

# L2 Unit 2: Webpage creation (2010)

## Learning outcomes

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By completing this unit candidates will develop knowledge relating to the planning and creation of a multimedia website that is fit for purpose. Candidates will develop the skills to plan, design and implement a simple website using appropriate software.

They will develop an understanding of common concepts and features relating to the creation of webpages, webpage formatting and website structure.

They will be able to format the pages to create a house style, including creating hyperlinks, tables and forms. Candidates will also develop skills to include interactive elements, where appropriate.

Candidates will be able to:

- design a multimedia website
- create a multimedia website
- create hyperlinks
- create interactive elements
- create a user form for capturing user feedback
- test a website and act on the findings
- evaluate a website they have created.

**It is anticipated that a candidate will require 40 guided learning hours to complete this unit.**

Assessment objectives	Knowledge, understanding and skills
1 Design a multimedia website	<p>Design to include:</p> <ul style="list-style-type: none"><li>• <b>at least five pages</b></li><li>• identified purpose and target audience</li><li>• a site plan for a new website</li><li>• a house style</li><li>• detailed page plans showing the layout of different components and an appropriate navigation system</li></ul> <p>Collect and store suitable components to include, eg: images, text, animations, interactive elements, video, sound</p>

Assessment objectives	Knowledge, understanding and skills
2 Create multimedia webpages	<ul style="list-style-type: none"> <li>• set up suitable <b>folder</b> structure for the website, using sub-<b>folders</b> and appropriate filenames throughout</li> <li>• keep copies of work on a suitable backup device</li> </ul> <p><b>Create multimedia webpages that are fit for purpose</b></p> <ul style="list-style-type: none"> <li>• produce a homepage and at least <b>four</b> other pages</li> <li>• adhere to the chosen house style</li> <li>• insert/import and align text</li> <li>• format text and colour to the chosen house style</li> <li>• set text attributes (size, colour, appearance)</li> <li>• use a range of different components, eg: images, animations, interactive elements, video, sound</li> <li>• optimise components for use on the Internet, eg: file size, download times</li> </ul>
3 Create functioning hyperlinks	<p>Use different types of hyperlink as part of the navigation system, eg:</p> <ul style="list-style-type: none"> <li>• menus</li> <li>• navigation bar</li> <li>• text hyperlink</li> <li>• image hyperlinks</li> <li>• image maps</li> <li>• buttons</li> <li>• hyperlink to email</li> <li>• hyperlinks to external website</li> </ul>
4 Create interactive elements	<p>Interactive elements eg:</p> <ul style="list-style-type: none"> <li>• rollover images</li> <li>• Flash objects</li> <li>• interactive buttons</li> <li>• user controls (for audio, video)</li> </ul>
5 Create a user form for capturing user feedback/ <b>information</b>	<p>Create a form allowing feedback/<b>information</b> to be given either by printing out the form or submitting it online</p> <p>Format of form (<b>using form fields</b>) eg:</p> <ul style="list-style-type: none"> <li>• text boxes</li> <li>• radio buttons</li> <li>• check boxes</li> <li>• drop-down menus</li> <li>• <b>submit button</b></li> </ul> <p>Feedback/<b>information</b> to be collected eg:</p> <ul style="list-style-type: none"> <li>• user experience ie ease of use, opinion of appearance of website, easy to navigate, good use of interactive elements</li> <li>• <b>an order/booking form or membership application</b></li> </ul>

Assessment objectives	Knowledge, understanding and skills
6 Test website	Areas to be tested: <ul style="list-style-type: none"> <li>• navigation system</li> <li>• hyperlinks</li> <li>• use of consistent house style</li> <li>• use of different components</li> <li>• interactive elements</li> <li>• user form</li> <li>• ease of use</li> </ul> Respond to any issues by making necessary changes.
7 Evaluate own website	Consider: <ul style="list-style-type: none"> <li>• quality of website, eg: suitability for purpose and audience, content, readability (use of colour, language), usability (navigation, ease of use) and accessibility (use of ALT tags for images)</li> </ul>

## Assessment

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This unit is centre assessed and externally moderated.

In order to achieve this unit, candidates must produce a portfolio of evidence showing that they have met all of the assessment objectives.

Portfolios of work must be produced independently. They will need to be made available, together with witness statements and any other supporting documentation, to the OCR Visiting Moderator when required.

Centres must confirm to OCR that the evidence produced by candidates is authentic. An OCR Centre Authentication Form is provided in the Centre Handbook and includes a declaration for assessors to sign. It is a requirement of the QCA Common Criteria for all Qualifications that proof of authentication is received.

## Guidance on assessment and evidence requirements

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This unit can be integrated with others. Candidates may wish to enhance their work by the inclusion of other units of work such as creating video, sound, animation, digital imaging and computer graphics. This work will not be assessed as part of this unit. However, the candidate's website work may be used to display work from other units; in which case, the website must be saved, presented/printed accordingly.

Where the term HTML is used variants thereof (XHTML, asp, XML etc) are also acceptable.

The use of web-authoring software should be encouraged, or HTML coding. It is not appropriate to produce this work using desktop publishing or word-processing software and simply saving the final products as HTML.

The assessment objectives (AOs) must be assessed separately, however they might not be carried out separately in discrete units of work.

For Assessment Objective 1 candidates are likely to enjoy this unit if they are interested in the subject matter; therefore, they are required to design their own website, which may be based on their own area of interest or suggestions from the tutor. The proposal for the new website must have an identified purpose and target audience defined by the candidate. The basic site plan must show all pages and a possible navigation system. The house style, which must be more than just the use of a logo on each web page, should cover areas such as the colour scheme and position of different components, including the navigation system. The page plans will show a varying amount of detail which will assist in determining the grade awarded for this AO.

Candidates are required to source and store relevant material for their own website. Some components may be provided. It is acceptable for multimedia components to be downloaded from the internet for use on their website, but there is no requirement for candidates to provide information about their sources for this AO. They may also create components themselves; using skills they already have or have learned as part of other units. Evidence of a suitable location for storage of website components is required for AO2.

For Assessment Objective 2 candidates need to set up a suitable folder structure for the website. Folders and files should have suitable names. For example, for higher grades the home page should be given the filename "index". Candidates should produce a homepage and at least four other pages using a consistent house style. To ensure consistency of layout candidates may use tables or other suitable methods as appropriate. Web pages should include a variety of multimedia components, including as a minimum text and images. Text used on the web pages should be checked for accuracy - proofreading and correcting their work, so that mistakes are minimised. This will be evidenced through the web pages themselves. For Distinction, styles will be defined and used for text elements rather than formatting each block of text individually. It is not necessary for such styles to be defined as part of a cascading stylesheet (css), however candidates may choose to use this method if they wish.

Images must be suitable for purpose, and for higher grades must be optimised for use on a website. For Distinction some explanation is required for why optimisation is necessary for the images used on the web site. If images are sourced from an existing website and/or are already optimised using suitable file sizes and types, there is no need for further adjustment, however this should be explained by higher level candidates.

Navigation to all web pages must be evident. For higher grades the web pages should be backed up onto a suitable storage device.

For Assessment Objective 3 a range of hyperlinks should be included as part of the navigation system. For Pass all web pages will be accessible using links on the pages without having to use the "back" button. For higher grades the navigation system must be used consistently on all web pages, making them all accessible from the home page. For Distinction, an image map must be included. An image map is an image that has been divided into regions/sections or hotspots. When a hotspot is clicked an action occurs – for example a new web page opens.

For Assessment Objective 4, at Pass level, at least one interactive element needs to be included, which could be downloaded from the internet or created by the candidate. Hyperlinks are assessed in AO3, they do not count as "further interactive elements". "Interactive elements" could be rollover images, interactive buttons or other interactive elements such as controls/mouseovers/clicks for running video, audio or animation. For Merit/Distinction candidates should use an appropriate range of different types of interactive elements, including some created by themselves using appropriate software. If paper-based evidence is provided, all interactive

elements and hyperlinks must be identified by the candidate on the printouts. Electronic evidence may be more suitable for assessment and moderation of this Assessment Objective.

For Assessment Objective 5 for Pass level students this can be a form to be printed out that indicates where text should be entered, completed and sent through the post. The form may be to provide feedback about the website or could be for some other purpose, for example an order/booking form or membership application. For higher levels the form will require a variety of different response types – and for Distinction these will make use of form fields – eg. response types using radio buttons, check boxes, drop down lists, scrolling text boxes.

For Merit, candidates should create a form that has been set up to be submitted online; though it is not necessary that the form functions in this way. For Distinction the form should be capable of functioning. For the form to work, at Distinction level, there must be some code behind the “submit” button, to direct the responses to an email address. It is not expected that the website will be hosted, but the form should be set up so that, if the site were hosted, it would work. For

Assessment Objective 6 the website should be tested covering a range of different areas. For Pass all external and internal hyperlinks, including the navigation system must be tested, and any broken or faulty links fixed. For higher grades testing should include most or all areas (as stated in the KUS) of the website. For Distinction candidates will explain how their website meets its intended purpose and is suitable for the identified target audience. Higher level candidates will action changes to solve problems if appropriate. They can then include annotated code or screenshots to demonstrate this taking place, there is no need to provide step-by-step evidence; before and after evidence to exemplify the changes is all that is required. In cases where candidates carry out testing as they create the website, some evidence of improvements made during the development will be sufficient to evidence this part of this AO.

For Assessment Objective 7 candidates must produce an evaluation of their website. For Pass the evaluation must cover suitability for purpose and audience. Examples taken from the candidate’s website will be used to support their comments. For Merit the evaluation will also include readability (eg the choice of font and font size, colour, language). For Distinction usability (eg navigation and ease of use) and accessibility (eg issues with screen readers and nested tables, use of ALT tags for images) will also be covered. Readability, usability and accessibility are technical terms that need specific consideration. At the time of publication, [www.webcredible.com](http://www.webcredible.com) provides a useful resource for teachers and students on these topics. It has a search facility which brings up articles on each of these issues.

An OCR model assignment is available for this unit and can be downloaded from our website: [www.ocr.org.uk](http://www.ocr.org.uk).

## Mapping to national occupational standards

The mapping in the table below provides an indication of where evidence might be available for assessment against some of the knowledge and understanding contained in the national occupational standards (NOS). It does not claim to guarantee that evidence will meet the NOS.

Occupational standards	Unit number	Title
IT Users (e-skills UK)	WEB2	Website software Level 2
IT Users 2009 (e-skills UK)	WS:B	Website software
IT Users 2009 (e-skills UK)	MM:B	Multimedia software
IT Users (e-skills UK)	WP2	Word processing software Level 2
IT Users 2009 (e-skills UK)	WP:B	Word processing software
IT Users 2009 (e-skills UK)	ISF:FS:B	IT software fundamentals
IT Users 2009 (e-skills UK)	IPU: B	Improving productivity using IT
IT Users 2009 (e-skills UK)	ICF: B	FS IT communication fundamentals
IT Practitioners and Professionals (e-skills UK)	ICTTEST	Testing ICT systems Level 2

## Signposting to functional skills

✓ The unit contains opportunities for developing Functional Skills.

Functional Skills Standards			
English		Mathematics	ICT
Speaking and Listening		Representing	Use ICT systems ✓
Reading	✓	Analysing	Find and select information ✓
Writing	✓	Interpreting	Develop, present and communicate information ✓

## Resources

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This section provides suggestions of suitable resources. The list is neither prescriptive nor exhaustive, and candidates should be encouraged to gather information from a variety of sources.

Some suggested resources are intended for Tutor use. The resources in this section were current at the time of production.

### Books

Bowman & Jones	<i>OCR National Level 2 in ICT Student Book with Dynamic Learning CD-ROM</i> Hodder Arnold. ISBN: 9780340942017, ISBN-10: 0340942010
North West Learning Grid	<i>OCR Nationals in IT (ICT)</i> North West Learning Grid
Manson, Graham et al (2007)	<i>OCR Level 2 National Certificate in ICT Student Book</i> Payne-Gallway
Thomas Telford Online	<i>OCR Nationals in ICT</i> Thomas Telford Online
@tain online curriculum resources	<i>OCR Nationals in ICT</i> <i>@tain at Brooke Weston City Technology College</i>

### Websites

*Web style guide.* URL: <http://www.webstyleguide.com>  
This site provides information for web developers about how to standardise the appearance of a website.

*W3 Schools* URL: <http://www.w3schools.com/html/default.asp>  
Provides full web building tutorials.

*Web page design* URL: [http://www.edselect.com/web\\_page\\_design.htm](http://www.edselect.com/web_page_design.htm)  
Provides tutorials in web page design and creation.

*Dreamweaver tutorials* URL: <http://www.adobe.com/devnet/dreamweaver>  
This site provides tutorials for using Adobe Dreamweaver CS4 software.

## Grading

Assessment Objective	Pass	Merit	Distinction
<p><b>AO1</b> Design a multimedia website</p>	<p>Candidates will produce a proposal for a website. This will include some details of purpose and target audience.</p> <p>Candidates will source and store components to use in their website.</p> <p>They will produce a site plan, basic house style and simple page plans for five web pages showing a possible link system between them.</p> <p>The page plans may not always be accurate.</p>	<p>Candidates will produce a proposal for a website. This will include details of purpose and target audience.</p> <p>Candidates will source and store components to use in their website.</p> <p>They will produce a site plan, a suitable house style and page plans for at least five web pages showing a clear navigation structure and showing the position and details of most components (eg images, text, animations, interactive elements, video, sound).</p>	<p>Candidates will produce a proposal for a website. This will include details of purpose and target audience.</p> <p>Candidates will source and store components to use in their website.</p> <p>They will produce a site plan, a detailed house style and page plans for at least five web pages showing a clear navigation structure and showing the position and details of all components (eg images, text, animations, interactive elements, video, sound).</p>
<p><b>AO2</b> Create multimedia webpages</p>	<p>Candidates will show basic competence in producing web pages containing text and images.</p> <p>There may be errors in the text, but meaning will be clear.</p> <p>Images must be suitable for purpose.</p> <p>A method of navigation to all pages must be evident.</p> <p>Candidates will provide evidence showing a basic folder structure although folder and filenames may not always be suitable.</p>	<p>Candidates will produce web pages containing text and images. There will be consistency to the layout and house style of the web pages, although there may be some exceptions.</p> <p>Meaning of text will be clear but there may be some errors.</p> <p>A range of suitable images will be evident. Image optimisation will be evidenced by showing that image size has been altered for some image files. Images will be of good quality and scaled in proportion.</p> <p>A method of navigation to all pages must be evident.</p> <p style="text-align: right;">continued</p>	<p>Candidates will produce web pages containing text and images. There will be consistency to the layout and house style of the web pages. Styles will be consistently applied to text used on the web pages.</p> <p>Meaning of text will be clear and there will be minimal textual errors.</p> <p>A range of suitable images will be evident. Image optimisation will be evidenced by showing that image size has been altered for image files as appropriate. An explanation of the need for their images to be optimised will be given. Images will be of good quality and scaled in proportion.</p> <p style="text-align: right;">continued</p>

Assessment Objective	Pass	Merit	Distinction
		<p>Candidates will provide evidence of a suitable folder structure. Folder and filenames will be suitable for purpose.</p> <p>Some backup procedures will be evidenced.</p>	<p>An effective method of navigation to all pages must be evident.</p> <p>Candidates will provide evidence of a suitable folder structure. Folder and filenames will be suitable for purpose.</p> <p>Full back up procedures will be evidenced.</p>
<p><b>AO3</b> Create functioning hyperlinks</p>	<p>Candidates will link together all pages. Linking methods may not be consistent and may lack structure.</p> <p>At least one link to an external website will be included.</p>	<p>Candidates will link together all pages, Linking methods should be consistent and will allow the user to access all web pages from the home page, and show a clear structure.</p> <p>At least one link to an external website and at least one email link will be included.</p>	<p>Candidates will link together all pages. The method of navigation is consistently placed on all pages to create a fully functioning hyperlink system. Linking methods should show a well-structured approach.</p> <p>At least one link to an external website, an email link and an image map will be included.</p>
<p><b>AO4</b> Include interactive elements</p>	<p>Candidates will include at least one interactive element in their website.</p>	<p>Candidates will include at least two different types of interactive elements in their website. At least one will be a rollover button or image.</p>	<p>Candidates will include at least three different types of interactive elements in their website. At least one will be a rollover button or image. At least two of the interactive elements will be created by themselves using appropriate software</p> <p>A consistent approach should be adopted where interactive elements are used.</p>
<p><b>AO5</b> Create a user form for capturing user information or feedback</p>	<p>Candidates will create a simple form that can be printed out for the user to fill in to give some information or feedback.</p> <p>The layout of the form might not be appropriate.</p>	<p>Candidates create a user form using at least one form field to gather information or feedback that the user can fill in and would be able to submit using a 'submit' button.</p> <p>The form will be mainly well laid out and easy to use.</p>	<p>Candidates create a well-designed user form using a range of different form fields to gather information or feedback that the user can fill in and would be able to submit using a 'submit' button.</p> <p>The form will work as intended and will be well laid out and easy to use.</p>

Assessment Objective	Pass	Merit	Distinction
<p><b>AO6</b> Test website</p>	<p>Candidates will provide evidence of testing their website, ensuring that all internal and external hyperlinks and navigation system work effectively. Any broken and/or faulty links will be fixed.</p>	<p>Candidates will provide evidence of testing their website, ensuring that all internal and external hyperlinks and navigation system work effectively. Any broken and/or faulty links will be fixed.</p> <p>Further tests will cover most of the main areas of their website and will be appropriate.</p>	<p>Candidates will provide evidence of testing their website, ensuring that all internal and external hyperlinks and navigation system work effectively. Any broken and/or faulty links will be fixed.</p> <p>Further tests will cover all of the main areas of their website and will be appropriate.</p> <p>Candidates will use the tests to identify any action that is required to solve any problems identified. For the tests carried out, candidates will provide annotated code or screen shots highlighting before and after changes where appropriate.</p>
<p><b>AO7</b> Evaluate own website</p>	<p>Candidates will produce a evaluation of their website. This will cover: suitability of the website for purpose and audience (as identified by the candidate). Candidates will support their comments with examples taken from their website.</p>	<p>Candidates will produce a evaluation of their website. This will cover: suitability of the website for purpose and audience (as identified by the candidate), and readability.</p> <p>Candidates will support their comments with examples taken from their website.</p>	<p>Candidates will produce an evaluation of their website. This will cover: suitability of the website for purpose and audience (as identified by the candidate), readability, usability and accessibility.</p> <p>Candidates will support their comments with examples taken from their website.</p>