

Instructions for candidates

This assessment applies to the assignment for Higher Computing Science.

This assignment has 40 marks out of a total of 120 marks available for the course assessment.

It assesses the following skills, knowledge and understanding:

- ◆ applying aspects of computational thinking across a range of contexts
- ◆ analysing problems within computing science across a range of contemporary contexts
- ◆ designing, implementing, testing and evaluating digital solutions (including computer programs) to problems across a range of contemporary contexts
- ◆ demonstrating skills in computer programming
- ◆ applying computing science concepts and techniques to create solutions across a range of contexts

Your teacher or lecturer will let you know if there are any specific conditions for doing this assessment.

In this assessment, you have to complete two short practical tasks.

You must complete task 1 (software design and development) and **either** task 2 (database design and development) **or** task 3 (web design and development).

You may complete the tasks in any order.

Advice on how to plan your time

You have 6 hours to complete the assignment. Marks are allocated as follows:

- | | | |
|--|----------|----------------|
| ◆ Task 1 – software design and development | 25 marks | (63% of total) |
| AND EITHER | | |
| ◆ Task 2 – database design and development | 15 marks | (37% of total) |
| OR | | |
| ◆ Task 3 – web design and development | 15 marks | (37% of total) |

You can use this split as a guide when planning your time for each of the two tasks.

Advice on gathering evidence

As you complete each task, you must gather evidence as instructed in each task.

Your evidence, especially code, must be clear and legible. This is particularly important when you paste screenshots into a document. You can print code from the software environment or copy and paste this into other packages such as notepad or Word.

Use the evidence checklist provided to make sure you submit everything necessary at the end of the assignment. Ensure your name and candidate number is included on all your evidence.

Evidence may take the form of printouts of code, screenshots, typed answers, hand-written answers or drawings of diagrams and designs.

Advice on assistance

This is an open-book assessment. This means that you can use:

- ♦ any classroom resource as a form of reference (for example programming manuals, class notes, and textbooks) – these may be online resources
- ♦ any files you have previously created throughout the course

The tasks are designed so you can complete them independently, without any support from your teacher or lecturer. This means that you:

- ♦ cannot ask how to complete any of the tasks
- ♦ cannot access any assignment files outside the classroom

Computing Science assessment task: evidence checklist

You should complete the checklist for task 1 and **either** task 2 or task 3.

Task 1 – software design and development

Evidence		Tick
1a	Completed task sheet identifying the missing functional requirements	
1b	Completed task sheet showing your function design	
1c	Printout of your completed program code	
	Printout of the program outputs	
1d(i)	Completed task sheet explaining why output would be incorrect	
1d(ii)	Completed task sheet describing the additional refinements required	
1e	Completed task sheet evaluating the efficiency of your program	

Task 2 – database design and development

Evidence		Tick
2a	Completed task sheet identifying two functional requirements	
2b(i)	Completed diagram showing the cardinality between entities	
2b(ii)	Completed task sheet stating the compound key	
2c	Printout of the implemented SQL statement	
	Printout of the output produced	
2d	Printout of the implemented SQL statement(s)	
	Printout of the output produced	
2e	Printout of the amended SQL statement	
	Printout of the output produced	
2f	Completed task sheet explaining the additional data required	

Task 3 – web design and development

Evidence		Tick
3a	Completed task sheet showing your multi-level navigation structure design	
3b	Printout of the edited 'bedrooms.html' file	
3c	Printout of the edited 'styles.css' file	
3d	Printout of the edited 'quote.html' file	
3e	Completed task sheet stating why website is not fit for purpose	

Please follow the steps below before handing your evidence to your teacher or lecturer:

- ◆ Check you have completed all parts of tasks 1 and either task 2 or 3.
- ◆ Label any printouts and screenshots with the task number (for example 1a, 2a).
- ◆ Clearly display your name and candidate number on each printout.