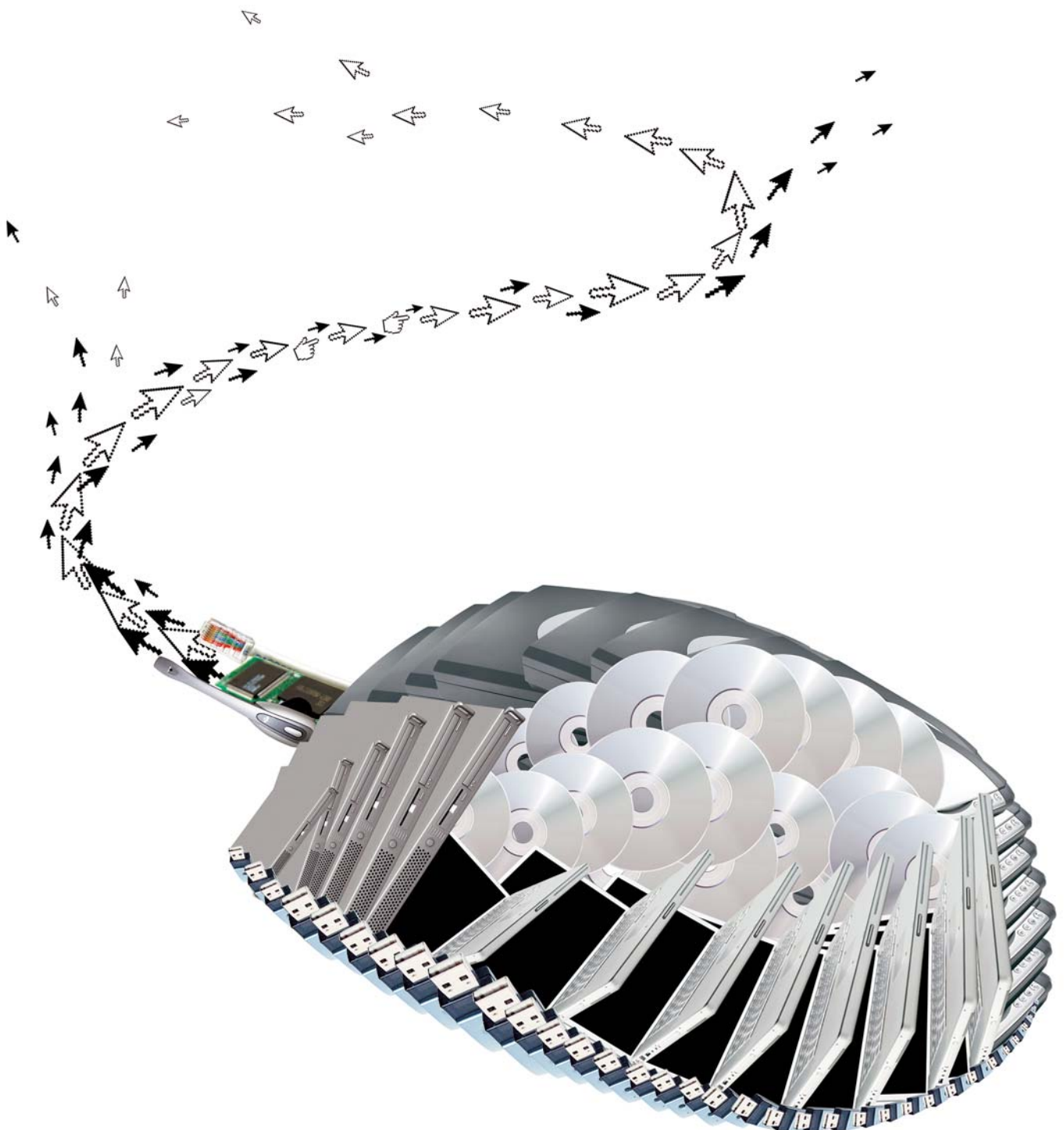


IT

Unit 5: Multimedia and digital projects

Unit 6: Making projects successful



IT

Level 3 Unit 5: Multimedia and digital projects

Level 3 Unit 6: Making projects successful

Sample scheme of work

This is an example of a possible scheme of work. You can use it as it is, adjust it or extract content to create a scheme of work to suit your delivery needs. It can also be adjusted by adding theory workshops to support learners who have/need additional learning time.

Total GLH	180
Aim	<p>The purpose of Unit 5 is to provide learners with the opportunity to develop a multimedia product and, in so doing, consider the business issues that drive its inception, design and implementation. It will enable learners to develop contemporary digital media solutions to meet specific business needs. They will need to follow a structured set of activities, following the systems life cycle, from identification of the client's needs, through analysis, and leading to the design and development of a creative multimedia product embedded into a website of at least four pages that they have created. Learners will be able to:</p> <ul style="list-style-type: none"> • understand different types of digital media and how they are developed and used by businesses • design, develop, test and implement digital and interactive multimedia products to communicate with a defined audience and to meet a particular business purpose • review and evaluate the effectiveness of multimedia and digital products, and identify potential improvements. <p>The purpose of Unit 6 is to introduce learners to the principles of project planning and management within the systems life cycle and their use in organisations. Learners will plan and manage projects, including those for technology-enabled business solutions, using industry standard software and techniques. Learners will be able to:</p> <ul style="list-style-type: none"> • understand the principles of project planning and management, and the key factors in the success and failure of projects • effectively plan and manage projects to meet the business need and project objectives using industry standard approaches • assess risks, evaluate project progress and success and adapt or improve project plans accordingly.

<p>Notes</p>	<p>Units 5 and 6 are both assessed internally, through the production of a portfolio of evidence, including the multimedia assignment (Unit 5) and management of the project (Unit 6).</p> <p>The AQA–City & Guilds Assessment Guidance document, which can be found at www.diplomainfo.org.uk/documents/IT_Advanced_Diploma_-_Assessment_Guidance.pdf, explains the requirements of these two units and how they can be linked together.</p> <p>This unit builds on skills acquired through the study of Level 2 Unit 6: Multimedia, but whereas at Level 2, learners will have looked at digital media for entertainment and communication, they should now be concentrating on other business areas where these products are used, such as education or marketing, and their choice of project should reflect this emphasis.</p> <p>The Craven College Website Project exemplar project provided by AQA–City& Guilds has been used extensively in this scheme, and can be found at www.diplomainfo.org.uk/IT-Internal-SAMs.asp, under units 5 and 6. The Marking Grids are at the bottom of this web page too, and these must be used by teachers when assessing the work. See also the Instructions on the use of Marking Grids.</p> <p>Teachers should also ensure they are familiar with the advice and ground rules for internal assessment, which can be found in Section 4 of the AQA City & Guilds Principal Learning Specification www.diplomainfo.org.uk/documents/IT_Level_3_Principal_Learning.pdf</p> <p>Under FS (functional skills):</p> <p>* indicates opportunities for assessment in English of speaking and listening and/or written communication + indicates opportunities for use of functional mathematics</p> <p>Colour coding:</p> <p><u>Rows in this colour are mainly for Unit 5</u></p> <p>Rows in this colour are mainly for Unit 6</p> <p>Rows with no colour combine work for both units</p>

Topic	Activities, assignments, assessments, resources	LO and AC	PLTS	FS	GLH	Other comments
1 Introduction to the units and assessment	<p>In a presentation, the teacher should explain the content of the two units and joint assessment. Ask learners if they have any questions.</p> <p>Show examples of the type of project to be undertaken – a website with an interactive multimedia product embedded in it.</p> <p>The Craven College Website Project (AQA–City & Guilds example) covers the two units, but it would be useful to show other websites that have a business purpose and include multimedia elements, eg www.getbodysmart.com/</p> <p>Conduct an activity to analyse the items that will need to be created for such a project:</p> <ul style="list-style-type: none"> • Website • Still images • Sound clips • Video images • An interactive multimedia product <p>Then suggest what hardware and software could be used and is available. Check whether learners have used any of it before.</p>	Units 5 and 6, all AC			2	Links to Unit 1: The potential of technology. Links to Unit 3: Professional development.
2 The systems life cycle and overview of running a project	<p>Present an overview of the systems life cycle, and where the planning and running of the project fits in.</p> <p>Explain the project phases and divide the project into tasks and sub-tasks.</p> <p>In a class discussion, examine why projects are often allocated to a team. Discuss team characteristics.</p>	Unit 6 AC1a, b			2	The systems life cycle and different models are covered in more detail in Unit 3.

<p>3 Identify key factors in the success or failure of projects</p>	<p>Learners should identify projects they have undertaken before, both alone and in teams, and say whether they were successful, ie met objectives on time.</p> <p>Learners should use websites, eg www.jiscinfonet.ac.uk/infokits/project-management www.jiscinfonet.ac.uk/infokits/project-management/prince2.pdf to find:</p> <ul style="list-style-type: none"> • examples of projects that failed and why • ways to ensure project success • effective project planning • risk assessment • project management and the role of project manager • structured processes used to develop multimedia products. <p>Learners should make notes for use in their assignment later.</p>	<p>Unit 5 AC2a Unit 6 AC1b</p>	<p>IE</p>		<p>2</p>	<p>Links to Unit 3 (risks).</p>
<p>4 Introduce practice assignment</p>	<p>Introduce a practice assignment case study, where a user needs a website with multimedia elements. An example is given on page 71 of the specification.</p> <p>The class will use this case study to try out all the skills required in these two units, before attempting a project for a real business client.</p> <p>Allocate teams and decide on roles in the teams. In their team meetings learners should make a list of tasks for the project.</p> <p>One learner needs to write minutes to record the decisions made.</p>	<p>Unit 6 AC2a</p>	<p>TW EP</p>	<p>*</p>	<p>2</p>	

<p>5 Project planning software</p>	<p>Industry standard software should be used, such as Microsoft Project. Video tutorials are available on YouTube. Learners will be introduced to the software, and try using it to set up:</p> <ul style="list-style-type: none"> • a high level plan for the whole case study • a detailed plan for the first few tasks of the case study. <p>The Craven College example plan could be used as a guide.</p>	<p>Unit 6 AC1a AC2a</p>			<p>2</p>	
<p>6 Project planning (continued)</p>	<p>Learners should use websites such as www.jiscinfonet.ac.uk/infokits/project-management www.jiscinfonet.ac.uk/infokits/project-management/prince2.pdf www.jiscinfonet.ac.uk/InfoKits/risk-management/index.html to find out the meaning of the following, and how they are done:</p> <ul style="list-style-type: none"> • Stakeholder analysis • Scope definition • Task breakdown and resource allocation • Estimation of timescales • Definition of dependencies • Critical paths • Estimation of costs • Risk assessment • Monitoring, reporting and closure mechanisms <p>Learners should make notes for use in their assignment later. This could be done in teams.</p> <p>The teacher should demonstrate:</p> <ul style="list-style-type: none"> • how the software can show different tasks, dependencies and critical path • how to use the plan for monitoring and reporting • how to adjust the plan as tasks are completed. <p>Class plenary to compare findings and ensure that everyone has the key points.</p>	<p>Unit 6 AC1a</p>	<p>IE TW</p>		<p>2</p>	<p>Links to Unit 3.</p>

<p>7 Assessed work</p> <p>Different types of digital media products</p>	<p>Learners should use the internet to investigate at least three digital media products:</p> <ul style="list-style-type: none"> • Still images • Sound files • Video files • Animation including software such as Macromedia Flash, which can be used to create timeline-based animations <p><i>Assessed task</i> Learners must create a document explaining different multimedia file types with advantages and disadvantages, referring also to their use in websites.</p>	<p>Unit 5 AC1a</p>	<p>IE</p>	<p>*</p>	<p>3</p>	
<p>8 Assessed work</p> <p>Use of different types of digital media products in websites to meet different business needs</p>	<p>Learners must assess the different websites they have found, which use different types of digital media products.</p> <p><i>Assessed task</i> Describe the websites analysed in terms of:</p> <ul style="list-style-type: none"> • intended audience • purpose • how different types of digital media are used to meet identified client and audience needs • Quality and load time of the digital media products • HCI and usability. 	<p>Unit 5 AC1a, b</p>	<p>IE</p>		<p>2</p>	
<p>9 Continuing practice assignment</p> <p>Relate types of digital media products to case study client's needs</p>	<p>The teams should meet to discuss the different digital media products identified in the previous activity, and decide which three would best meet the client's needs and audience for the case study.</p> <p>Learners should write up the minutes of the meeting, including decisions made with reasons.</p>	<p>Unit 5 AC1b Unit 6 AC2b</p>	<p>TW EP CT</p>	<p>*</p>	<p>1</p>	

10 Risk assessment	<p>In teams, with guidance from the teacher, learners must identify risks for the case study project and create a risk register. The Craven College example risk register could be used as a guide.</p>	Unit 6 AC3b	TW		1	
11 Designing the website including multimedia products for the case study	<p>Using the information in the case study and with guidance from the teacher, teams must decide on the content of their website, which must:</p> <ul style="list-style-type: none"> • contain at least four pages • include images and sounds created or captured by the learner • include animations created using software such as Flash • include multimedia elements to create functioning internal and external links • include sufficient content to allow each member of the team to create each type of multimedia product. <p>Learners must record any decisions made, and explain why each element is appropriate to the client's requirements.</p> <p>Present an introduction on how to create storyboards. The team must then create the initial storyboard for the website.</p> <p>Present an introduction on how to create a site map for a website. The team must then create the initial site map for their website.</p> <p>Teams should update their project plans.</p>	Unit 5 AC1b Unit 6 AC2b, c	TW EP CT		6	
12 Capturing and editing still images	<p>Learners should practise using digital cameras, trying out the different settings available.</p> <p>Learners will take photos with digital cameras, suitable for their web pages.</p> <p>Learners should practise using image editing software and compression. They should consider the quality and size of file. They must prepare photos for inclusion in the website.</p>	Unit 5 AC2d			3	

13 Capturing and editing sound	<p>Learners should practise using recording equipment, trying out the different settings available. The equipment could be mobile devices or on PC, eg using Audacity (download from http://audacity.sourceforge.net/) and use the some of the tutorials on the Help area of the site and/or video tutorials from YouTube.</p> <p>Learners will record sound clips, suitable for their web pages.</p> <p>Learners should practise using audio editing software, eg Audacity, and prepare sound clips for inclusion in the website.</p>	Unit 5 AC2d		4	
14 Capturing and editing video images	<p>Learners should practise using digital video cameras, trying out the different settings available.</p> <p>Learners will record films with digital video cameras, suitable for their web pages.</p> <p>Learners should practise using video editing software such as Windows Movie Maker. They should consider the quality and size of file.</p> <p>Learners must prepare short videos for inclusion in their website.</p>	Unit 5 AC2d		4	
15 Create web pages	<p>Give instructions on how to use web creation software. Tutorials from the internet, eg www.guidesandtutorials.com/index.html, may be helpful.</p> <p>Create an outline of pages, dividing the work up between team members.</p>	Unit 5 AC2b		4	
16 Check HCI	<p>Teams must show their websites so far to the class and comment on the HCI of the other teams' websites.</p> <p>Follow with team meetings where learners could discuss the views of others and decide on any changes. Divide up tasks and implement changes.</p>	Unit 5 AC2b	EP	2	

17 Create animations	<p>Give instructions on using animation software such as Macromedia Flash. Include the use of a timeline, so that key frames can be identified and used to synchronise the different layers containing sound, video and graphics. Interactivity will be needed as well.</p> <p>Once they know what is possible, learners can design their animated products, producing detailed storyboards and layout designs for the multimedia product to be included in the practice project. The designs must pay attention to usability and include interactive elements.</p> <p>Each member of the team should produce one animation.</p>	Unit 5 AC2b	SM		15	
18 Test plan for animations	<p>Conduct a class session on testing, and how to write a test plan. The Craven College example could be used but note that more is required for full marks.</p> <p>Each learner should create a test strategy and a detailed test plan to test every element of his/her multimedia product. User testing and audience testing should be included.</p>	Unit 5 AC2f			4	
19 Testing the product	<p>Using their test plans, learners should run all the tests and record results.</p> <p>Other team members could take the part of user and audience for the case study.</p>	Unit 5 AC2g			4	
20 Putting the case study website together	<p>Teams should incorporate all multimedia elements into the website and combine their pages, linking them all together.</p>	Unit 5 AC2e	TW		6	
21 Test plan for website	<p>As a team, learners should devise a test strategy and a detailed test plan to test every element of the website for functionality, operability and accessibility, including integration of the multimedia element. A range of platforms should be used to ensure the product will display in different user situations.</p>	Unit 5 AC2f	TW		3	

22 Testing the website	Learners must test the completed website using their test plans, and record the results of all the tests.	Unit 5 AC2g, i			4	
23 Produce evidence of understanding and complying with copyright and other legislation in the completed multimedia product and website	<p>Learners could investigate laws relating to the content of websites, in small groups, and each group could produce a factsheet on one aspect, to share with the class. Learners will then check their own work to ensure it is within the law.</p> <p>Useful links include:</p> <p>Copyright: www.out-law.com/page-5633</p> <p>Information on the DDA and accessibility is available, eg on www.webcredible.co.uk/user-friendly-resources/web-accessibility/uk-website-legal-requirements.shtml and www.w3.org/TR/WCAG20/</p> <p>Learners could use some of the checking tools available on the internet to test sites for accessibility.</p>		IE TW	*	4	
24 User guide	<p>Introduce the type of user guide required. The guide must be focused on how the business user can make changes to the product, rather than how to view pages and elements. If the Craven College example is used, the commentary should be noted.</p> <p>The guide must contain:</p> <ul style="list-style-type: none"> • instructions for changing multimedia product • instructions for updating and improving the website and for uploading to the internet • a description of the relationship between the tools used and the underlying HTML in order to deliver the solution. <p>Each learner will produce a section of the guide – the full guide is not needed for this practice project.</p>	Unit 5 AC2b, h	TW	*	5	

25 Obtaining feedback on the effectiveness of multimedia and digital products	<p>Learners must design a questionnaire to obtain feedback on their multimedia products, from the client or the audience, including references to the original client requirements and business needs, and the effectiveness of the product.</p> <p>For the case study, other learners or the teacher could take on the role of client or audience and provide answers to the questions.</p>	Unit 5 AC3a, b	EP		4	
26 Potential opportunities for improvement	<p>Learners should use the feedback to evaluate their product and identify at least two improvements that could be made to the multimedia and digital products.</p> <p>Learners should reflect on and evaluate their own performance and the team performance, including project planning.</p> <p>They should list the potential opportunities for improvement, and the action required.</p>	Unit 5 AC3c, d Unit 6 AC3a	RL		2	
27 Review risks	<p>In teams, review risk registers previously created and discuss:</p> <ul style="list-style-type: none"> • whether any of the risks happened • whether the mitigation identified worked • any other risks that were not originally identified. 	Unit 6 AC3b, c	TW		2	
28 Estimating costs	<p>In a class session, identify costs for the case study, eg software, consultancy fees, purchase of domain.</p> <p>Ask learners to estimate some of the costs for the case study.</p>	Unit 6 AC1a		+	2	Links to Unit 3.

<p>29 Introduce the assessment task: Assignment to design and create interactive multimedia and website products</p>	<p>The rest of the course will be devoted to the assessment task, which will enable all criteria to be met except Unit 5 AC1 (already done).</p> <p>See Guidance for Delivery on page 68 of the specification. Suitable project ideas are suggested on page 69.</p> <p>The projects will be carried out in teams, but each learner must create his or her own content to fulfil every criterion (see page 100 of the specification).</p> <p>Allocate teams, encouraging learners to take on different roles from before. Each team must identify a client and project.</p> <p>Introduce the concept of organisation charts or organograms.</p> <p><i>Assessed task</i></p> <p>Individually, learners must create a project organisation chart or organogram for the team. It should be annotated clearly to identify roles, functions and responsibilities of individuals, and in particular the project manager. Learners should add a description of their own role in the project.</p>	<p>Unit 5 AC1b Unit 6 AC1a</p>			<p>3</p>	
<p>30 High level project planning</p>	<p>Have a team meeting to make a list of tasks for the assessment task. Write minutes to record the decisions made.</p> <p><i>Assessed task</i></p> <p>Create a high level project plan using MS Project for the whole project, including time taken for each phase and milestones for key activities. For each milestone, include the achievements to have been met, outputs from it and, where applicable, inputs for the next stage.</p> <p>Record how the work was done. Learners could use capture software such as Cam Studio (www.camstudio.org) or annotated screenshots, and descriptions.</p>	<p>Unit 6 AC1a AC2a, d</p>	<p>TW</p>	<p>*</p>	<p>3</p>	

31 Identify the business need	<p><i>Assessed task</i></p> <p>Once a client has been identified, the learners must identify and document the client's requirements in terms of:</p> <ul style="list-style-type: none"> • Business need • Client requirements • Audience requirements <p>Each learner will need to keep a record of all work done, in a word processed report, for submission as evidence. Other evidence such as minutes of meetings will also be needed, as shown in the Craven College example.</p>	Unit 5 AC1b	TW	*	2	
32 Risk assessment	<p><i>Assessed task</i></p> <p>In teams, learners must identify the risks for the project.</p> <p>Individually, learners should create a risk register.</p>	Unit 6 AC3b	TW CT	*	1	
33 Relate types of digital media products to case study client's needs	<p>Teams should meet to decide which three (or more) different digital media products would best meet the client's needs and audience for the case study.</p> <p>Write up the minutes of the meeting, including decisions made with reasons relating to client's requirements and business need.</p>	Unit 5 AC1b	TW EP CT	*	1	

<p>34 A detailed plan for the whole project including creation of own animation</p>	<p>Learners will need to break down the main phases or tasks in the high level plan.</p> <p>Estimate the time required, using experience from case study.</p> <p><i>Assessed task (to be done individually)</i></p> <ul style="list-style-type: none"> • Create a detailed project plan using MS Project, including the time taken for each task and milestones for key activities. For each milestone, include the achievements to have been met, outputs from it and, where applicable, inputs for the next stage • Record how the work was done in Project, using capture software or annotated screenshots • Explain how times were estimated • Identify costs for the project, and make estimates • Explain how costs were estimated 	<p>Unit 6 AC2a</p>			<p>3</p>	
--	--	------------------------	--	--	----------	--

<p>35 Designing the website including multimedia products</p>	<p><i>Assessed task</i></p> <p>As a team:</p> <p>Using information obtained from the client about the business requirements, meet to decide on the content of the website, which must:</p> <ul style="list-style-type: none"> • relate to the client’s business needs • contain at least four pages • include images and sounds created or captured by the learner • include animations created using software such as Flash • include multimedia elements to create functioning internal and external links • include sufficient content to allow each member of the team to create each type of multimedia product. <p>Allocate the following tasks:</p> <ul style="list-style-type: none"> • Write minutes recording the decisions made • Create the initial storyboard for website. Each member must make a significant contribution to this, and record their own part • The team must create the initial site map for the website. Each member must make a significant contribution to this, and record their own part <p>Individually:</p> <p>Explain why each element is appropriate to the client’s requirements and business need.</p>	<p>Unit 5</p> <p>AC2b, c</p> <p>Unit 6</p> <p>AC2b, c</p>			<p>5</p>	
--	---	---	--	--	----------	--

<p>36 Capturing and editing still images, sound clips and video clips</p>	<p>Learners will take photos and record sound and video as required for their web pages. They will need to edit and prepare them for inclusion in the website.</p> <p><i>Assessed task</i></p> <p>Record how the work was done, using capture software or annotated screenshots with reasons for each part of the process, including why it is appropriate to the client's requirements. Add this to the report.</p>	<p>Unit 5 AC2d</p>			<p>6</p>	
<p>37 Update project plans</p>	<p><i>Assessed task</i></p> <p>Learners should update their project plan, keeping a record of how and why edits were made. This will need to be done at every stage of the project.</p>	<p>Unit 6 AC2d, e</p>			<p>2</p>	
<p>38 Create web pages</p>	<p>Create an outline of pages, dividing the work up between team members.</p> <p><i>Assessed task</i></p> <p>Record how the work was done, using capture software or annotated screenshots with reasons for each part of the process, including why it is appropriate to the client's requirements and how usability has been assured. Add this to the report document.</p>	<p>Unit 5 AC2b</p>			<p>5</p>	

39 Design and create animations	<p><i>Assessed task</i></p> <p>Learners must design their animated products, producing detailed storyboards and layout designs for the multimedia product. The designs must pay attention to usability and include interactive elements.</p> <p>Each member of the team should produce one animation.</p> <p>Record how the work was done using capture software or annotated screenshots, with reasons for each part of the process, including why it is appropriate to the client's requirements. Add this to the report.</p>	Unit 5 AC2b, c			10	
40 Produce evidence of understanding and complying with copyright and other legislation in the completed multimedia product and website	<p><i>Assessed task</i></p> <p>Learners must check their own work to ensure it is within the relevant legislation such as copyright and the DDA.</p> <p>They should add a section to their report describing how they have done this and what issues they have addressed.</p>	Unit 5 AC2i	IE TW	*	1	
41 Test plan for animations	<p><i>Assessed task</i></p> <p>Each learner must create a test strategy and a detailed test plan to test every element of his/her multimedia product. User testing and audience testing should be included.</p>	Unit 5 AC2f			2	
42 Testing the product	<p><i>Assessed task</i></p> <p>Using their test plans, learners run all the tests and record the results. The client and all stakeholders should be asked to take part in testing and to provide feedback.</p>	Unit 5 AC2g	SM		5	

43 Putting the case study website together	Teams must incorporate all the multimedia elements into the website and combine their pages, linking them all together.	Unit 5 AC2e	TW		6	
44 Test plan for website	<i>Assessed task</i> As a team, devise a test strategy and a detailed test plan to test every element of the website for functionality, operability and accessibility, including integration of the multimedia element. A range of platforms should be used to ensure the product will display in different user situations.	Unit 5 AC2f			5	
45 Testing the website	<i>Assessed task</i> Learners must test the completed website using their test plans, and record the results of all the tests.	Unit 5 AC2g	SM		5	
46 Upload site to the internet	<i>Assessed task</i> Learners should upload their completed website to the internet. Carry out final tests to ensure that it works on all platforms, and can be used by the intended audience. Learners should record what they did, and the results of testing.	Unit 5 AC2g	SM		2	
47 User guide	<i>Assessed task</i> Learners must create user guides containing: <ul style="list-style-type: none"> • instructions for changing their multimedia product • instructions for updating and improving the website and for uploading to the internet • a description of the relationship between the tools used and the underlying HTML in order to deliver the solution. 	Unit 5 AC2b, h		*	5	

48 Obtaining feedback on the effectiveness of multimedia and digital products	<p><i>Assessed task</i></p> <p>Learners should design a questionnaire to obtain feedback on their multimedia products, from the client or the audience, including references to the original client requirements and business needs, and the effectiveness of the product.</p> <p>Obtain responses to the questionnaire.</p>	Unit 5 AC3a, b		*	2	
49 Potential opportunities for improvement	<p><i>Assessed task</i></p> <p>Learners should use the feedback to:</p> <ul style="list-style-type: none"> • produce a written evaluation that assesses the effectiveness and impact of the multimedia product and website, assessed against the business needs or client requirement • identify and describe at least two improvements that could be made to the multimedia and digital products. 	Unit 5 AC3c, d	RL	*	2	

50 Evaluation of project management	<p>The final evaluation of the project must be written as a formal report, taking care with spelling, punctuation and grammar and using appropriate technical terms. Learners must:</p> <ul style="list-style-type: none"> • describe the benefits of formal use of project management tools in general • describe all project management techniques used, and explain why they were chosen • evaluate the usefulness of all the tools and techniques used • describe their own role in the project; reflect on and evaluate their own performance and team performance over the duration of the project • evaluate the role of the project manager and describe how the approach taken has affected their success or failure • describe some of the 'people issues' in the project success or failure, and what can be done to avoid failure • explain how risk was managed; describe appropriate amendments that were made to the project plan and demonstrate that external factors and the constraints of cost, time and resources have been taken into consideration • list the potential opportunities for improvement in the management of the project, and the action required. 	Unit 6 AC1b AC2b, c AC3a–c	RL	*	5	
51 Check and submit all work in order	<p>Learners should ensure that files are all named in a meaningful way, and numbered in the order in which they are to be read.</p> <p>They should create an index and contents list.</p>	All	SM		2	