During industrial attachment</li> </ul>
5. Guidance information for assessment	<ul style="list-style-type: none"> <li>5.1 Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</li> </ul>