

# ICTWEB452 Create a markup language document

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IT Works is a series of training and assessment resources developed for qualifications within the Information and Communications Technology Training Package.





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### Introduction

The assessment tasks for ICTWEB452 Create a markup language document are outlined in the assessment plan below. These tasks have been designed to help you demonstrate the skills and knowledge that you have learnt during your course.

Please ensure that you read the instructions provided with these tasks carefully. You should also follow the advice provided in the IT Works Student User Guide. The Student User Guide provides important information for you relating to completing assessment successfully.

#### Assessment for this unit

ICTWEB452 Create a markup language document describes the skills and knowledge required to use a text editor to design, create and save web pages to a given specification.

For you to be assessed as competent, you must successfully complete two assessment tasks:

- Assessment Task 1: Knowledge questions You must answer all questions correctly.
- Assessment Task 2: Project You must work through a range of activities and complete a project portfolio.

## Assessment Task 1: Knowledge Questions

#### Information for students

Knowledge questions are designed to help you demonstrate the knowledge which you have acquired during the learning phase of this unit. Ensure that you:

- review the advice to students regarding answering knowledge questions in the IT Works Student User Guide
- comply with the due date for assessment which your assessor will provide
- adhere with your RTO's submission guidelines
- answer all questions completely and correctly
- submit work which is original and, where necessary, properly referenced
- submit a completed cover sheet with your work
- avoid sharing your answers with other students.



#### **Assessment information**

Information about how you should complete this assessment can be found in Appendix A of the IT Works Student User Guide. Refer to the appendix for information on:

- where this task should be completed
- the maximum time allowed for completing this assessment task
- whether or not this task is open-book.

Note: You must complete and submit an assessment cover sheet with your work. A template is provided in Appendix C of the Student User Guide. However, if your RTO has provided you with an assessment cover sheet, please ensure that you use that.

## Questions

Student English Name:

Student Pinyin Name:

Provide answers to all of the questions below:

1. Outline the use of each of the markup languages in the table below. (include sample coding and explain its purpose in your own words.)

Markup language	What is it used for? Write in your own words. Do not simply copy and paste, summarize and paraphrase. References should be provided if you are referring to ideas, content, and website from internet.
Hypertext markup language (HTML)	Is a markup language. It includes a series of tags, through which the document format on the network can be unified, connecting the scattered Internet resources as a logical whole.
Virtual reality modelling language (VRML)	The vrml (Virtual Reality Modeling Language) is the virtual reality modeling language. It is a kind of scene modeling language used to build real world scene model or people fictitious three-dimensional world, and also has platform irrelevant.
Extensible markup language (XML)	XML is an extensible markup language, a subset of standard common markup languages, and is a markup language used to tag electronic files as structural.

#### References

https://baike.baidu.com/item/HTML/97049

https://baike.baidu.com/item/Vrml/221543

https://zhidao.baidu.com/question/97288535.html

Complete the following table, listing two standards applicable to markup language.

Standards applicable to markup language	How the standard affects markup languages
XML Publishing: <a href="https://www.w3.org/standards/xml/publishing">https://www.w3.org/standards/xml/publishing</a>	XSL Set Object Format (XSL-FO) provides style sheet function for transforming XML into paper format, such as PDF. It provides all necessary formats, including page

	layout, header, footer, right/reverse (odd/even) pages, vertical and horizontal pages, and so on.
Security Standards:  https://www.w3.org/standards/xml/security	It helps prevent DNS spoofing and man-in- the-middle attacks, which are very important for websites that transmit or receive sensitive information. All websites that require users to log in or deal with financial transactions are attractive data theft targets, and HTTPS should be used.

List three web browsers that support accessibility (very easy question).

Answer: Microsoft Edge Google Chrome Firefox

Explain why website accessibility is important and provide two examples of how a website can be made more accessible.

#### Answer:

Users may encounter inaccessible Web sites in a number of ways.

Some people may be unable to use the mouse. They may need to be able to scroll, click, navigate and interact with all parts of the site using just a keyboard or other device.

Others may have some form of color blindness and therefore may struggle with identifying links and buttons from other textual content.

Dyslexia makes it difficult for some people to understand the content of the site.

For people with severe visual impairment, the screen reader must be able to understand all the content and interactivity on the page. This is a program that reads web content to users and lets them interact with the page.

- (1) Image information on a site is usually inaccessible for visually impaired users because a screen reader cannot read out the picture. By using the alternative text of pictures, the visually impaired, users who turn off image mode on their phones, and users with low-bandwidth in rural areas can get the same information
- (2) Some users cannot use the mouse, such as older people with inflexible fingers. A website with high accessibility should not rely on the mouse, and all functions should be available through the keyboard

For disabled users, other assistive technologies can be used to imitate keyboards (such as voice input) to access the site

List three web page components to illustrate your webpage design. Your answer should include sample coding.

Answer:

- (1) HTML Colours: example: <h1 style="background-color:DodgerBlue;">Hello World</h1>
- (2) HTML Styles: example: I am red
- (3) HTML Images: example: <img src="pic\_trulli.jpg" alt="Trulli" width="500" height="333">
- 6. Explain three importance of a style guide when creating web pages. Suggest 2 HTML and 2 CSS style guides.

Explain the importance: The style design of a website can use the elements in the page to layout the website. A good page layout can highlight the main content that the website wants to show to the user, allowing users to quickly find the key points of the website in the page.

2 CSS style guides The CSS color, font, and size

CSS color The attribute defines the text color that you want to use.

The CSS font-family attribute defines the font to be used.

The CSS font-size property defines the text size to use

2 HTML style guides The HTML link-target property

target The attribute can have one of the following values:

\_ Self-By default, the document is opened in the same window / tab when clicked

\_blank-Open the document in a new window or tab

\_parent-Open the document in the parent framework

\_ Top-Open the document throughout the window

 (1) Explain storyboarding as it applies to web pages. (2) suggest a business process to draw storyboard. (click <u>here</u> for resources)

A storyboard is a visual sketch of software display effects for video creation and advertising design to express the author's creativity.

Step 1

Collect the information that you want to include on the Web site.

Step 2

Sorting information

Step 3

Determine page title, headings, sub headings and content for each page of the Web site,

Step 4

Plan the structure of the information and how the pages will link.

Step 5

Layout the menu structure.

Step 6

Layout your template page.

Step 7

Test the layout.

Describe the process for web pages validation. List and number your process. Select one tool and justify your selection in 50 words.

1 Open the W3C web page

2 Find the verification service page for the web site

3 Import the web page into the verification program for verification

When you use the validator to check an HTML, XHTML, or CSS file, the validator returns a list of errors based on the criteria you selected. Before publishing, make sure that you have verified that all web pages meet the W3C standard.

9. Explain why it is important to conduct compatibility testing for both browsers and devices. List 3 reasons for each.

Name of the browser: mircosoft edge

Name of the Devices: desktop

List 3 reasons

1 Browser compatibility causes some web page display errors and conflicts with other applications

2 May affect the app user experience and brand image

3 And other web pages to achieve some advanced features

# Assessment Task 1: Checklist

Student's name:				
Did the student provide a sufficient and clear answer that addresses the	Completed successfully?		Comments	
suggested answer for the following?	Yes	No		
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Question 7				
Question 8				
Question 9				
Task outcome:	□ Sati	sfactory		Not satisfactory
Assessor signature:				
Assessor name:				
Date:				

## Assessment Task 2: Project Portfolio

#### Information for students

In this task, you are required to demonstrate your skills and knowledge by working through a number of activities and completing and submitting a project portfolio.

You will need access to:

- a suitable place to complete activities that replicates an ICT environment including digital devices, word processing software and markup languages, Internet access and a range of browsers
- your learning resources and other information for reference
- Project Portfolio template
- Simulation Pack.

#### Ensure that you:

- review the advice to students regarding responding to written tasks in the IT Works Student User Guide
- comply with the due date for assessment which your assessor will provide
- adhere with your RTO's submission guidelines
- answer all questions completely and correctly
- submit work which is original and, where necessary, properly referenced
- submit a completed cover sheet with your work
- avoid sharing your answers with other students.



#### **Assessment information**

Information about how you should complete this assessment can be found in Appendix A of the IT Works Student User Guide. Refer to the appendix for information on:

- where this task should be completed
- how your assessment should be submitted.

Note: You must complete and submit an assessment cover sheet with your work. A template is provided in Appendix B of the Student User Guide. However, if your RTO has provided you with an assessment cover sheet, please ensure that you use that.

#### **Activities**

Complete the following activities:

#### Carefully read the following:



This assessment task requires you to design, create and save web pages using a markup language. The document you create will be a student portfolio and will include your resume, photos and images and a contact me page. Review the information in the ICTWEB429 Simulation Pack for more information.

Vocational education and training is all about gaining and developing practical skills that are industry relevant and that can help you to succeed in your chosen career. For this reason, basing your project on yourself means you are applying your knowledge and skills in a relevant, practical and meaningful way!

You will be collecting evidence for this unit in a Project Portfolio. The steps you need to take are outlined below. Before you begin, complete page 4 of your Project Portfolio.

#### 2. Web page preparation.



You are required to prepare to develop your web pages by providing the following information in your Portfolio:

- Identifying how the web pages you develop can be used and who is the audience for your document
- Identifying the markup language that you will use and documentation you need to access.
- Creating a structure and layout for your markup document, including explaining how you will ensure that the web pages are accessible.

Complete Section 1 of your Portfolio.

#### 3. Create web page.



Now that you have designed your web pages, you are required to create them using a text editor. You will also include the web page components you planned in Activity Step 2.2.

Complete Section 2 of your Portfolio.

#### Test and finalise web pages.



The final part of this assessment requires you to test and finalise your web pages. You will be required to:

- Test both documents offline to confirm that they are working i.e. valid.
- Confirm that the web pages you have created work on at least:
  - Two different types of browsers
  - Two different types of browsers
- Assess the test results to update the web pages as required.
- Confirm all requirements are met, finalise the web page and obtain signoff.

Complete Section 3 of your Portfolio.

Submit your completed Project Portfolio.



Make sure you have completed all sections of your Project Portfolio, answered all questions, provided enough detail as indicated and proofread for spelling and grammar as necessary.

Submit to your assessor for marking.

# Assessment Task 2: Checklist

Student's name:			
	Completed successfully?		Comments
Did the student:	Yes	No	
Identify uses and audience for the web pages?			
Determine and document mark-up language to be used to meet requirements?			
Identify and document required documentation for web pages?			
Define document structure following instructions and document requirements?			
Markup and define sections of document and describe structure and layout as per requirements outlined?			
Create and assign basic elements of document considering accessibility and document requirements?			
Identify and evaluate web page components required and select accordingly?			
Incorporate required web page components into web pages following procedures?			
Validate markup language document using two different browsers and devices and record outcomes?			
Identify gaps based on validation and apply changes?			

Confirm requirements for the web have been met, including styling requirements?	page			
Finalise documentation following required procedures?				
Obtain sign-off from the assessor?				
Task outcome:	□ Sa	atisfactory		Not satisfactory
Assessor signature:				
Assessor name:				
Date:				

## Final Results Record

Student name:	
Assessor name:	
Date	

## Final assessment results

		Result		
Task	Туре	Satisfactory	Unsatisfactory	Did not submit
Assessment Task 1	Knowledge questions	S	U	DNS
Assessment Task 2	Project Portfolio	S	U	DNS
Overall unit results		С	NYC	

## Feedback

	My performance in this unit has been discussed and explained to r	ne.
	I would like to appeal this assessment decision.	
Stud	dent signature:	Date:
	I hereby certify that this student has been assessed by me and that carried out according to the required assessment procedures.	t the assessment has been
Ass	essor signature:	Date: