

<b>UAN:</b>	<b>Y/502/4632</b>
<b>Level:</b>	3
<b>Credit value:</b>	5
<b>GLH:</b>	40
<b>Relationship to NOS:</b>	This unit is linked to the Level 3 National Occupational Standards for IT users devised by e-Skills UK (Sector Skills Council for ICT).
<b>Endorsement by a sector or regulatory body:</b>	This unit is endorsed by e-Skills UK, the Sector Skills Council for ICT.
<b>Aim:</b>	<p>This unit is about the ability to use a software application designed for planning, designing and building websites.</p> <p>On completion of this unit a candidate should be able to select and use a range of advanced website software tools and techniques to develop multiple-page websites with multimedia and interactive features.</p> <p>Website software tools and techniques will be defined as 'advanced' because:</p> <ul style="list-style-type: none"> <li>• the software tools and functions used will be complex and at times involve having the idea that there may be a tool or function to do something (eg improve efficiency or create an effect), exploring technical support, self-teaching and applying;</li> <li>• the development techniques will be complex, and will involve research, identification and application; and</li> <li>• the user will take full responsibility for planning and developing the structure, inputting, manipulating, adding multimedia or interactive features, uploading and publishing the information.</li> </ul> <p><b>Examples of context:</b> Shopping website linked to product information and stock control database.</p>

<b>Learning outcome</b>
The learner will: 1. create structures and styles and use them to produce websites
<b>Assessment criteria</b>
The learner can: 1.1 determine what website content and layout will be needed for each page and for the site 1.2 plan and create web page templates to layout content 1.3 select and use website features and structures to enhance website navigation and functionality 1.4 create, select and use styles to enhance website consistency and readability 1.5 provide guidance on laws, guidelines and constraints that affect the content and use of websites 1.6 explain what access issues may need to be taken into account 1.7 explain when and why to use different file types for saving content 1.8 store and retrieve files effectively, in line with local guidelines and conventions where available.

<b>Learning outcome</b>
The learner will: 2. select and use website software tools and features to develop multiple page websites with multimedia and interactive features
<b>Assessment criteria</b>
The learner can: 2.1 prepare content for web pages so that it is ready for editing and formatting 2.2 organise and combine information needed for web pages in line with any copyright constraints, including across different software 2.3 select and use appropriate editing and formatting techniques to aid meaning 2.4 select and use appropriate programming and development techniques to add features and enhance websites 2.5 select and use file formats that make information easier to download 2.6 check web pages meet needs, using IT tools and making corrections as necessary.

<b>Learning outcome</b>
The learner will: 3. publish and test multiple page websites with multimedia and interactive features
<b>Assessment criteria</b>
The learner can: 3.1 select and use appropriate testing methods to check that all elements and features of complex websites are working as planned

- 3.2 identify any quality problems with websites and explain how to respond to them
- 3.3 select and use an appropriate programme to upload and publish the website and make sure that it will download efficiently
- 3.4 respond appropriately to quality problems with websites to ensure outcomes are fit for purpose.

# Unit 311 Website software

## Supporting information

### Guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

### Learning outcome

#### 1. Create structures and styles and use them to produce websites

The learner should be able to and understand:

#### Content and layout:

- Web page content and layout will vary according to the template, but may include:
  - text (eg body text, headings, captions)
  - images (eg still photographs, diagrams)
  - numbers (eg tables, charts or graphs)
  - background (eg colours, gradients, patterns, textures)
  - structure (eg frames, side bars)
  - moving images (eg animation, video clips)
  - sound (eg clips linked to navigation, background music, video sound track)
  - interactive components (eg message boards, forms, e-mail links, registration log-ins)
  - down loads (eg pdf files, pod casts)

#### Constraints affecting websites:

- Effect of copyright law (eg on music downloads or use of other people's images)
- Acknowledgment of sources, avoiding plagiarism, provisions of the Data Protection Act; accessibility standards, IPR

#### Website features:

- Web page features will vary, but may include:
  - navigation (eg action buttons, links, hot spots, menus, hyperlinks, pop-ups)
  - multimedia (eg animation, sound linked to actions, video clips, sound track)
  - interactive (eg message boards, forms, downloads, pod casts, e-mail links, registration log-ins)
  - e-commerce facilities

#### Website access issues:

- The difficulties different users may have in accessing websites
- Accessibility guidelines, ways to increase accessibility

- Effect of download speeds (eg from different browser software, connection type, size of web page contents), ways to improve download speeds
- Ways to improve search engine results

### **Web page templates:**

- Web page content and layout will vary according to the template, but may include:
  - text (eg body text, headings, captions)
  - images (eg still photographs, diagrams)
  - numbers (eg tables, charts or graphs)
  - background (eg colours, gradients, patterns, textures)
  - structure (eg frames, side bars)
  - moving images (eg animation, video clips)
  - sound (eg clips linked to navigation, background music, video sound track)
  - interactive components (eg message boards, database fields, forms, e-mail links, registration log-ins)
  - downloads (eg pdf files, podcasts)

### **Web page styles:**

- Styles will vary according to the different elements of the website design, but may include:
  - typeface (eg font, colour, size and alignment of headings, captions or body text)
  - lines (eg type, thickness and colour of borders, tables, diagrams)
  - structure (eg size of frames, number of tabs, format of menu)
  - cascading style sheets

### **File types:**

- Text (eg rtf, doc, pdf), images (eg jpeg, tiff, psd), charts and graphs (eg xls), sound (eg wav, MP3)

### **Store and retrieve:**

- Files (eg create, name, open, save, save as, print, close, find, share)
- Version control; import/export
- File size; folders (eg create, name)

## **Learning outcome**

### **2. Select and use website software tools and features to develop multiple page websites with multimedia and interactive features**

The learner should be able to and understand:

#### **Combine information:**

- Combine images with sound (eg dub or overlay sound track onto film sequence; integrate a audio or video sequence with another application):
  - Techniques: copy and paste, insert, screen grabs/shots
  - File download (eg connect USB lead, drag and drop), file transfer protocol (FTP)
  - Forms of information: moving images, sound; pre-recorded, live, web-streaming

**Editing techniques:**

- Editing techniques will vary in line with the type of information, for example:
  - select, copy, cut, paste, undo, redo, drag and drop, find, replace, size, crop, position, change templates

**Programming and development techniques:**

- Creating links to bookmark text within a page, linking web pages together, adding a link to another website
- Altering simple code using programming language, creating code using an appropriate programming language
- Adding multimedia content to web pages
- Setting up a secure area, message board or e-mail link
- Adding meta tags

**File formats:**

- Change format of documents to RTF or HTML

**Check web pages:**

- **Using help:** Will vary depending on the content but may include, for example:
  - Text: spell check; grammar check, type face and size, hyphenation
  - Layout: page layout, margins, line and page breaks, tables, sections
  - Images: size, alignment and orientation, suitability of file format, appropriate choice of colour mode and use of filters, fitness for purpose of image resolution

**Learning outcome****3. Publish and test multiple page websites with multimedia and interactive features**

The learner should be able to and understand:

**Testing methods:**

- Methods will vary but may include:
  - viewing web pages using browser software
  - testing navigation round pages within multiple page website
  - testing external links
  - testing multi-media and interactive elements

**Quality problems with websites:**

- Problems may vary, but could include:
  - content that is not appropriate for the template or missing
  - text that is not readable or missing
  - images that are oriented or sized wrongly
  - navigation that does not work as planned
  - multimedia features (eg sound levels, image resolution, synchronisation of sound and images)
  - interactive features (eg response to posting a message or when key fields on forms are not completed, downloads not active)

**Upload and publish website:**

- Upload content to a template
- Use file exchange programme to upload and publish (eg FTP or HTTP)
- Improve loading speed of a website

Submit to search engines