Quality Endorsed Unit

This unit does not form part of a regulated qualification.

Unit Title: Web Design: Advanced HTML & CSS Programming

Unit Reference Number: CK8/4/WR/002

Level: 4

Credit Value: 9

Minimum Guided Learning Hours: 90

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Be able to design and build the following web pages: a) Home Page b) About Us Page c) Products Page d) Information or Services Page e) Store Front Page f) Contact Us Page	1.1 Describe the latest developments in HTML5 and CSS3
	1.2 Illustrate the role of HTML5 in creating web pages
	1.3 Structure the web pages using the following HTML5 semantic elements: a) <header> b) <footer> c) <nav> d) <section> e) <article> f) <aside> and incorporate an external CSS3 style sheet
	1.4 Test and debug all HTML5 and CSS3 documents
	1.5 Validate both HTML5 and CSS3 documents using the W3C code validators, and make the necessary amendments to ensure 100% conformance with W3C standards
2. Be able to update all web pages so that they are fully responsive to screen and device size.	2.1 Describe proportional layouts and CSS3 media queries
	2.2 Create fluid layouts and scale images in proportion with the viewport size
	2.3 Update a non-responsive web page to a

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		responsive design by implementing a fixed-to-fluid percentage formula for all element sizes
	2.4	Implement CSS3 media queries and ensure suitability for a variety of screen sizes, including: a) widescreen monitors b) laptops c) tablets d) smartphones
	2.5	Carry out checks to ensure all element measurements are percentages of the viewport width to ensure full responsiveness
3. Be able to update all web pages to include HTML5 and CSS3 presentation techniques.	3.1	Incorporate newspaper-style articles describing at least two products
	3.2	Implement a CSS3 transformation effect when the user hovers the mouse over a navigation link
	3.3	Implement text shadowing in section headers and footers and navigation links
	3.4	Implement special effects to include the following: a) linear and radial gradients b) box shadows c) rounded corners d) transitions e) animations
	3.5	Incorporate font families and both serif and cursive generic fonts
	3.6	Include at least one HTML5 list using an image as the list marker, and a table structured with HTML5's new table elements: a) <caption> b) <thead> c) <tbody> d) <col>
	3.7	Implement an HTML5 form in the contact page using the new form elements: a) email b) telephone c) date d) time e) range

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	3.8	Enhance text using the following pseudo elements: a) :before b) :after c) :selection
	3.9	Implement special cursors when the user's mouse moves over input box elements
	3.10	Hide and show elements using the new CSS3 visibility property
4. Be able to organise and optimise all existing CSS3 style sheets.	4.1	Reset all browser default CSS settings
	4.2	Create modular style sheets and link them all into a master style sheet using @import
	4.3	Incorporate comments and headings into all style sheets
	4.4	Optimise each style sheet by incorporating inheritance and shorthand values, and specifying multiple classes
5. Demonstrate an understanding of the functionality of the HTML5 Application Programming Interfaces (APIs).	5.1	Demonstrate a knowledge of the functionality of the following HTML5 APIs: a) Canvas b) Drag & Drop c) Geolocation d) Web Storage e) Multimedia
	5.2	Incorporate at least 2 of the following features into existing web pages: a) A GPS enabled function to show the location of the user or business b) Audio c) Video d) Drag and drop e) Browser data storage f) A canvas-based drawing

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