



Accredited

OCR LEVEL 3 CAMBRIDGE TECHNICALS IN IT

LEVEL 3

A PROJECT APPROACH TO DELIVERY

VERSION 1





The purpose of this guide is to give you an overview of how you could holistically deliver a range of units from the Cambridge Technicals in IT Level 3. When delivering any qualification it is always useful to be able to look at the variety of units and consider how they are or could be linked together – a holistic approach.

- Unit 01 – Communication and employability skills for IT
- Unit 02 – Information systems
- Unit 12 – Website production
- Unit 14 – Computer animation
- Unit 18 – Web animation for interactive media
- Unit 31 – Digital graphics for interactive media

In this example, the objective is for learners to produce an interactive media website. This will be possible through planned delivery of the units using animation and digital graphics to enhance the website.

The intention is that the learners will be taught a range of knowledge and skills within each of the units and then carry out relevant review activities at various stages. Each of the reviews (once successfully completed by the learner) will provide the foundation knowledge for their final assessment. The practice review activities within the modules **must not** be used for final assessment purposes.

It is assumed that the learners will be given the opportunity to carry out activities that will enable them to practice the skills they have learned within each module prior to being given final assessment activities.



When considering a holistic approach to delivery and learning, it is important to consider the overall objectives. In this guide the objectives are to:

- deliver six units towards the overall Level 3 qualification from the Cambridge Technicals in IT
- structure a programme of learning and reviews which are exciting and engaging for the learners encouraging them to undertake the necessary independent personal research and study expected of a Level 3 learner
- provide the learners with an overview of how the knowledge and skills gained in one unit, supports the knowledge and skills used within other units
- provide the learners with an opportunity to consider how they would use their IT skills holistically within the working environment.

As stated previously, the end result for the learners will be a functioning interactive media website that they have designed and created. For the purpose of this guide, the intention is for the learners to manage the planning, design and creation of a customer support website that could be used by an organisation.

Please see the Teaching Content section for the identified Learning Outcomes (LO), found within the individual units (www.ocr.org.uk).

This guide is divided into twelve modules which may be subdivided or combined according to teaching time available.

The tables below show where each module provides delivery approaches and learning opportunities to ensure a thorough review of skills and understanding prior to final assessment and evidencing by the learner. Please note final assessment may be presented in a similar holistic way. Learners must be able to evidence achievement for each of these six units independently.

Project Process

The following stages of the website development project will be covered in this guide.

- Identify the project requirements
- Explore techniques and technologies for what is needed
- Plan the product and its component parts
- Present a proposal to the client/organisation
- Create the assets needed
- Create the website product
- Test and publish the website product
- Store information for the project and website
- Review the project, skills developed and further development.

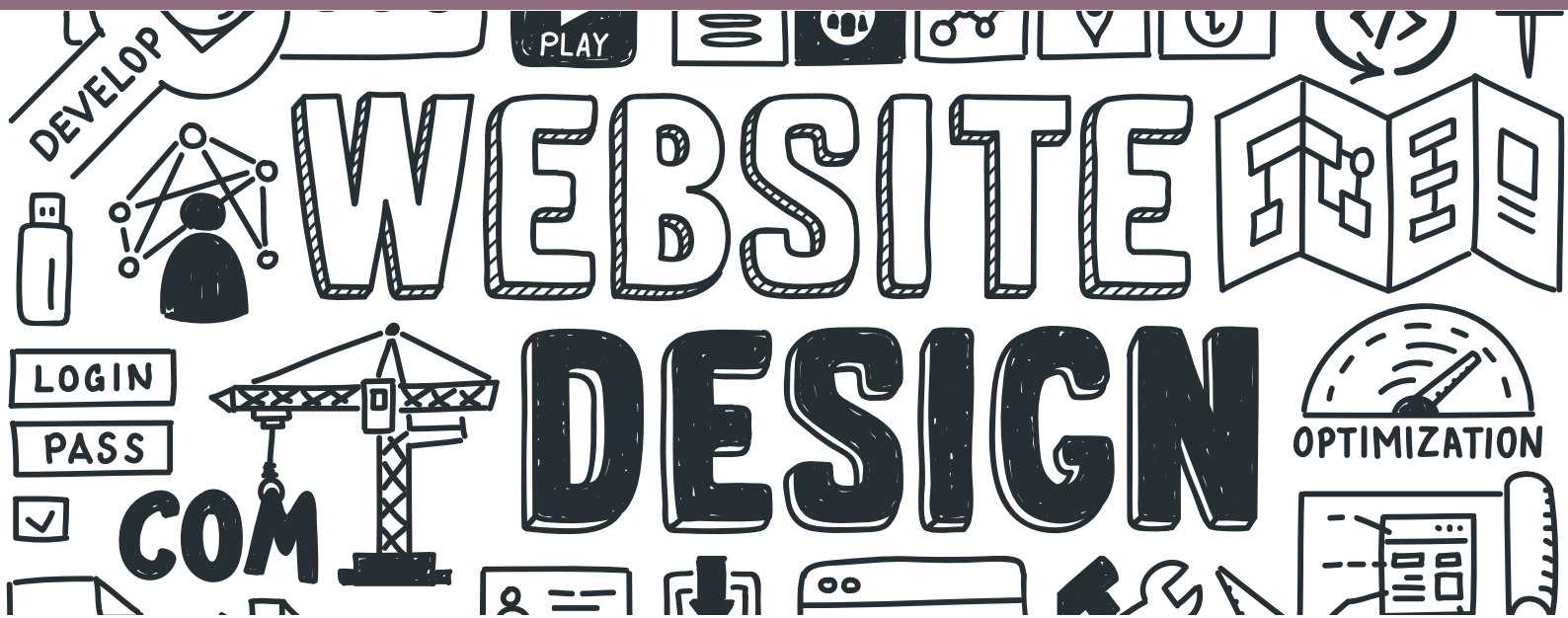
By Unit/Learning Outcome (LO)

	LO1	LO2	LO3	LO4
Unit 01	Module 2 Module 12	Module 6 Module 10	Module 6 Module 10	Module 1 Module 9 Module 12
Unit 02	Module 1	Module 1 Module 11	Module 1 Module 5 Module 11	Module 6 Module 9 Module 11
Unit 12	Module 2	Module 2	Module 6	Module 9 Module 10
Unit 14	Module 4 Module 6	Module 4 Module 5 Module 8	Module 5 Module 8 Module 10	
Unit 18	Module 4	Module 5	Module 8 Module 10	
Unit 31	Module 3	Module 5	Module 7	



By Module

Module 1	Unit 01	LO4
	Unit 02	LO1
		LO2
		LO3
Module 2	Unit 01	LO4
	Unit 12	LO1
		LO2
Module 3	Unit 31	LO1
Module 4	Unit 14	LO1
		LO2
	Unit 18	LO1
Module 5	Unit 02	LO3
	Unit 14	LO2
	Unit 18	LO2
	Unit 31	LO2
		LO2
Module 6	Unit 01	LO2
		LO3
	Unit 02	LO4
	Unit 12	LO3
	Unit 14	LO1
	Unit 31	LO2
Module 7	Unit 31	LO3
Module 8	Unit 14	LO2
		LO3
	Unit 18	LO3
Module 9	Unit 01	LO4
	Unit 02	LO4
	Unit 12	LO4
Module 10	Unit 01	LO2
		LO3
	Unit 12	LO4
	Unit 14	LO3
	Unit 18	LO3
Module 11	Unit 02	LO2
		LO3
		LO4
		LO4
Module 12	Unit 01	LO1
		LO4



Module 1

The delivery begins with Unit 01 – Communication and Employability Skills for IT (LO4) and Unit 02 – Information Systems (LO1, LO2 and LO3).

Before learners can start the design process for the new website, they need to know what will be required and how to achieve it. For this they will need to have a good understanding of:

- How organisations use business information
- The features and functions of information systems
- The issues related to the use of information
- How to identify and address personal development needs.

Contained within the following assessment criteria/LO(s)/units:

Explain how organisations use information	P1	LO1	Unit 02
Discuss the characteristics of good information	M1		
Identify the information systems used in a specified organisation	P5	LO3	Unit 02
Describe the features and functions of information systems	P4		
Assess the improvements which can be made to an identified organisation's business information systems	M1	LO1	Unit 02
Explain the issues related to the use of information	P3	LO2	Unit 02
Compare legal, ethical and operational issues that may affect organisations	D1		
Produce a personal development plan	P7	LO4	Unit 01



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The first stage is to identify the aims and objectives for these learning activities. Learners should be briefed on the sequence of modules and practice activities to support their learning and wider understanding of cross working.

As listed earlier in this guide, the following stages of the website development project can be outlined.

- Identify the project requirements
- Explore techniques and technologies for what is needed
- Plan the product and its component parts
- Present a proposal to the client/organisation
- Create the assets needed
- Create the website product
- Test and publish the website product
- Store information for the project and website
- Review the project, skills developed and further development.

In general this first module begins with the identification of the overall project and what is to be produced. One approach would be to show this sequence as a pre-prepared project plan, which could be viewed using a projector and screen. Although Unit 9 (Project Planning) is not being included in this Project Approach, the fundamental aspects of project planning may still be included and described by the teacher. Printed copies of a Gantt chart could also be handed out.

Having identified the aims, the next step is to begin developing knowledge of website content and components and the usage/functionality of them. The teacher should talk through the basic structure for websites found on the internet. Examples would include manufacturers and distributors such as those for computers, smartphones, tablets and peripherals (eg printers or routers). Many of these have a range of content such as product/service information, online ordering, support, customer reviews etc. The teacher could also discuss other sites that the learners are familiar with and learners could perhaps research independently to identify cross sector sites with similar features or features on other web sites that could be applied.



Practice review activities: In this practice review activity, learners will be considering an organisation's information system. For the purposes of this module, it is interpreted as being marketing and sales in the form of the website. Learners should now complete some independent research to gather information on typical content for this type of information system. The choices of website researched should be made in conjunction with the teacher who should advise on the suitability. This is to ensure the site content will be appropriate to the practice activity. The information obtained could then be summarised in a presentation and will be used to support the generation of ideas in later modules.

Activity 2

Delivery: The teacher will need to describe the different types of information and their properties that are used by an organisation in connection with their website. An example would be price information that is stored in a database (ie the source) and how it is handled (ie linked to the website page). Other types of information may include an FAQ, support pages, customer reviews etc. This teaching activity will introduce the concept of a website architecture with links to databases compared to simple websites with discrete pages of text and information.

Practice review activities: Using the websites chosen earlier, learners could produce a table that identifies what database information is used on the organisation's website. Comments should be added for the categories, sources, handling and standard (quality, reliability etc.) of information. A column should be included that clearly refers to any characteristics that make this 'good' information.

Activity 3

Delivery: The teacher could deliver a presentation that identifies the broader range of information systems that are used in organisations. This activity needs to include information systems that are not related to website content (since this is the context for this project but the unit requires a broader scope).

Practice review activities: Learners will need to conduct research to identify the range of information systems used in their chosen organisation. Learners could then relate what information systems are connected to and/or influence the website content. Learners should be encouraged to create diagrams or visualisations to clarify their level of understanding of the subject and show the information systems for an organisation and those related to the website. This information could be evidenced in the form of a presentation.





Activity 4

Delivery: This activity is a task to be completed by each learner. The teacher should monitor the learner's practice activities, which may be linked to the work completed in Activity 1 and Activity 3.

Practice review activities: The task is to summarise the features and functions of the information systems used by organisations. This may be produced as a report or presentation. If producing a presentation, a slide that identifies the key features and functions for each system could be included. Alternatively, if producing a report with a table, then separate columns for the features and functions can be added. Group discussions and feedback will support the learners on their individually created diagrams (from above). It will also allow them to extend their ideas and thoughts to allow different perspectives and approaches. They should also be of information. In the context of the website scenario, learners should identify the relevance of the features and functions of any information that will be visible on the web pages in the public domain.

Activity 5

Delivery: The teacher could deliver a presentation on how information systems can be improved. This can be supported with examples and potentially case studies. The performance and expandability of the information system are areas to consider. Specific examples would be the performance of a database in response to queries (eg currently too slow) or how to enhance a stock control information system for wider access and wider issues (eg WAN or cloud based access by staff).

Practice review activities: Learners should consider what improvements could be made to the information system in the form of the organisation's website. This could include additional sections/pages or enhanced versions of what already exists. However, learners should consider improvements in a broad context that includes innovative ideas for both content and services that could be provided to a range of platforms and browser technologies.



Activity 6

Practice review activities: Learners should consider that the web pages will be in the public domain and there will be a number of issues related to the use of information and site content. Learners could prepare a presentation or report on these issues, in consultation with the teacher who is acting on behalf of the organisation.

Delivery: A workshop style environment is suggested for this activity. The teacher will need to describe the issues related to the use of information. This should cover all legal, ethical and operational issues such as data protection, copyright, accessibility, codes of practice, security, health and safety. The learners could review this against their original diagrams and suggestions to identify impacts. A series of handouts will be useful as reference documents for future use. For example, one of these should cover the eight principles of data protection and what the legal responsibilities are. A group discussion on the practical impact for these issues will facilitate a broader learning and understanding.

Activity 7

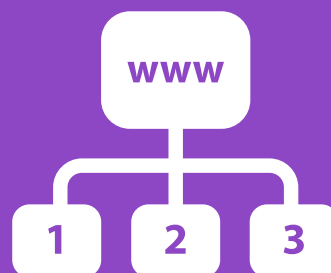
Delivery: A workshop style environment is suggested for this activity. Initially, the teacher will need to describe the legal, ethical and operational issues that may affect organisations. Although different (and broader in scope) to the issues related to the use of information it may be practical to combine the delivery activity 6 and 7 together. This will enable the distinction to be made about whether a particular issue is related to the use of information or the organisation itself. Part of this exercise would be a review against the learner's visualisation/diagram. Categorising the issues in this way should assist in the learners understanding of the differences. Examples of other issues not related to information may include employer liability, insurances, health and safety, recruitment and advertising.

Practice review activities: Learners should consider the broader legal, ethical and operational issues for their organisation. The approximate number of employees, trading status and styles of advertisement may contribute to this investigation although the individual organisations will also have particular issues that must also be considered.



Network

Hom



Web

Lapt



Dialogue

Back

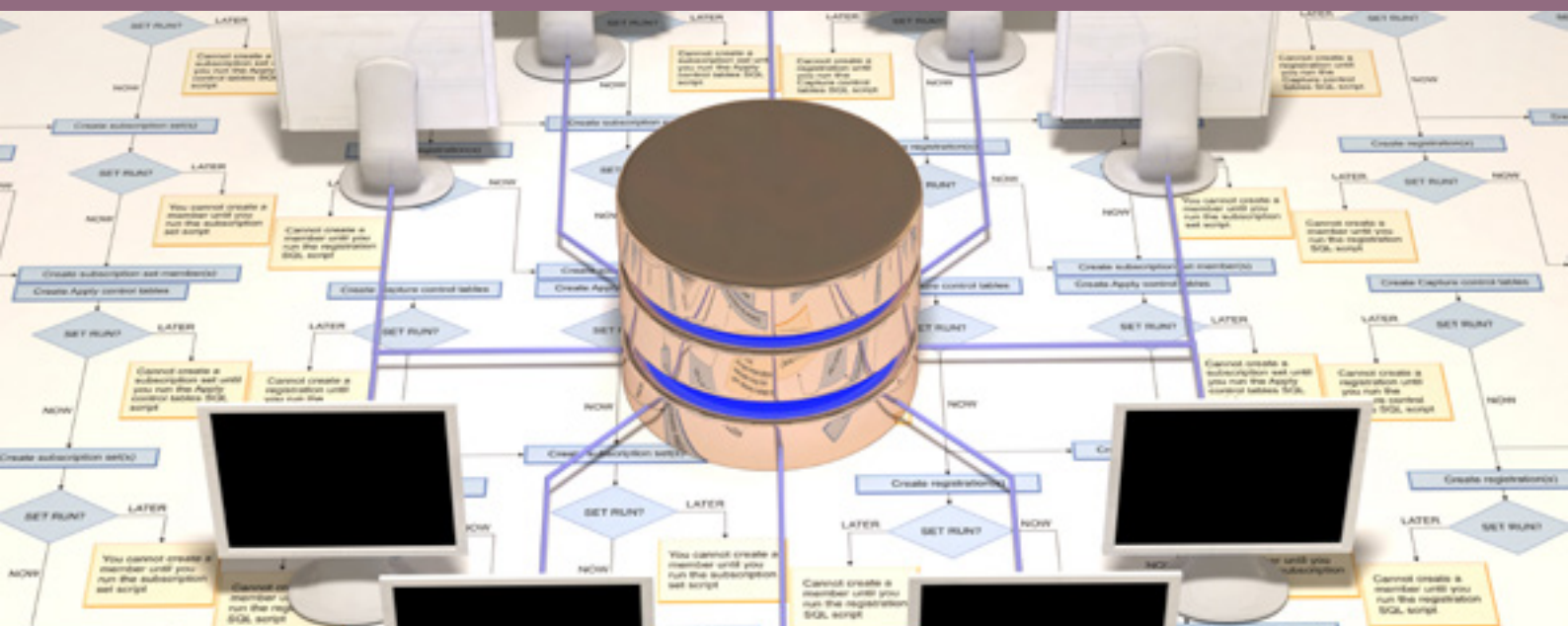


Activity 8

This project approach is based on a scenario to create a new website for the organisation that includes a range of animations and graphics. This will require the development of knowledge and skills in creating graphics, animations, web pages, using information systems and interpersonal communication. These processes and personal development should be documented for monitoring purposes and future reference.

Delivery: The teacher should introduce the concept of a personal development plan. Practical examples should be provided that identify what is to be learned, where, how and when. These examples should be relevant to the project approach and may be for a web developer, animator or graphic designer. The use of different layouts and software applications can be included (eg the use word processing tables, spreadsheets or personal planners). The teacher should show how a personal development plan can be used for short term project goals as well as longer term career aims.

Practice review activities: Learners should produce their own personal development plan that identifies the knowledge and skills they will individually need to accomplish this task. Any additional learning, training and timescales should be identified. The personal development plan could be produced in any of the suggested formats and updated throughout the project.



Module 2

The delivery moves on to an exploration of the interactive media website sector. This module covers Unit 01 – Communication and Employability Skills (LO4) and Unit 12 – Website Production (LO1 and LO2).

Before learners can start to plan the interactive website, they need to know about the structure, performance and security issues. For this they will need to have a good understanding of:

- How to address personal development needs
- Web architecture and components
- Factors that influence website performance.

Contained within the following assessment criteria/LO(s)/units:

Follow a personal development plan	P8	LO4	Unit 01
Outline the web architecture and components which enable internet and web functionality	P1	LO1	Unit 12
Explain the user side and server side factors that influence the performance of a website	P2	LO2	Unit 12
Explain the security risks and protection mechanisms involved in website performance	P3		
Compare and contrast current interactive websites for performance and security	M1		
Discuss the impact that cases of website security breaches have had on society	D1		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The first activity would be to start following the personal development plan produced in Module 1 so the teacher should ensure that each learner has this available. Guidance on how to update this should already have been covered in module 1.

Practice review activities: The personal development plan should be updated and regularly monitored through all modules to track progress and achievement.

Activity 2

Delivery: For the purposes of this module, the teacher should now start delivery of lesson elements on web architecture and performance related issues. These could be delivered as presentations that are also supported by practical examples (eg a website that is hosted locally in the school/college). This can also be supported by independent learner research activities web components is suggested so that learners can document and apply their understanding of web architecture before moving on to this different (but related) area of web development. Handouts that identify a range of web components can be supplied. These could then be used for reference later in the project such that learners choose what components they will want to include.

Practice review activities: Learners should have access to practical examples of websites and architectures within the classroom. It is recommended that at least one of these is hosted internally so that the architecture behind the published website can also be investigated. Learners could complete a series of tests to identify any performance related issues so that limitations of the architecture and/or data transfer are recognised. These performance issues should be focussed on website performance rather than broadband service providers. The results could be included in a report document so that it becomes a reference for future study and progression. It can also be updated for the latest technology, processes and developments within the sector.

```
<html>
<head>
<title>HTML code page - </title>
<meta name="resource-type" content="document">
</head>
<body bgcolor="#FFFFFF" text="#000000">
<center>
<table width="720" border=0 cellpadding=0 cellspacing=0>
<tr valign="top">
<td>
<font face="arial">
<table width="720" cellspacing=0 cellpadding=0>
<tr valign="top">
<!-- left side content -->
<td rowspan="3" bgcolor="#FFFFFF">
<font face="Arial" size=2>
<a href="../../../main.htm"><b>Back to Home</b></a>
<font size=1><br>Best html coding examples
</SCRIPT LANGUAGE = "JavaScript">
<!--
document.write("AddFavorite('"+document.location+"'")")
document.write("<b>Bookmark this page</b>")
}
// -->
</SCRIPT>
size=1><br>Add to favo
```



Activity 3

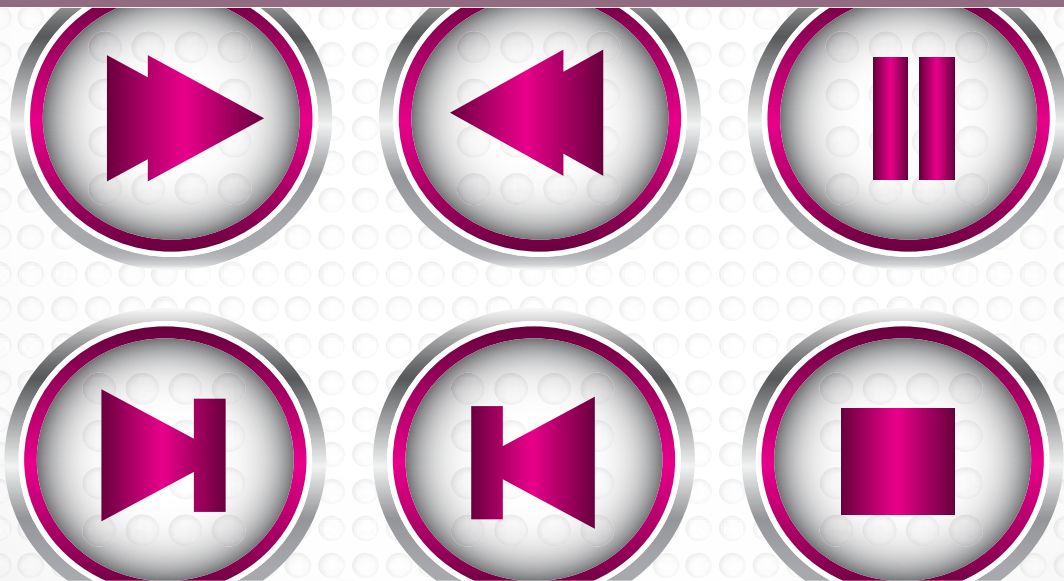
Delivery: Teachers could deliver a presentation on the factors that influence website performance. This should include both the user side and server side. This presentation should cover (for example) different types of website content (and hence file sizes), internal links, data transfer, number of requests per second, number of servers, back end processing, connection types, available bandwidth and the use of streaming data. The different types of platform and browsers available to users should also be included.

Practice review activities: Learners should investigate the hosting of a range of different websites, comparing the number of visitors, requests and architecture used. The impact of a much higher number of requests per second should be considered as part of this investigation. This content could be added to the report produced in Activity 2 so that a more comprehensive reference document is created.

Activity 4

Delivery: Teachers should deliver a presentation on the security risks and protection mechanisms involved in website performance. This should include for example, malicious threats, cyber-attacks and data theft. Case studies on reported cyber-attacks and data theft (such as user account details) should be included. Consideration should be given to how to protect a new website that will be produced as part of this project and what threats could be experienced.

Practice review activities: Further independent investigation and research into cases of cyber-attack on well-known websites together with data theft should be completed. Learners could work in groups where each person specialises in researching a different type of protection mechanism. Learners could deliver a group presentation on this topic and/or individually add a new section to the report produced in Activity 2 so that a more comprehensive reference document is created.



Module 3

The next stage in the process is to explore the computer graphics sector and their use with interactive media websites. This module covers Unit 31 – Digital Graphics for Interactive Media (LO1).

Before learners can start to plan the website pages and content, they need to know what properties and parameters will be needed for the graphics. For this they will need to have a good understanding of:

- The theory of digital graphics technology
- The applications of digital graphics technology.

Contained within the following assessment criteria/LO(s)/units:

Describe theory and applications of digital graphics technology with some appropriate use of subject terminology	P1	LO1	Unit 31
Explain different settings used for different outputs	M1		
Critically evaluate a range of digital graphics for interactive media	D1		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The teacher should initially deliver presentations on the theory and applications of digital graphics. This should be well supported with a range of digital graphic products, such as for print purposes, web use (backgrounds, navigation features), games, advertising and branding etc. As part of the theory presentation, a comparison should be made between raster and vector types of graphics together with their associated file types. A clear distinction between the properties of graphics for print and interactive media purposes should be made, for example, in terms of the total number of pixels, resolution in dpi (or ppi), colour mode and colour depth.

Practice review activities: Learners could further investigate the theory behind digital graphics by using image editing software applications with a range of digital graphics. This will enable the learner to identify colour modes, bit depth and resolution for example. They could also complete some independent research outside of classroom activities into the broad use of digital graphics, collecting examples for later analysis.





Activity 2

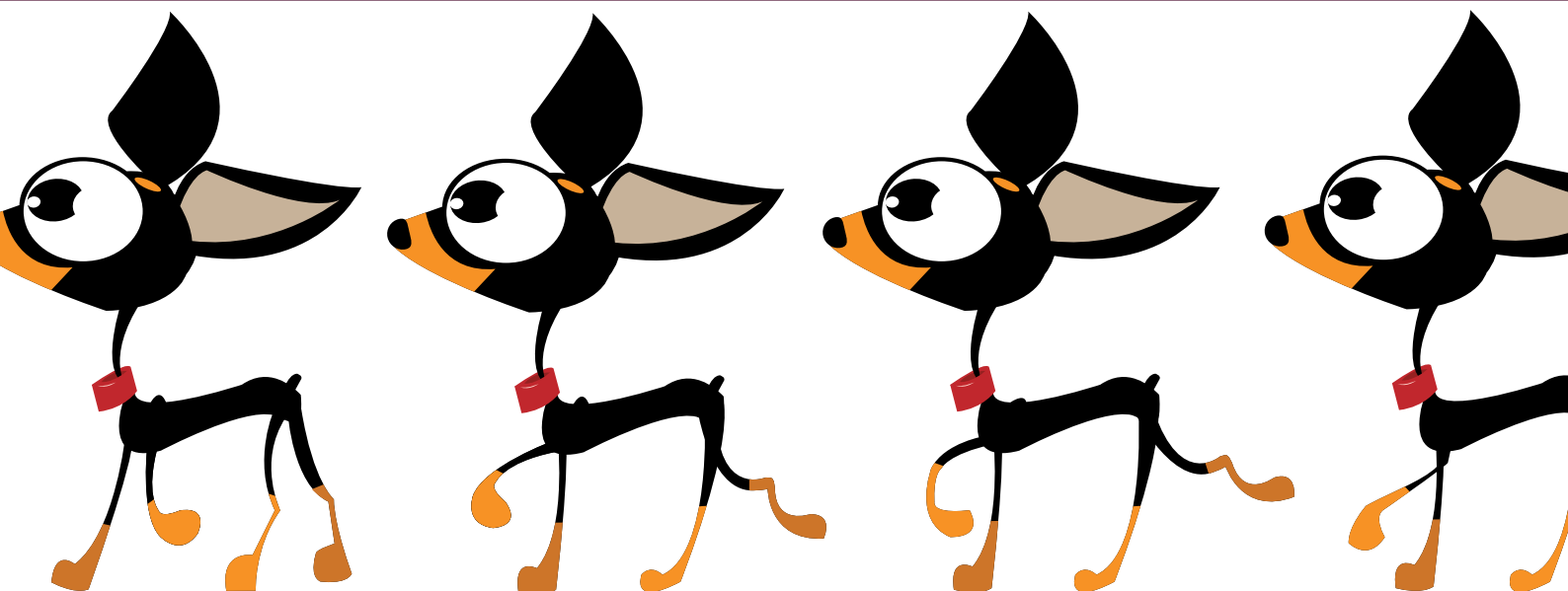
Delivery: The teacher could demonstrate the use of digital image editing software. At this stage, the tools and menu options for checking the properties of images and graphics will be most useful (editing tools and techniques can be covered later). This will enable learners to relate to the knowledge gained in Activity 1 to actual graphic files. The different options for saving graphics in the image editing software should also be demonstrated so that learners can explore the settings used for different outputs. A range of sample graphics will be needed to support this activity, which covers both print products and interactive media applications.

Practice review activities: Learners could experiment with digital imaging software applications and export sample graphics using different settings. This could include resizing the graphic, changing the resolution, colour mode and exported file type. Learners could source their own digital graphic examples and produce a report or presentation that explains the settings and properties for specific applications. This should include graphics for both print and web/display purposes. Learners should store these different output graphics in a folder with filenames that clearly identify its intended purpose and application. The work for this activity could be combined with that for Activity 1.

Activity 3

Delivery: For this activity learners will need to critically evaluate a range of digital graphics that are used with interactive media. The teacher should identify what criteria would be used to evaluate digital graphics. Examples of graphics can be used such as navigation buttons, banners, icons, logos, images, adverts and backgrounds (for both computer and smartphone display screens). Consideration should also be given to animated graphics and interactive features such as the change of appearance with rollover buttons.

Practice review activities: Learners should now apply their knowledge of how to evaluate a range of digital graphics. Different types of graphics should be evaluated and learners can choose relevant criteria for this activity. This evaluation could be completed in the form of a document or presentation file with annotated comments alongside the graphic identifying the properties together with their more detailed critical evaluation.



Module 4

The next stage in the process is to explore the sector for computer animations and how they are used with interactive media websites. This covers Unit 14 – Computer Animation (LO1 and LO2) and Unit 18 – Web animation for Interactive Media (LO1).

Before learners can start to plan the animation, they need to know about different types of animation and how web based animations are created. For this they will need to have a good understanding of:

- The types and uses of animation
- The software techniques used in animation
- The uses and principles of web animation.

Contained within the following assessment criteria/LO(s)/units:

Explain the different types of animation	P1	LO1	Unit 14
Discuss the history of studios that produce animations	M1		
Compare the different animation styles of key animators	D1		
Explain different uses of animation	P2	LO2	Unit 14
Describe the software tools available for animation	P4		
Describe factors that need to be taken into account when creating animations for the web	P5		
Describe uses and principles of web animation with some appropriate use of subject terminology	P1	LO1	Unit 18
Justify the choices of file formats within software that would be suitable for use in web animation	M1		
Evaluate the design constraints for web animations across different delivery formats	D1		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: Teachers could deliver a presentation on the different types of animation, how they are created and where used. These could be introduced by displaying sample animation products and then explaining the techniques used to create them. Traditional animation techniques and digital approaches should be included. In the case of traditional animation techniques, teachers could identify how many of these can be digitised for use in broadcast, digital media or online.

Practice review activities: Learners could source their own examples of animation and create a report or presentation that identifies the types and techniques used in their production.

Activity 2

Delivery: It is suggested that the delivery of this module activity is implemented as a research assignment task. The history of studios that created the animations explored in Activity 1 could be researched by the learners independently or as a group.

Practice review activities: Based on the different types of animations explored in Activity 1, learners could investigate and explore the history of the studios that created them. This may be completed using web based research. The work of classic animators and modern digital artists should be included with examples of their work. A presentation would be an ideal output format for this activity since it will provide opportunities to display samples and/or extracts of the animated products.

Activity 3

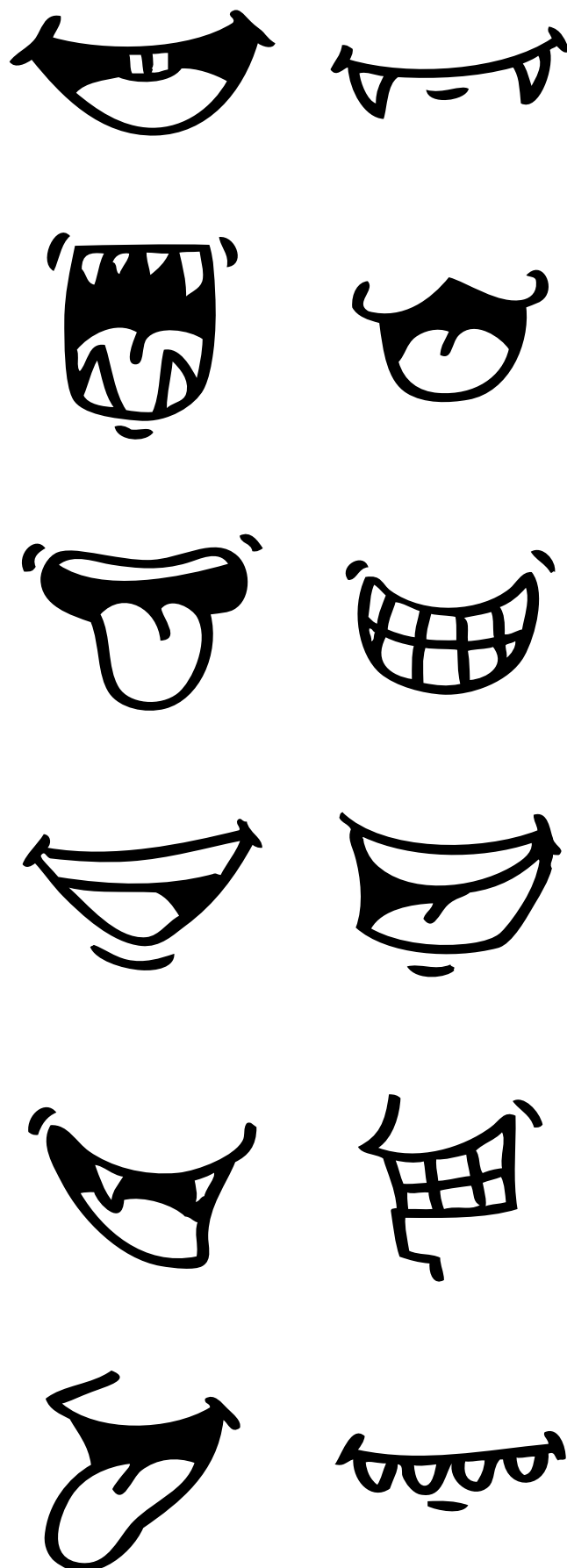
Delivery: This continues as a learner research task, which may be completed individually or as a group.

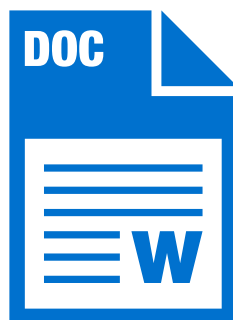
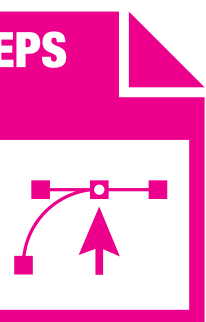
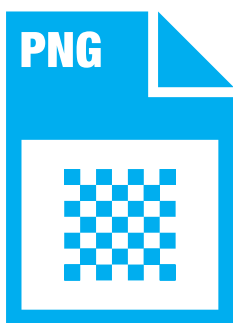
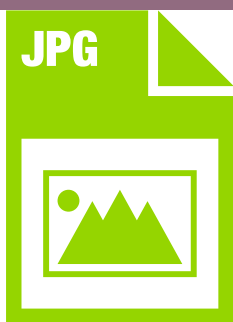
Practice review activities: As an extension to Activity 2, learners could identify the differing animation styles of key animators. These may be chosen over a number of decades so that the work of classic animators such as Walt Disney and Hayao Miyazaki are compared with Aardman and Pixar. The changing animation styles of Disney from the early Mickey Mouse cartoons through to modern animated CGI films can be included as part of this comparison. Learners could merge their findings into a group presentation. This activity may be completed in conjunction with Activity 2.

Activity 4

Delivery: The broad uses of animation should have been covered in the presentation as part of Activity 1. It is now time to start thinking about how animation could be used in an applied context for the project scenario. The teacher could refer to the project brief/scenario and facilitate a group discussion on ways to make the new website more visually appealing and engaging.

Practice review activities: Learners should identify and explain the different ways in which animation could be used. This could be shown in the form of a mind map/spider diagram or presentation.





Activity 5

Delivery: The teacher should demonstrate the tools, techniques and resources available for creating animations. This will need to be based upon the software applications installed on the centre's computing facilities. A series of demonstrations that show the basic layout, timeline and tools will be required, which would best be viewed using a projector and screen. A range of sample exercises in using the software interface and tools can then be completed in a workshop environment. At this stage the delivery should be more generic, demonstrating the wide ranging capabilities of the software resources.

Practice review activities: The capabilities of the animation software must be known before any planning can be started. At this stage, learners should further investigate the software applications, resources and relevant tools that are available to create their animations. Any limitations and constraints of these should be identified so that realistic animation work can be planned and created later on. Learners may create samples and drafts that utilise key animation techniques as well as the software tools. Notes may be added to supplement their learning.

Activity 6

Delivery: The teacher could deliver a presentation on factors that need to be taken into account when creating for the web. This can be supported by good (and bad) examples of animation content, with differing file sizes, file types, pixel/aspect ratios and purpose.

Practice review activities: The animations that will be created as part of this project are to be used on the organisation's website. Learners should describe the factors that they need to consider when designing and creating for their website and chosen purpose. Consideration should be given to file format, file size, purpose, content, layout and target audience.



Activity 7

Delivery: The teacher should describe the techniques and principles of animation when designing for the web. The techniques to be used will be dependent on what software applications will be used to create the animation, which will be saved in a digital format. The teacher could provide a presentation to illustrate some principles. A review of frame by frame versus tweened animation approaches should be included.

Practice review activities: Learners could identify the techniques and principles that they will want to use when designing the content for their website. This should include reference to the impact of these techniques and principles on the animation file size, which will be used to support their planning later on. This may be combined with Activity 6.

Activity 8

Delivery: The teacher should explain what file formats are supported by the web and different browsers, for example Internet Explorer, Safari, Firefox and Chrome. They should also discuss what platforms are used to view web content and hence what browser/animation file formats will be supported. This information may be supported with a handout for reference purposes.

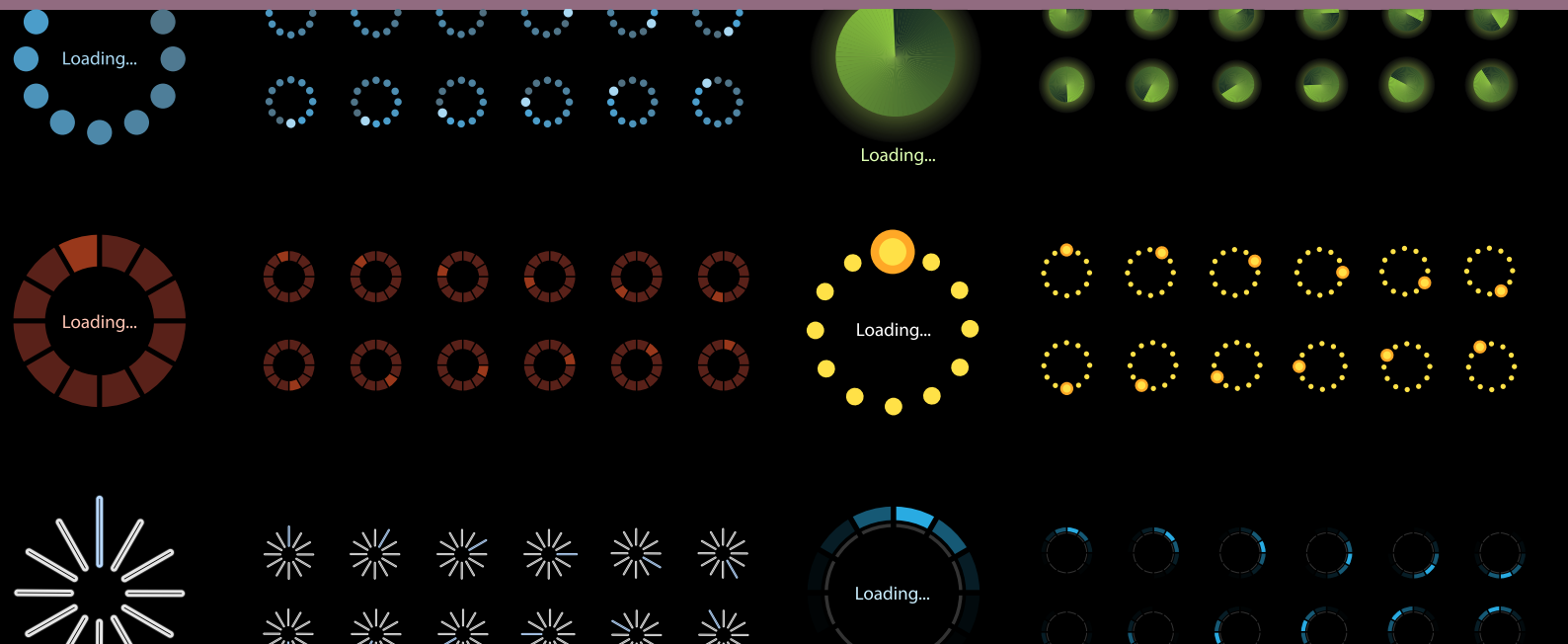
Practice review activities: Learners should investigate the software applications that are available and list what options are provided for saving and/or exporting the final animation. The compatibility of version numbers (eg browser and/or flash player) should be included. The information should also be summarised for future use in their planning and development work.

Activity 9

Delivery: Having considered the possible uses for animation on the new website, learners will need to identify the outline parameters and constraints. These may be clarified by discussion whereby the teacher acts in the role of the client or organisation. This may be conducted on an individual or group basis. For example, these constraints may be in the frame dimensions, duration, file size or file format. The teacher can describe examples of parameters and constraints that may affect the animation work as part of this discussion.

Practice review activities: Learners could list the relevant parameters and constraints that apply to their intended website animation work, storing this for future reference.





Module 5

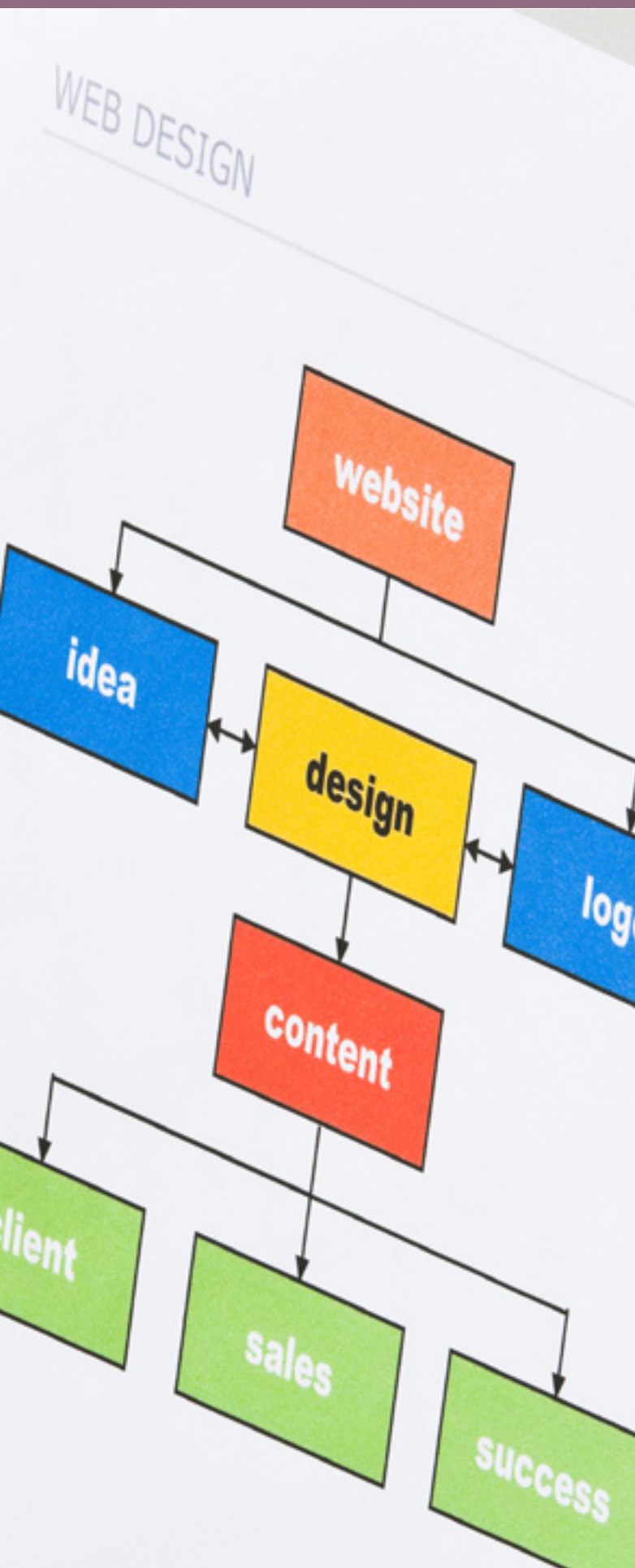
Following the exploration of the different sectors, the next stage is to plan the content for the new interactive website. This covers Unit 02 – Information Systems (LO3), Unit 14 – Computer Animation (LO2) and Unit 18 – Web animation for Interactive Media (LO2), Unit 31 – Digital Graphics for Interactive Media (LO2).

Before learners can start to plan the animation, they need to know about different types of animation and how web based animations are created. For this they will need to have a good understanding of:

- The features and functions of information systems
- The software techniques used in animation
- How to devise web animation
- How to generate ideas for digital graphics.

Contained within the following assessment criteria/LO(s)/units:

Illustrate the input and output of information within a specified functional area of an organisation	M2	LO3	Unit 02
Analyse the legal and ethical implications of the illustrated input and outputs	D2	LO3	Unit 02
Describe factors that need to be taken into account when creating animations for the web	P5	LO2	Unit 14
Generate outline ideas for web animation working within appropriate conventions and with some assistance	P2	LO2	Unit 18
Develop ideas for web animation using different planning techniques	M2		
Justify how the design meets the identified needs of the client	D2		
Generate outline ideas for digital graphics for an interactive media product working within appropriate conventions and with some assistance	P2	LO2	Unit 31
Provide a detailed plan of ideas generated for digital graphics for an interactive media product	M2	LO2	Unit 31



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: For this website project, the functional area of the organisation is specifically customer relationship management (CRM). The teacher should identify the typical input and output of information within this area as part of a presentation. This may include sales/order processing, product information, support pages and customer support contact information.

Practice review activities: Learners should record this identification of needs to assist the planning activities in terms of website content, pages and data management.

Activity 2

Delivery: Having identified the customer support requirements and what input/output this requires, the teacher should now explain what must be considered in terms of legal and ethical implications. This may include the use and processing of customer contact details, records of products and services, prices, product safety, public liability considerations, ethical and environmental issues.

Practice review activities: These factors should be documented in a report for future reference to support the decision making processes and organisational responsibilities.

Activity 3

Delivery: The teacher should demonstrate techniques involved in how to generate ideas. This may include the use of mind maps/spider diagrams and mood boards. Visualisation diagrams of characters and scenes may also be an outcome from this. It is recommended that a class activity is facilitated by the teacher so that anybody can suggest ideas on suitable content for a different scenario.



Practice review activities: Learners should generate their outline ideas for animation content on the new website. The use of these animations should be clearly identified, whether for advertising or information purposes. Sketches and diagrams of key characters and/or scenes can be included at this stage but complete storyboards are not yet required. A good approach would be to present these ideas, which can then be discussed with the teacher (acting on behalf of the client/organisation). The format of these ideas may be a presentation file, concept drawings and/or flip chart pages. As a result, a decision would be made about which idea will be taken forward for detailed planning and development.

Activity 4

Delivery: The teacher could demonstrate how to produce planning documents for an animation product. This should include the use of visualisation diagrams, storyboards and scripts. The content of these pre-production documents should be explained. OCR resources on creating storyboards may be helpful with this process.

Practice review activities: Following on from Activity 3, learners should now have decided on what ideas are to be developed in more detail. A range of different planning techniques should be used to develop these ideas, which may include storyboards, mind maps, spider diagrams, visualisation diagrams and a script. These planning documents should be stored for use alongside the production phase of the animation.

Activity 5

Delivery: The needs of the client/organisation will have been identified as part of Activities 1 and 3. For this activity, learners will need to consider how the animation design meets the identified needs of the client/organisation. An example would be for an animation that demonstrates the use of an organisation product. The teacher could deliver a presentation that shows how a different product would meet the needs of a given scenario in order to illustrate the process involved.

Practice review activities: Learners would need to justify how the content of their animation satisfies the intended purpose. As an example, if the animation is meant to demonstrate a product made by the organisation then it may be important to show customers how it works. This justification can be recorded in a presentation or report that will also contribute towards the decision making process.





01

02

03

Activity 6

Delivery: In addition to animation features on the new website, a range of digital graphics will also be needed. The teacher should demonstrate techniques involved in how to generate ideas for digital graphics. This may include the use of mind maps/spider diagrams and mood boards. Visualisation diagrams of an intended graphic will be an outcome from the ideas generated. It is recommended that a class activity is facilitated by the teacher so that anybody can suggest ideas on suitable content for a different scenario.

Practice review activities: Learners should generate their outline ideas for the digital graphics. These may include items such as page backgrounds, banners, logos, navigational features, advertisements and other images. At this stage of ideas generation, it is the overall purpose and content that is being considered. The properties, sizes and layout will be planned in the next activity. The range of ideas can also be presented to the client/organisation. This activity may be combined with the presentation of the animation ideas in Activity 3. As an outcome from the presentation, learners will decide what ideas will be taken forward for detailed planning.

Activity 7

Delivery: Having decided what graphics will be needed on the new website, learners will need to plan their development. The teacher could deliver a presentation that applies the knowledge from Module 3 Activity 2 into practical web/digital graphics. In particular, the properties (pixel dimensions/resolution), colour mode and file type should be included.

Practice review activities: The properties for each digital graphic planned should be clearly documented, ie the pixel dimensions, resolution and layout. Visualisation diagrams should also be produced to show the intended content with component images, graphics and text. Some of the static digital graphics may be required as a background for an animation scene, in which case their use should be clearly identified and linked to the animation planning.



Module 6

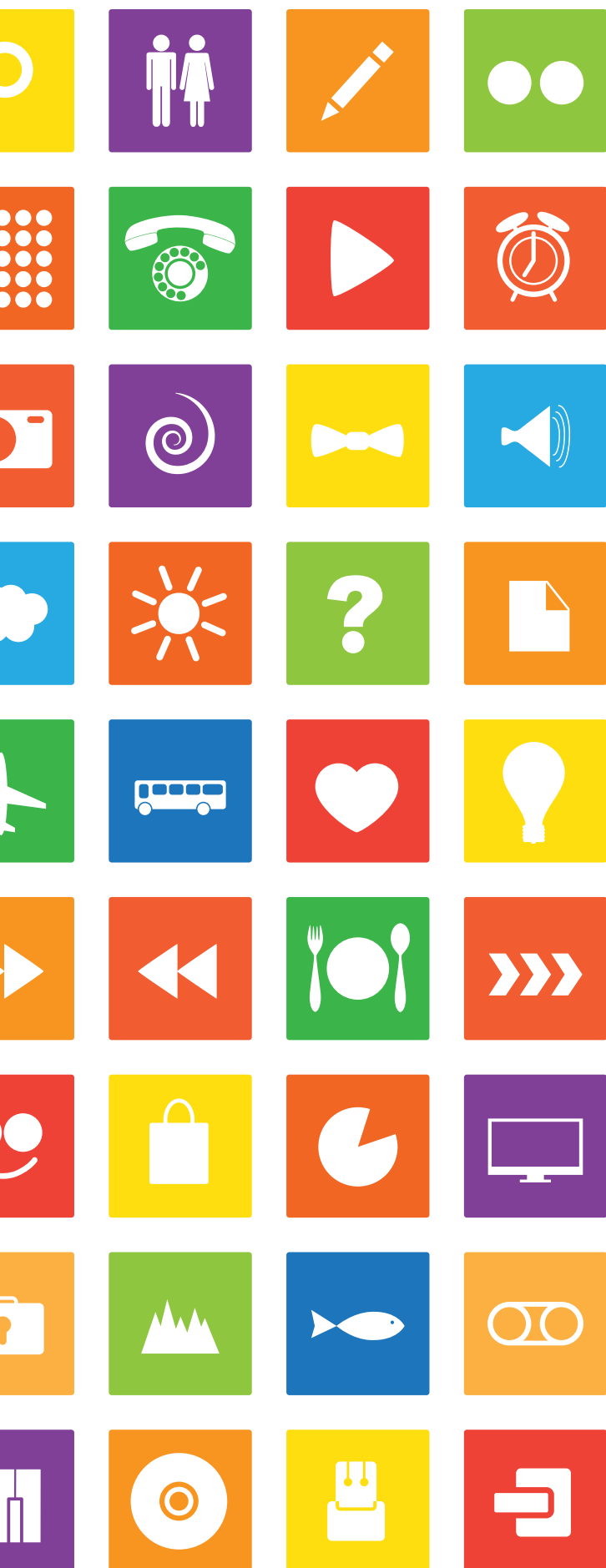
The delivery now concludes the exploration and planning stages by presenting ideas for the new interactive website. This covers Unit 1 – Communication and Employability Skills (LO2 and LO3), Unit 2 – Information Systems (LO4), Unit 12 – Website Production (LO3), Unit 14 – Computer Animation (LO1) and Unit 31 - Digital Graphics for Interactive Media (LO2).

Before learners can start to plan the animation, they need to know about different types of animation and how web based animations are created. For this they will need to have a good understanding of:

- How to use IT tools to produce management information
- How to generate ideas for digital graphics
- The types and uses of animation
- How to design websites
- The principles of effective communication
- How to use IT to communicate effectively.

Contained within the following assessment criteria/LO(s)/units:

Select information to support a business decision-making process	P6	LO4	Unit 02
Justify decisions made in producing the detailed plan	D2	LO2	Unit 31
Using appropriate design tools, design an interactive website to meet a client need	P4	LO3	Unit 12
Produce annotated design documentation for an interactive website to meet a client need	M2		
Use IT tools to produce management information	P7	LO4	Unit 02
Explain the principles of effective communication	P2	LO2	Unit 01
Discuss potential barriers to effective communication	P3		
Explain how some of the potential barriers can be reduced	D1		
Use IT to aid communications	P5	LO3	Unit 01
Explain the value of a management information system	M3	LO4	Unit 02
Describe the benefits of using animations in the media	M2	LO1	Unit 14
Discuss the advantages and limitations of animated GIFs	P3		
Communicate technical information to a specified audience	P6	LO3	Unit 01
Demonstrate a range of effective interpersonal skills	P4	LO2	Unit 01
Explain the choices of the IT used	M2	LO3	Unit 01
Justify the use of the IT used to aid communication	D2		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The development of the organisation's new website will have a time and cost implication. Before being given approval for its development, a presentation and proposal will have to be made to support the idea. The teacher should explain the processes that are required for a proposal to be supported by an organisation. They should emphasise the importance of benefits to the organisation, whether purely financial (eg cost savings) or higher revenue (eg more product sales).

Practice review activities: For this activity, learners should select relevant information to support this business decision making process. This will require the identification of the benefits to the organisation, such as in terms of cost savings or improvement in customer service and support. Learners should start to prepare a presentation for the proposed new website to support the decision making process.

Activity 2

Delivery: The teacher should encourage learners to deliver presentations to the rest of the class. This may be individually or as part of a group. As a learning exercise, this can be on any topic since the intention is to build presentation skills and confidence. Preparation for this presentation should include methods used to justify any statements or decisions.

Practice review activities: It is suggested that learners present their new website proposal later in this module. As part of the presentation, learners should be able to justify the decisions made in producing the detailed plan and website proposal. If this is not included in the actual presentation material, a question and answer session as part of the audience feedback will need to cover this requirement. This activity requires learners to prepare their justification of what decisions were made in the planning and proposal stages. This justification should be documented at this stage.



Activity 3

Delivery: The content of this activity means that learners will need to plan the website development. This includes the preparation of a site map, page layouts, page content, identification of house styles, use of CSS, navigational features, database links, site security and hosting. The teacher will need to deliver presentations and/or explain how these processes are completed. This will need to include the creation of a site map in a recognised format, visualisation diagrams for selected pages and an indication of the visual style/layout together with the technical aspects such as domains, hosting and site security.

Practice review activities: By this stage learners will have decided on the purpose and content for the new website. Using appropriate design tools, learners should now design their interactive website in response to the client/organisational needs. The designs will need to include a site map, page layouts, page content, identification of house styles, use of CSS, navigational features, database links, site security and hosting for example. Design tools may be a combination of hand drawn and digital files created using software applications.

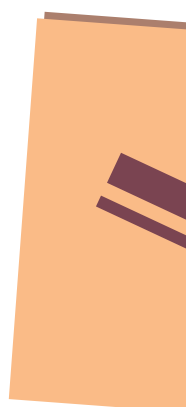
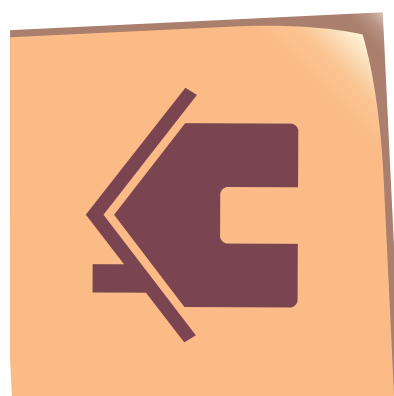
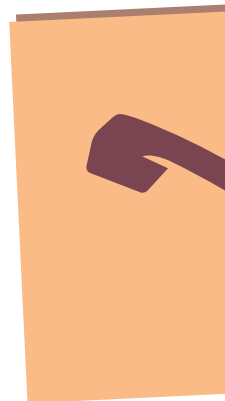
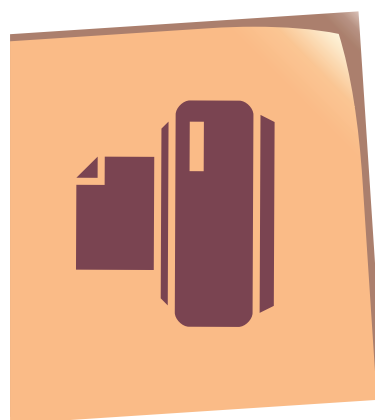
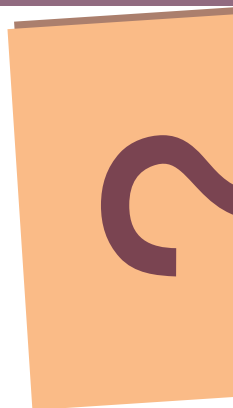
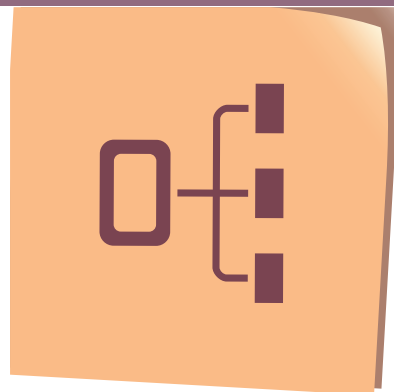
Activity 4

Practice review activities: The design of the new website for Activity 3 should be documented so that annotated versions can be included in the presentation to the client/organisation. Photographs or scans of hand drawn material can be combined with digital files and screen captures to achieve this. The annotated design documents will need to be combined with the proposal that includes the decision making information for presentation purposes.

Activity 5

Delivery: The presentation of the proposal for the website will need to include a section on management information. The teacher should explain what content is required and expected by information supplied to management.

Practice review activities: Learners will need to use IT tools to produce management information in order to assist the business decision making process. The output from this activity should also be combined and inserted into the presentation materials.







Activity 9

Practice review activities: Learners present their proposal to a panel that represents the client/organisation. As part of this, learners should use IT to aid communication of their ideas and proposed solution. This may be recorded on video for appraisal and review purposes.

As part of the presentation, learners could:

- Identify and explain the value of a management information system to the client/organisation. The benefits of this will then contribute to the business decision making process.
- Describe the benefits of using animations in the new website. A range of different types of animation may be included in the proposed new website. Their use should be identified and suitability described.
- Discuss the advantages and limitations of animated GIFs. Even if animated GIFs are not being proposed, their limitations should be explained to the audience.
- Communicate technical information to a specified audience. In addition to the layout and structure of the website, the technical aspects such as database links, security features, architecture and hosting should also be included.
- Demonstrate a range of effective interpersonal skills. Learners should attempt to engage the audience, responding to their needs and expectations. Consideration should be given to the nature and style of verbal exchanges and body language for example.

Activity 10

Delivery: The teacher should explain how to analyse the effectiveness of a presentation. This will need to include consideration of the choices of IT used and how they aided communication.

Practice review activities: Following the presentation by the learner, a review of key factors should be completed. This may be added to the diary, blog or activity report. In particular, learners should:

- Explain their choices of the IT used in the proposal for the new website
- Justify their use of IT to aid communication in the presentation.

To complete this module, it is expected that a proposed solution for the new website will be approved by the client/organisation. Adjustments to the content and structure can be made at this stage although Module 7 will begin the creation of the planned outcome.





Module 7

The content and website should be planned and approved by the teacher prior to starting this module. Initially, learners need to create the different assets required. The delivery in this module looks at creating the digital graphics that will be used on the website. This covers Unit 31 – Digital Graphics for Interactive Media (LO3).

Before learners can create the website pages, they need to produce the digital graphic assets. Note that some of these graphics may be used as part of the animations so this module is completed first. For this they will need to have a good understanding of:

- How to create digital graphics for interactive media products
- What industry practice should be followed.

Contained within the following assessment criteria/LO(s)/units:

Create digital graphics for an interactive media product following industry practice, working within appropriate conventions and with some assistance	P3	LO3	Unit 31
Enhance digital graphics for an interactive media product using advanced skills	D3		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

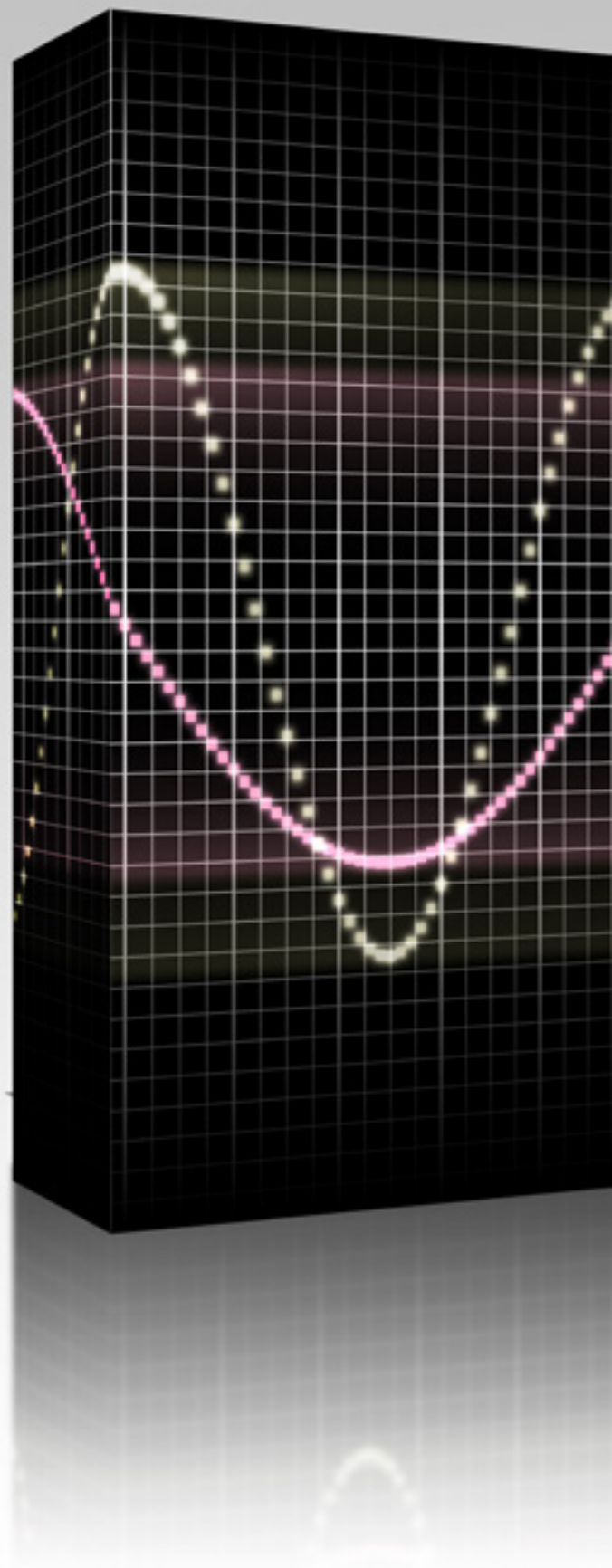
Delivery: Following on from Module 5 (to plan the digital graphics) and Module 6 (to present the proposal) learners need to begin preparing the content. This module looks at creating the digital graphics for the interactive media product. Initially a series of presentations, demonstrations and workshops will need to be delivered on the tools and techniques of the digital graphics editing software. Learners will need to develop some proficiency in the use of the software prior to creating their own graphics for the website project.

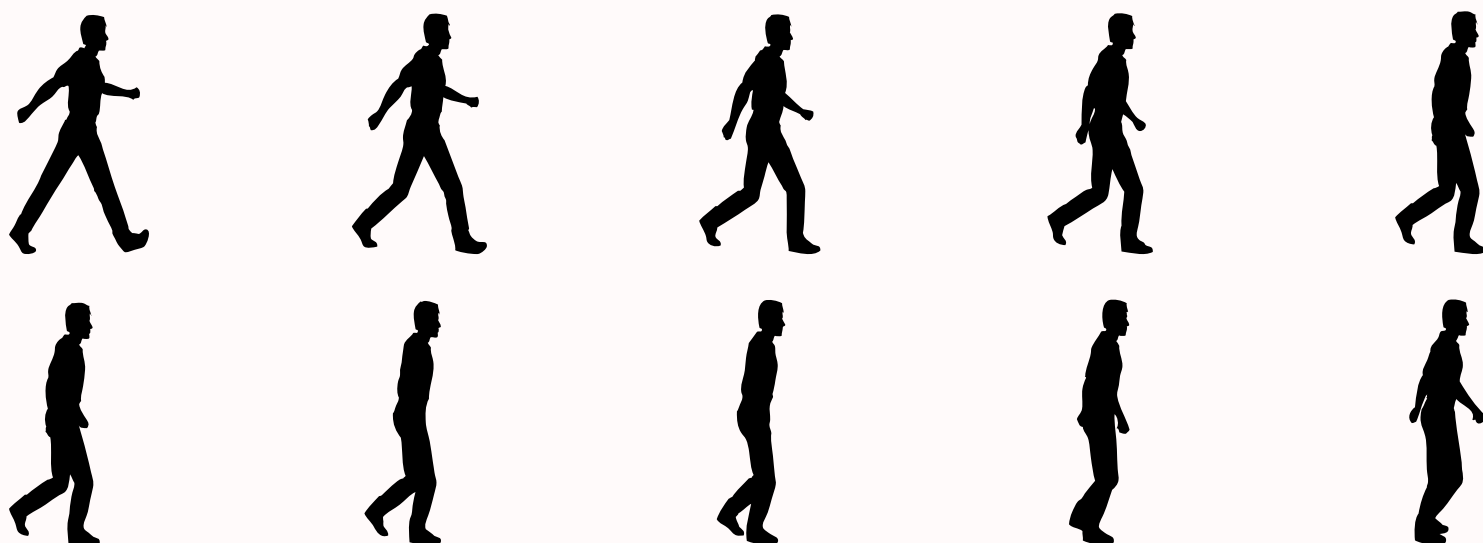
Practice review activities: Learners should use their planning documents created in Module 5 such as the visualisation diagrams and specifications for the different graphics. Learners should then use the digital graphics editing software application to create their work, following industry practice and working within appropriate conventions. A suitable range of editing tools and techniques should be used to create each of the required graphics.

Activity 2

Delivery: Learners will need to enhance their digital graphics for an interactive media product using a range of advanced skills. The teacher will need to demonstrate the use of more advanced tools such as enhanced text effects, layer styles, shadow effects, gradients and composite layers. These may be demonstrated and merged with the delivery of the content for Activity 1.

Practice review activities: Learners should apply the use of advanced features and tools to their own digital graphics. The graphics should then be saved in a suitable file format and resolution for use on the new website.





Module 8

The next stage in the process is to look at creating the animations that will be used on the website. This covers **Unit 14 – Computer Animation (LO2, LO3)** and **Unit 18 – Web Animation for Interactive Media (LO3)**.

Before learners can create the website pages, they need to produce the animation assets. For this they will need to have a good understanding of:

- The software techniques used to create animation
- How to design and implement digital animations
- How to create web animation following industry practice.

Contained within the following assessment criteria/LO(s)/units:

Describe the software tools available for animation	P4	LO2	Unit 14
Design computer animations using different animation techniques	P6	LO3	Unit 14
Create web animation following industry practice, working within appropriate conventions and with some assistance	P3	LO3	Unit 18
Implement animations using different animation techniques	P7	LO3	Unit 14
Use advanced software functions to enhance the animation	M3		
Implement improvements to a web animation using advanced software functionality	M3	LO3	Unit 18



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

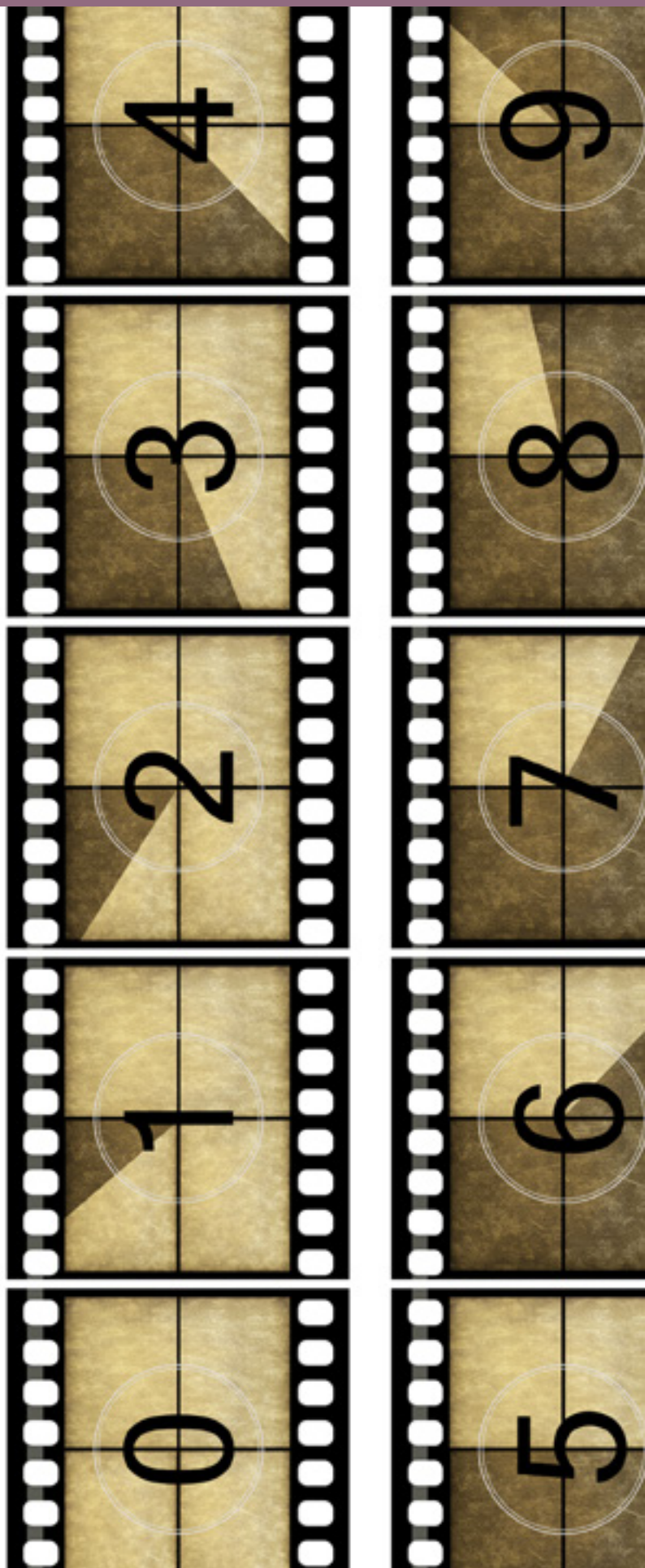
Delivery: Initially the teacher should deliver a presentation on the range of animation software available. This may include information on software applications that are not available within the classroom for comparison purposes. This should be followed by a series of presentations, demonstrations and workshops on the tools and techniques of the digital animation software to be used. Tools and techniques may include frame by frame, shape and/or motion tweens. The use of key frames should be identified with any of these approaches.

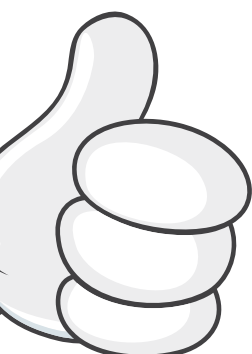
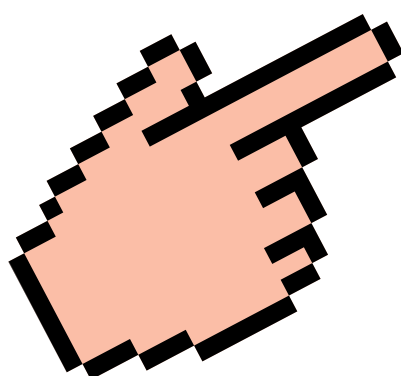
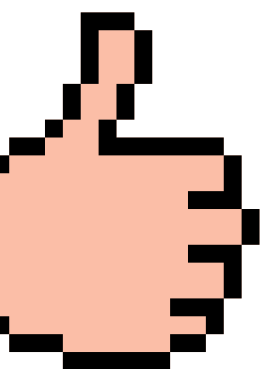
Practice review activities: Learners will need to develop some proficiency in the use of the software tools prior to creating their own animations for the website project. Their use may be documented with examples, reference materials and annotated notes. The use of suitable tools and techniques may be added to the planning reports and documents that have already been produced.

Activity 2

Delivery: The teacher should demonstrate the design processes for creating animations. This should begin with creating a storyboard that identifies the content, timings and key frames.

Practice review activities: Learners should create a storyboard and identify tools and techniques to be used within the software applications. The scene timings, content and use of different animation techniques should be clearly identified and documented for future reference.





Activity 3

Delivery: Following on from the planning and design stages learners need to implement and create the web animation. The teacher should facilitate workshops so that learners can create their animations.

Practice review activities: Learners should use their planning and design documentation such as the detailed storyboard and specifications in conjunction with the chosen software application, following industry practice and working within appropriate conventions. A suitable range of animation tools and techniques should be used to create the web animations.

Activity 4

Practice review activities: Having created their basic web animations, learners should now enhance these using advanced software functions. This will be dependent on the software application being used but may include the use of shape and motion tweens for example. A key feature will be the creation of animated movement using animation techniques and not just linear transitions between scenes. The processes should be clear in the final animations, although screen captures and annotated commentaries will provide useful reference information for future work.

Activity 5

Delivery: Techniques for enhancing, optimising and saving work may have already been covered by the teacher in the presentations and demonstrations. If not the teacher should now deliver a presentation on the use of scripting, user interaction and optimisation to ensure the file size is appropriate for web use.

Practice review activities: Learners will need to implement improvements to a web animation using advanced software functionality. This may include user interaction using scripting together with optimisation prior to saving/exporting the work into a suitable file format. Consideration of these formats should be supported by learners' findings in their exploration of file formats, platforms and browser support in Module 4.



Module 9

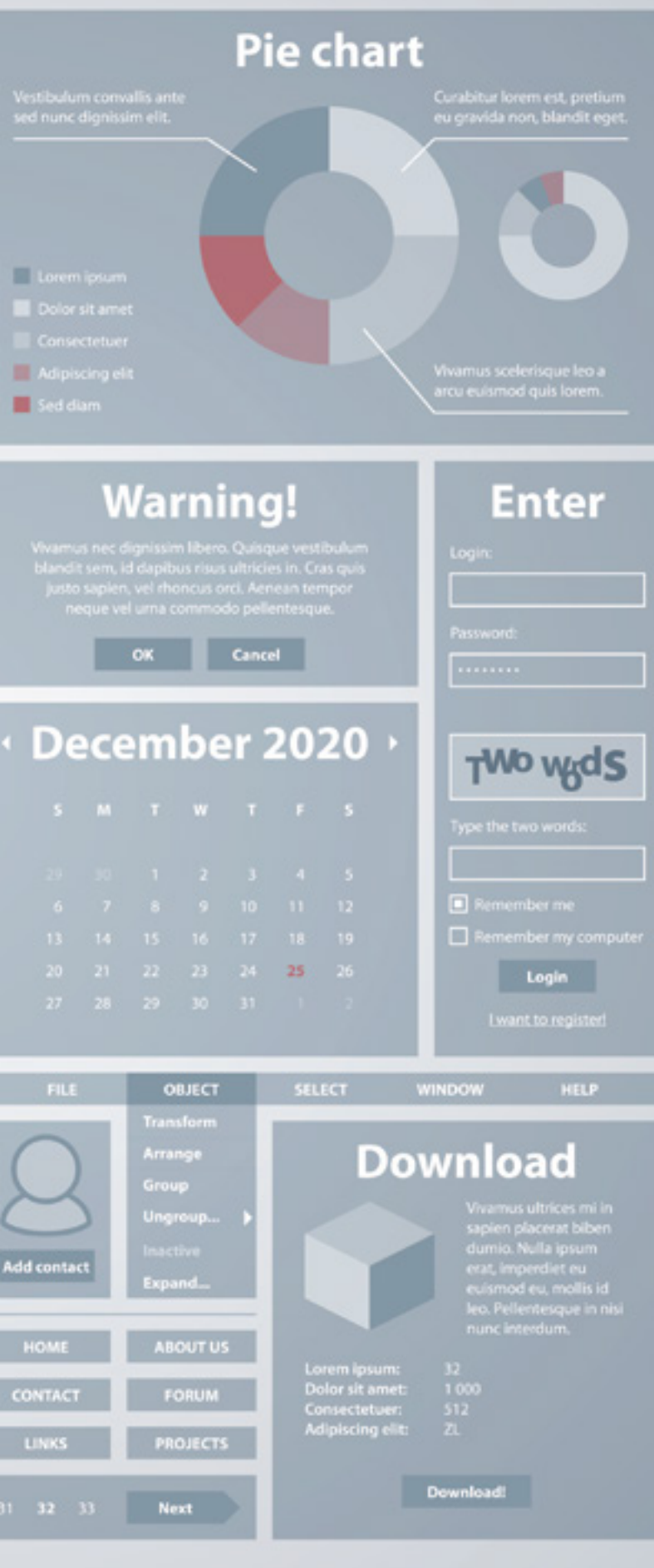
Now that the animation and graphics assets have been created, learners need to produce the website. The delivery in this module looks at how to create the final website, importing the assets and creating the navigation, page layout etc. This covers Unit 01 – Communication and Employability Skills (LO4), Unit 02 – Information systems (LO4) and Unit 12 – Website Production (LO4).

To create the website learners will need to have a good understanding of:

- How to create a website
- How to use IT tools to create management information
- How to address personal development needs.

Contained within the following assessment criteria/LO(s)/units:

Create an interactive website to meet a client need	P5	LO4	Unit 12
Implement CSS in an interactive website to improve the site to meet a client's needs	M3		
Use IT tools to produce management information	P7	LO4	Unit 02
Follow a personal development plan	P8	LO4	Unit 01



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: This module is based around a practical activity whereby learners are creating their interactive websites. The teacher should deliver this module using a series of presentations, demonstrations and workshops on the tools and techniques of the web authoring software. This will need to include the use of the software, how to import/manage content, work with cascading style sheets (CSS), create the site pages and add navigation features for example. A separate presentation will need to be included that covers testing on an interactive website. The creation of suitable test plans together with any built in test utilities of the software can be demonstrated and documented. Delivery will continue in a workshop style environment with learners creating sample pages and websites. Clarification and guidance on the use of tools and techniques will need to be provided where necessary.

Practice review activities: In previous modules, learners will have created and stored the website content in the form of graphics and animations. Learners can now create the interactive website by applying their knowledge and skills in the use of a web authoring software application to create a functional website that satisfies the client/organisational requirements. Each of the website pages should be created as planned and linked together using the navigational structure identified on the site map. Any changes to the content or structure should be described with reasons given. As part of this activity to create the website, learners should also implement CSS to improve the overall look and ensure a consistent style across all the site pages. Testing of the display and navigation should also be completed and documented.



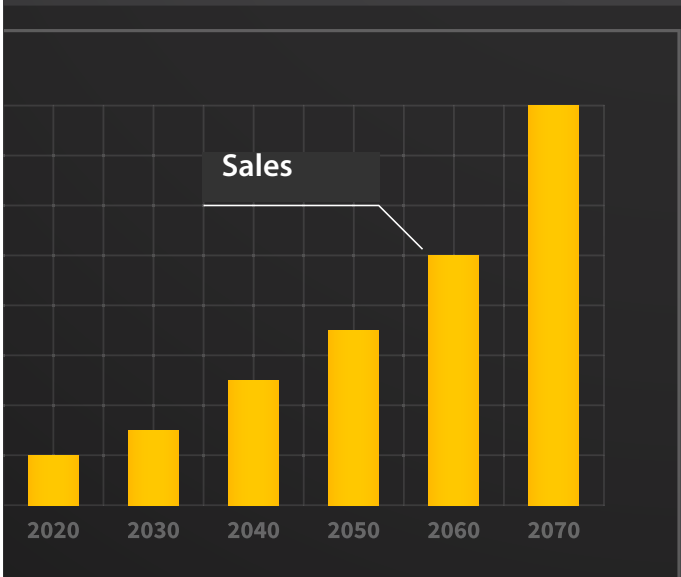
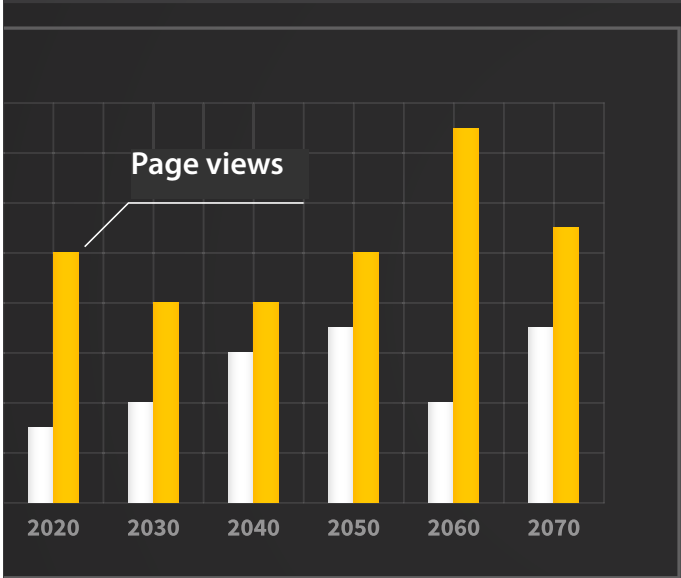
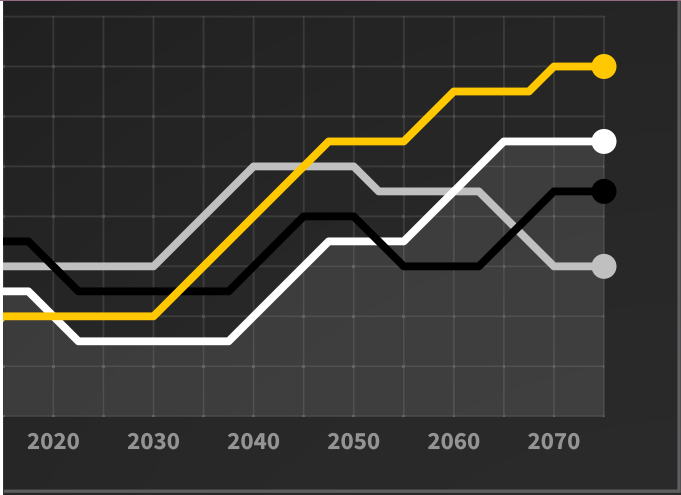
Activity 2

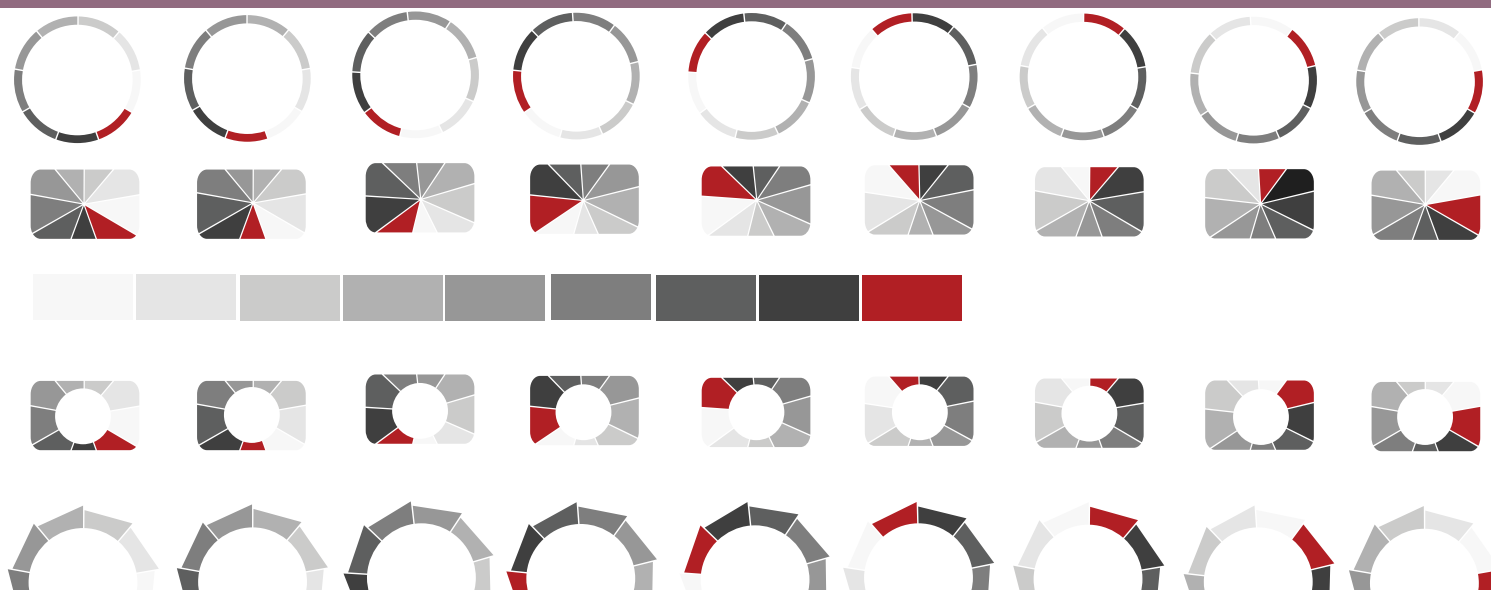
Delivery: The teacher should identify what is accepted as management information in a broad context and then apply this to a website. The use of IT tools to produce management information should include the scope and any sources to be used.

Practice review activities: Learners should use a range of IT tools to produce management information for their website. This could relate to the tracking of website statistics, page views and the processing of sales orders and/or customer enquiries. As an example, this information may be stored in a database or spreadsheet format.

Activity 3

Practice review activities: Throughout the creation of the website, learners should be following their personal development plan. This may have identified additional learning and training requirements to develop skills in creating the content and interactive website. Learners should record their progress and activities that relate to their development plan.





Module 10

Following the exploration of the different sectors, the next stage is to plan the content for the new interactive website. This covers Unit 02 – Information Systems (LO3), Unit 14 – Computer Animation (LO2) and Unit 18 – Web animation for Interactive Media (LO2), Unit 31 – Digital Graphics for Interactive Media (LO2).

Before learners can start to plan the animation, they need to know about different types of animation and how web based animations are created. For this they will need to have a good understanding of:

- The features and functions of information systems
- The software techniques used in animation
- How to devise web animation
- How to generate ideas for digital graphics.

Contained within the following assessment criteria/LO(s)/units:

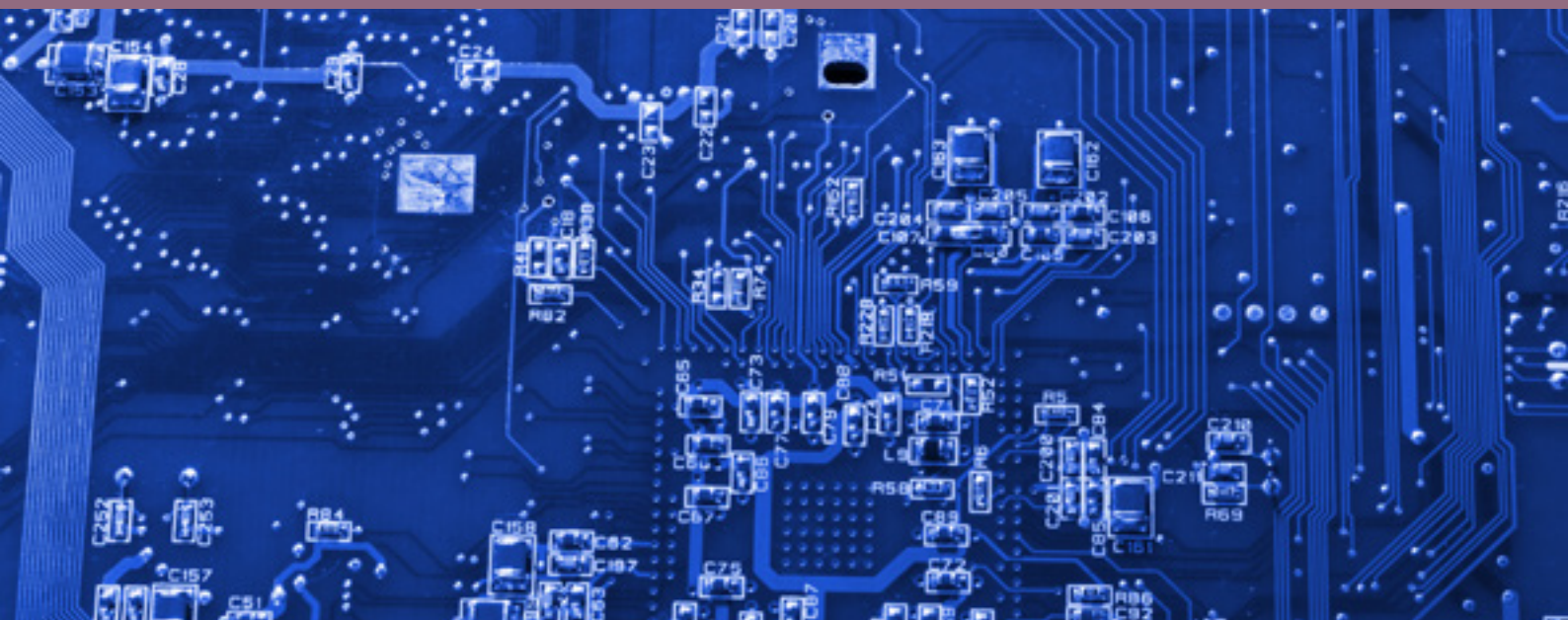
Carry out acceptance testing with client on an interactive website	D2	LO4	Unit 01
Demonstrate a range of effective interpersonal skills	P4	LO2	Unit 01
Use IT to aid communications	P5	LO3	Unit 01
Communicate technical information to a specified audience	P6		
Justify how the use of advanced software functionalities has improved the animation	D2	LO3	Unit 14
Justify how the use of advanced software functions has improved the final animation	D3	LO3	Unit 18



Practice Review Activities

- Use IT to aid the communications. For example, using multiple browsers, platforms and IT software applications, potentially with a projector if a larger audience
- Communicate technical information about the workings and features of the interactive website to the specified client/organisational audience
- Justify how the use of advanced software functionalities has improved the animation features on the website.





Module 11

Now that the website has been created, tested and published, learners need to use information systems to manage and store relevant information about it. The delivery in this module looks at the use, issues, features and tools that could be used. This module covers Unit 02 – Information Systems (LO2, LO3 and LO4).

For this they will need to have a good understanding of:

- The issues related to the use of information
- The features and functions of information systems
- How to use IT tools to produce management information.

Contained within the following assessment criteria/LO(s)/units:

Explain the issues related to the use of information	P3	LO2	Unit 02
Compare legal, ethical and operational issues that may affect organisations	D1		
Describe the features and functions of information systems	P4	LO3	Unit 02
Illustrate the input and output of information within a specified functional area of an organisation	M2		
Analyse the legal and ethical implications of the illustrated input and outputs	D2		
Use IT tools to produce management information	P7	LO4	Unit 02



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The teacher could deliver a presentation on the issues related to the use of information. A range of legal, ethical and operational issues all need to be included. Case studies and real world examples should be used to support this.

Practice review activities: Learners should identify the range of information that is associated with the website. This may relate to the website content, customer contact details, customer orders, use of graphics and animation features. Learners should explain the issues related to the use of all information for the new interactive website. This may include comments on the use of intellectual property, copyright and data protection.

Activity 2

Practice review activities: Following on from Activity 1, learners should expand on the legal, ethical and operational issues making comparisons where relevant. This may be combined with the work already produced and be summarised in a report or presentation.

Activity 3

Delivery: The teacher could deliver a presentation on different types of information system including their content, features and functions. This should be relatively broad in scope so that learners will be able to identify suitable systems for their own future projects.

Practice review activities: A range of information will need to be stored safely and securely for the new website. This information will be stored in one of the organisation's information systems. Using a report or presentation, learners should describe the features and functions of information systems that relate to this project.





Activity 4

Practice review activities: As an extension to Activity 1 in Module 5, learners should review the input and output of information within the customer relationship area. The basis of this information will have been identified earlier but now formal records need to be produced. These will then be stored within the organisation's management information system. Learners could document the inputs and outputs in the form of a table and complete the following sub tasks:

- Analyse the legal and ethical implications of the website input and outputs.
- Identify the copyright issues on all assets and content, whether sourced or created.
- Use IT tools to produce management information for the interactive website.



Module 12

As the final stage in the project, learners need to review their progress and future development needs. This module covers Unit 01 – Communications and Employability Skills (LO1 and LO4).

For this they will need to have a good understanding of:

- The personal attributes valued by employers
- How to address personal development needs.

Contained within the following assessment criteria/LO(s)/units:

Explain the personal attributes valued by employers	P1	LO1	Unit 01
Explain the different personal skills that employers may require for specific IT job roles	M1		
Follow a personal development plan	P8	LO4	Unit 01
Identify primary areas for improvement and how these will be achieved	M3		



During the delivery of the units, the learners should carry out a range of activities to demonstrate and check their knowledge and understanding. They should also undertake review activities as they work through the programme of learning.

Practice Review Activities

Activity 1

Delivery: The teacher could deliver a presentation on what personal attributes are valued by employers. Alternatively, a suitable guest speaker from an outside organisation would be ideal if available (one example being a representative from human resources).

Practice review activities: Having finished the website and stored all relevant information in the management information systems, learners should consider the personal attributes valued by employers. This should be explained in the form of a post-project report or presentation to assist further development needs. Examples could include their technical ability, creative thinking, time management, independence, motivation, team working and communication skills.

Activity 2

Delivery: The teacher could deliver a presentation on what personal skills are required by employers for specific IT job roles. One way to achieve this is by reviewing job vacancies that include a list of required skills and expertise. Alternatively, a guest speaker from an outside organisation may also be suitable (such as a departmental manager).

Practice review activities: Following on from Activity 1, learners should explain the different personal skills that employers may require for a specific IT job role. Learners should identify what relevant IT job roles would be needed to produce an interactive website that includes creating animations and digital graphics in addition to the website. A table of personal skills cross referenced to the IT role would be a suggested format for this.



Practice review activities: Learners will have followed their personal development plan throughout this project to create a new website. At this final stage, learners should now review what personal development needs were completed. Looking further ahead, learners should also identify primary areas for improvement and how these could be achieved. This may be shown as annotated comments on the existing plan or, alternatively, a new/updated personal development plan could be produced for comparison purposes.

A word cloud featuring various marketing and business terms. The words are arranged in a dense, overlapping manner. The most prominent words, shown in larger fonts, include 'QUALITY', 'MARKET', 'THING', 'WORLD', 'BUSINESS', 'VALUE', 'PROMO', 'GOOD', 'STATUS', 'ADVERTISING', 'ADVANTAGE', 'BRANDED', 'MANUFACTURING', 'HIGH', 'GOOD', 'MARKETING', 'BADGE', 'POSITIVE', 'SELLING', 'NAME', 'LEADING', 'PROMOTION', 'THINKING', 'SYMBOL', 'LIVE', 'DEVELOPMENT', 'METHODOLOGY', 'BUSINESS', 'THING', 'LEADER', 'C', 'ADVANTAGE', 'BRANDED', 'MANUFACTURING', 'GOOD', 'HIGH', 'USE', 'ING', 'US', 'CT', 'HIG', 'UE', 'GOOD'. Other visible words include 'EXCELLENT', 'PROMOTION', 'GO', 'METHODOLOGY', 'TRADE', 'SYMBOL', 'WORLD', 'STATUS', 'LIVE', 'HIGH', 'SELL', 'BRAND', 'EXCELLENCE', 'PERFECT', 'LOGO', 'NAME', 'VALUE', 'HIGH', 'WORLD', 'BRANDED', 'LOGO', 'SELLING', 'VALUE', 'BRANDED', 'THINKING', 'WORLD', 'DEVELOPMENT', 'PROMOTION', 'LEADING', 'THINKING', 'SYMBOL', 'LIVE', 'DEVELOPMENT', 'METHODOLOGY', 'BUSINESS', 'THING', 'LEADER', 'C', 'ADVANTAGE', 'BRANDED', 'MANUFACTURING', 'GOOD', 'HIGH', 'USE', 'ING', 'US', 'CT', 'HIG', 'UE', 'GOOD'. The colors used for the words include shades of green, blue, purple, yellow, orange, and brown.

This guide is an example of how delivery can be conducted holistically.

Other examples of units which could be delivered holistically as an overall project are identified below.

IT Technical Support

Unit 03 – Computer Systems
Unit 04 – Managing Networks
Unit 05 – Organisational Systems Security
Unit 07 – Computer Networks
Unit 08 – IT Technical Support
Unit 09 – Project Planning with IT
Unit 11 – Maintaining Computer Systems
Unit 13 – Installing and Upgrading Software
Unit 21 – Communication Technologies
Unit 22 – IT Systems Troubleshooting and Repair
Unit 28 – Networked Systems Security

Creating an Enhanced Computer Game

Unit 09 – Project Planning with IT
Unit 10 – Computer Games Development
Unit 16 – 2D Animation Production
Unit 32 – Computer Game Design

Skills Guides

A range of skills guides are available to support the delivery of the Cambridge Technicals qualifications, focusing on areas such as project management, testing and document production.

These skills guides can be downloaded from the OCR website

www.ocr.org.uk

To give us feedback on, or ideas about the OCR resources you have used, email resourcesfeedback@ocr.org.uk

OCR Resources: the small print

OCR's resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board and the decision to use them lies with the individual tutor. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources.

© OCR 2013 - This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content:

Page 2: Peshkova/Shutterstock.com, Page 5: bloomua/Shutterstock.com, Page 6: rosedesigns/Shutterstock.com, Page 7: alphaspirt/Shutterstock.com, Pages 8 and 46: Maksim Kabakou/Shutterstock.com, Page 9: Vector Icon/Shutterstock.com, Page 10: Enseigh/Shutterstock.com, Page 11: pisotskii/Shutterstock.com, Page 12: nasirkhan/Shutterstock.com, Page 13: alexskopje/Shutterstock.com, Pages 14 and 44: Login/Shutterstock.com, Page 15: szikszaisu/Shutterstock.com, Page 16: getvitamin/Shutterstock.com, Page 17: akito/Shutterstock.com, Page 18: Paola Canzonetta/Shutterstock.com, Page 19: citybrabus/Shutterstock.com, Page 20: notkoo/Shutterstock.com, Page 21: andromina/Shutterstock.com, Page 22: spiralmedia/Shutterstock.com, Page 23: jelome/Shutterstock.com, Page 24: Tiramisu Studio/Shutterstock.com, Page 25: Peshkova/Shutterstock.com, Page 26: Florian Augustin/Shutterstock.com, Page 27: bloomua/Shutterstock.com, Page 28: Alexandr Peers/Shutterstock.com, Page 29: cg-art/Shutterstock.com, Page 30: PlusONE/Shutterstock.com, Page 31: llnatovich Maryia/Shutterstock.com, Page 32: Red_Spruce/Shutterstock.com, Pages 33 and 41: Kheng Guan Toh/Shutterstock.com, Page 34: musicman/Shutterstock.com, Page 35: Maximus256/Shutterstock.com, Page 36: PILart/Shutterstock.com, Page 37: biorave/Shutterstock.com, Pages 38 and 39: Leonid Zarubin/Shutterstock.com, Page 40: tladams/Shutterstock.com, Page 42: Juan J. Jimenez/Shutterstock.com, Page 43: kubias/Shutterstock.com, Page 45: cmgirl/Shutterstock.com, Page 47: Login/Shutterstock.com



CONTACT US

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

Telephone 02476 851509

Email cambridgetec@ocr.org.uk

www.ocr.org.uk