

Set assignment

DRAFT

LEVEL 3 CAMBRIDGE ADVANCED NATIONAL (AAQ) IN

COMPUTING: APPLICATION DEVELOPMENT

Extended Certificate H129

For first teaching in 2025

F164: Website development

Introduction

This is Sample Assessment Material (SAM). It is an example set assignment that we publish alongside a new specification to help illustrate the intended style and structure of our set assignments.

During the lifetime of the qualification, updates to the set assignment template may happen. We always recommend you look at the most recent set of past set assignments where available.

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Designed and tested with teachers and students



Helping young people develop an ethical view of the world



Equality, diversity, inclusion and belonging (EDIB) are part of everything we do

Summary of updates

Date	Version	Page number	Summary of change
July 2023	1 DRAFT	All	Creation of document

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We have a range of support services to help you at every stage, from preparation to delivery.

Our teacher support is designed to make teaching our qualifications straightforward, whether you are an experienced teacher, new to teaching, new to OCR, or not a subject specialist of the qualification you are teaching.

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Contact details are available on the [final page](#) of the SAM.

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People and planet

OCR is part of Cambridge University Press & Assessment, which has clear commitments to champion sustainability, diversity, trust and respect for our people and planet.

We are committed to supporting a curriculum that helps young people develop an ethical view of the world. This enables them to take social responsibility, understand environmental issues and prepare them for the green jobs of the future.

Our equality, diversity, inclusion and belonging principles are that we:

- are respectful and considerate
- celebrate differences and promote positive attitudes to belonging
- include perspectives that reflect the diverse cultural and lifestyle backgrounds of our society
- challenge prejudicial views and unconscious biases
- promote a safe and supportive approach to learning
- are accessible and fair, creating positive experiences for all
- provide opportunities for everyone to perform at their best
- are contemporary, relevant and equip everyone to live and thrive in a global, diverse world
- create a shared sense of identity in a modern mixed society with one humanity.

To learn more, including our work on accessibility in our assessment materials, visit our [People and planet page](#).

OCR-set Assignment

Sample Assessment Material

OCR Level 3 Cambridge Advanced National (AAQ) in Computing: Application Development (Extended Certificate)

Unit F164: Website development

Scenario Title: Wind & Waves

This is a sample OCR-set assignment which should only be used for practice.

This assignment **must not** be used for live assessment of students.

The live assignments will be available on our secure website, 'Teach Cambridge'.

The OCR administrative codes linked to this unit are:

- unit entry code F164
- certification code H129

The regulated qualification number linked to this unit is: TBC

Duration

About 15 hours of supervised time (GLH)
(work that **must** be completed under teacher supervised conditions)

All this material **can** be photocopied. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

Contents

Information and instructions for Teachers	3
Using this assignment	3
Tasks for students and assessment criteria	5
Scenario	5
Task 1	6
Task 2	8
Task 3	11
Template for test table	13
NEA command words	14

Information and instructions for Teachers

Using this assignment

This assignment provides a scenario and set of related tasks reflect the development of a website prototype for a specific purpose based on a set of client requirements.

The assignment:

- Is written so that students have the opportunity to meet the requirements of all assessment criteria for the unit.
- Will tell students if their evidence must be in a specific format. If the task does not specify a format, students can choose the format to use.
- **Must** be completed under teacher supervision. Any exceptions to this will be stated in the assessment guidance.

You **must**:

- Use an OCR-set assignment for summative assessment of students.
- Familiarise yourself with the assessment criteria and assessment guidance for the tasks. These are given at the end of each student task. They are also with the unit content in **Section 4** of the Specification.
Assessment guidance is only given where additional information is needed. There might not be assessment guidance for each criterion.
- Make sure students understand that the assessment criteria and assessment guidance tell them in detail what to do in each task.
- Read and understand **all** the rules and guidance in **Section 6** of the Specification **before** your students start the set assignments.
- Make sure that your students complete the tasks and that you assess the tasks fully in line with the rules and guidance in **Section 6** of the Specification.
- Give your students the **Application Development Student guide to NEA assignments before** they start the assignments.

You **must not**:

- Use live OCR-set assignments for practice or formative assessment. This sample assessment material **can** be used for practice or formative assessment.
- Use this sample assessment material for live assessment of students.
- Allow group work for **any** task in this assignment.
- Change any part of the OCR-set assignments or assessment criteria.

Pages 1-4 are for teachers only. Please do **not** give **Pages 1-4** to your students.
You can give **any** or **all** of the pages **that follow** to your students.

Sample

Tasks for students and assessment criteria

Unit F164: Website development

Scenario Title: Wind & Waves

Scenario

'Wind & Waves' is a seaside shop. It hires out water sports equipment such as kayaks, surfboards and wetsuits. Most of its business is from people on holiday. Although the shop does well in the summer season, the owners are looking for ways that they can attract more customers and hire out more products all year round.

The owners have decided that they want to make the most of new technologies available to promote the shop, aiming at a target audience aged between 16 and 30 years.

You have been asked to create an interactive multimedia website that will promote the shop and its products.

The owners want the interactive multimedia website to reflect the fact that the shop is near the sea and supplies equipment for water-based activities. They want the website to allow potential customers to explore what 'Wind & Waves' offers in an exciting and engaging way. They have asked that the website uses a range of interactive features and multimedia effects to create this experience. The owners are also aware of how people use their mobile devices to access the internet and want the website to work on mobile devices.

Task 1

Planning and designing the high-fidelity website prototype

Topic Areas 1, 2 and 4 are assessed in this task.

The task is:

Plan and design the website prototype for 'Wind & Waves'.

You will:

- Document the requirements.
- Plan and design the website prototype's hosting requirements, structure, layout and content.
- Describe how the website prototype will be tested.

Your evidence **must** include:

- Written evidence.
- Website planning and design documentation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P1: Describe the client and user requirements for the website prototype.	M1: Explain the Libraries/ Frameworks required for the website prototype development.	D1: Justify the Search Engine Optimisation (SEO) techniques to be used in the website prototype.
P2: Explain the hosting requirements for the website prototype.		
P3: Create a design of the website structure, navigation system and a content overview.	M2: Explain how the house style for the website prototype is appropriate for the client requirements.	D2: Assess website prototype design choices in relation to W3C and accessibility compliance.
P4: Create a design of the webpage template(s) to show the page layout and the house style.		
P5: Identify assets required for the website prototype.		
P6: Describe how the website prototype will be tested.	M3: Justify the appropriateness of the testing.	

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P1	<ul style="list-style-type: none"> Students must describe both the client and user requirements. Students must expand the description into specific requirements which can be used as criteria to review against in Task 3.
P2	<ul style="list-style-type: none"> Students must explain the hosting requirements for the website prototype. The explanation of the hosting requirements must include the content in Topic Area 2.1.
P3	<ul style="list-style-type: none"> Students must create a design of the website structure for the proposed website prototype. Students could use the website planning and design tools in Topic Area 2.2. The site plan must include the navigation system and a summary of individual page content. The site plan must contain enough detail for it to be interpreted by someone who hasn't seen it before.
P4	<ul style="list-style-type: none"> Students must create a design for the webpage template(s). Students could use the website planning and design tools in Topic Area 2.2. The design must show how the pages will be laid out. Through the design, students must also define the house style for the website prototype. The designs must contain enough detail for them to be interpreted by someone who hasn't seen them before.
P5	<ul style="list-style-type: none"> Students must identify the essential assets required for the website prototype. To achieve this criterion, students are not required to identify all non-essential assets. This assessment criterion could be evidenced in an assets list.
P6	<ul style="list-style-type: none"> Students must describe the testing methods and testing types they will use to test the website prototype and the elements of the website prototype they intend to test. The description of how the software solution will be tested could include the content in Topic Area 4.1.
M1	<ul style="list-style-type: none"> Students must explain which Libraires/Frameworks they are using to develop the website prototype. The explanations must include how the chosen Libraries/Frameworks will allow the website prototype to function as intended.
M2	<ul style="list-style-type: none"> Students must explain how the house style(s) defined in P4 is appropriate for the client as detailed in the scenario.
M3	<ul style="list-style-type: none"> Students must justify the approach to testing detailed in P6.
D1	<ul style="list-style-type: none"> Students must explain how the search engine techniques they intend to use will ensure the website prototype is visible to search engines.
D2	<ul style="list-style-type: none"> Students must produce an assessment of how the design choices for the website prototype meet current W3C and accessibility guidelines.

Task 2

Creating the high-fidelity website prototype

Topic Areas 1, 2 and 3 are assessed in this task.

The task is:

Create the website prototype that you planned and designed in **Task 1**.

You will:

- Create an appropriate website structure.
- Source and prepare assets for use in the website prototype.
- Use web authoring software tools to create the website prototype.

Your evidence **must** include:

- The website structure.
- The final website prototype in a format which allows it to be viewed/used without installing any specialist software **or** video/screen recordings demonstrating the website prototype.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P7: Create an appropriate website structure for the website prototype.		
P8: Prepare assets appropriate for use as components in the website prototype.		
P9: Create the interactive and navigational components appropriate for the website prototype.	M4: Implement W3C and accessibility compliance in the website prototype.	D3: Implement appropriate Search Engine Optimisation (SEO) techniques in the website prototype.
P10: Create the website prototype using web authoring software tools.	M5: Implement appropriate responsive design features in the website prototype.	D4: Use appropriate Libraries/Frameworks to create the website prototype.
	M6: Use Cascading Style Sheets (CSS) to implement an appropriate and consistent style in the website prototype.	

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
Task 2	<ul style="list-style-type: none"> Ideally students will create the website prototype planned and designed in Task 1. However, if students deviate from the plan(s) and/or design(s) they should not be penalised when assessing Task 2. To confirm assessment decisions made for this task, the OCR assessor will need to be able to see the final website prototype. Therefore, students must provide either: <ul style="list-style-type: none"> The final website prototype in a format which allows it to be viewed/used without the need to install any specialist software. Video/screen recordings of the final website prototype being demonstrated.
P7	<ul style="list-style-type: none"> Students must create a website structure including the folder structure, site pages structure and index page location. This assessment criterion could be evidenced in screen shots or photographs showing the website folders and files.
P8	<ul style="list-style-type: none"> Students must prepare assets sourced for use as components in the website prototype. Topic Area 3.1 has examples of techniques students could use to prepare assets. The final website prototype will be sufficient evidence for this assessment criterion.
P9	<ul style="list-style-type: none"> Students must create interactive and navigational components to enable the website to function as intended. Students could use the web authoring software tools in Topic Area 3.3. The final website prototype will be sufficient evidence for this assessment criterion.
P10	<ul style="list-style-type: none"> Students must create the prototype website using the web authoring tools in Topic Area 3.2. The final website prototype will be sufficient evidence for this assessment criterion.
M4	<ul style="list-style-type: none"> Students must add W3C and accessibility compliance to the website prototype using the web authoring software tools in Topic Area 3.3. The final website prototype will be sufficient evidence for this assessment criterion.
M5	<ul style="list-style-type: none"> Students must add appropriate responsive design features to the website prototype using the web authoring software tools in Topic Area 3.3. Students must ensure the website prototype functions as intended on the devices detailed in the scenario. This assessment criteria could be evidenced in videos or photographs showing the website prototype working as intended on the devices detailed in the scenario
M6	<ul style="list-style-type: none"> Students must use CSS to implement a consistent style in the website prototype using the web authoring software tools in Topic Area 3.3. The style must be appropriate for the requirements detailed in the scenario. Students must include evidence of the CSS styles implemented. This assessment criterion could be evidenced in screen

Assessment Criteria	Assessment guidance
	shots, photographs or video/screen recordings showing the CSS styles implemented.
D3	<ul style="list-style-type: none">Students must add Search Engine Optimisation (SEO) techniques to the website prototype using the web authoring software tools in Topic Area 3.3. The techniques used must enable the website prototype to be visible to search engines. This assessment criterion could be evidenced in screen shots, photographs or video/screen recordings showing the techniques used.
D4	<ul style="list-style-type: none">Students must make use of Libraries/Frameworks to meet the requirements detailed in the scenario. Students must include evidence of the Libraries/Frameworks they have used. This assessment criterion could be evidenced in screen shots, photographs or video/screen recordings showing the Libraries/Frameworks used.

Task 3

Testing and reviewing the high-fidelity website prototype

Topic Areas 4 and 5 are assessed in this task.

The task is:

Test and review the website prototype that you created in **Task 2**.

You will:

- Test the website prototype using the testing described in **Task 1**.
- Review the website prototype.

Your evidence **must** include:

- Documented test results.
- Written evidence.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P11: Test the website prototype and document results.	M7: Analyse test results documenting any required remedial action.	D5: Discuss potential improvements and further development opportunities for the website prototype.
P12: Assess the suitability of the website prototype for meeting the requirements.		

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P11	<ul style="list-style-type: none"> Students must test the website prototype and document results. Ideally, students will use the approach described and justified in Task 1. However, if students deviate from the proposed testing they should not be penalised. Students must have evidence of the actual test results. For example, screen shots, photographs or video/screen recordings.
P12	<ul style="list-style-type: none"> Students must assess the suitability of the website prototype for meeting the requirements in Topic Area 5.1.
M7	<ul style="list-style-type: none"> Students must analyse the test results generated in P11 and explain any remedial action required to resolve the issues found during testing. Students are not expected to fix errors found in the website prototype during final testing.
D5	<ul style="list-style-type: none"> Having assessed the suitability of the website prototype (P12) and analysed test results (M7), students must discuss potential improvements and further developments to the website prototype.

Template for test table

Test number	Test type	Test description	Test data	Expected result	Actual result	Remedial action required

NEA command words

The table below shows the command words that may be used in the NEA assignments and/or assessment criteria.

Command Word	Meaning
Adapt	Change to make suitable for a new use or purpose
Analyse	Separate or break down information into parts and identify their characteristics or elements Explain the different elements of a topic or argument and make reasoned comments Explain the impacts of actions using a logical chain of reasoning
Assess	Offer a reasoned judgement of the standard or quality of situations or skills. The reasoned judgement is informed by relevant facts
Calculate	Work out the numerical value. Show your working unless otherwise stated
Classify	Arrange in categories according to shared qualities or characteristics
Compare	Give an account of the similarities and differences between two or more items, situations or actions.
Conclude	Judge or decide something
Describe	Give an account that includes the relevant characteristics, qualities or events
Discuss (how/whether/etc)	Present, analyse and evaluate relevant points (for example, for/against an argument) to make a reasoned judgement
Evaluate	Make a reasoned qualitative judgement considering different factors and using available knowledge/experience
Examine	To look at, inspect, or scrutinise carefully, or in detail
Explain	Give reasons for and/or causes of something Make something clear by describing and/or giving information
Interpret	Translate information into recognisable form Convey one's understanding to others, e.g. in a performance
Investigate	Inquire into (a situation or problem)
Justify	Give valid reasons for offering an opinion or reaching a conclusion
Research	Do detailed study in order to discover (new) information or reach a (new) understanding
Summarise	Express the most important facts or ideas about something in a short and clear form

We might also use other command words but these will be:

- Commonly used words whose meaning will be made clear from the context in which they are used
- Subject specific words drawn from the unit content.

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