A LEVEL

Moderators' report

COMPUTER SCIENCE

H446
For first teaching in 2015

# H446/03/04 Summer 2019 series

Version 1

Contents

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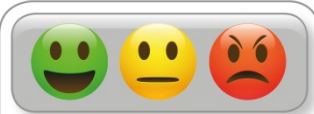
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Introduction

Our Moderators' reports are produced to offer constructive feedback on centres' assessment of moderated work, based on what has been observed by our moderation team. These reports include a general commentary of accuracy of internal assessment judgements; identify good practice in relation to evidence collation and presentation and comments on the quality of centre assessment decisions against individual Learning Objectives. This report also highlights areas where requirements have been misinterpreted and provides guidance to centre assessors on requirements for accessing higher mark bands. Where appropriate, the report will also signpost to other sources of information that centre assessors will find helpful.

OCR completes moderation of centre-assessed work in order to quality assure the internal assessment judgements made by assessors within a centre. Where OCR cannot confirm the centre's marks, we may adjust them in order to align them to the national standard. Any adjustments to centre marks are detailed on the Moderation Adjustments report, which can be downloaded from Interchange when results are issued. Centres should also refer to their individual centre report provided after moderation has been completed. In combination, these centre-specific documents and this overall report should help to support centres' internal assessment and moderation practice for future series.

General overview

This year saw a pleasing increase in the range of projects that centres provided. A lot of candidates were experimenting with exciting ideas; one of the more memorable being a self-driving rubber duck!

There was a noticeable trend in candidates experimenting with neural networks. These can make for ambitious and exciting projects.

As always, care must be taken to make sure the candidate is writing sufficient code outside of library calls to demonstrate the required skills. If the library is doing all the work the candidate may struggle to provide evidence for development.

There were still occasional centres submitting unsuitable projects where candidates were producing simple text based projects more akin to what would be expected at GCSE. Centres are reminded OCR's Subject Advisor Team offer a project checking service. Project ideas can be emailed to: ComputerScience@ocr.org.uk for review and feedback.

Many centres are now using the Repository or sending projects on digital media by post, greatly helping with the moderation process.

Moderators are keen to agree with centres' marks where they can. Where rationale and page numbers of evidence are provided it makes it easy to see why a mark has been given and to see if it can be agreed with.

Some centres provided no comments or simply copied and pasted criteria from the mark scheme. This creates more of a challenge where it is not immediately obvious why a mark has been given or where evidence isn't in the obvious place.

Analysis sections tended to be a wordier than needed. Many candidates when looking at "features that make the problem solvable by computational methods, explaining why it is amenable to a computational approach" went into great depth about abstraction, concurrency and such like.

While this can be included as part of this criterion, often what followed was generic and had little relevance to the project. The key to this section is to justify why a computer is being used to solve this problem rather than a more traditional pen and paper approach for example.

This might be focussing on how a computer will offer a faster or more accurate process than manual methods. It may in the case of a game allow a person to play without relying on other people. The key is whatever reasons are given they must be explicitly relevant to the specific project.

A lot of candidates still offered interviews with stakeholders. These can be useful but are by no means a formal requirement. For candidates scoring the top marks in this section, there must be clear justification for their requirements, limitations and success criteria. Usually this will involve referencing each requirement/success criterion to the part of the research that has led to it being included.

There was an increased tendency for candidates to include generic requirements. We can take requirements such as "The system will be stable" and "The system will be easy to use" as a given. Of course candidates may choose to include requirements about the load it can handle or specific features of the interface. There should be a clear sense of continuity between sections and good quality requirements are at the heart of this.

Several candidates tried to use reverse engineered code as their designs. This will gain no credit. Designed code does not have to be perfect and is likely that it will evolve over the development process.

This gives the candidate and opportunity to talk about these changes and show development at each iteration.

When documenting their development candidates are reminded to focus on the interesting aspects. A focus on failed tests and how they were overcome shows testing and review throughout the process.

Post development testing should reassure the reader the system works in the way claimed. Tests must be relevant to the requirements and be backed up with sufficient evidence.

When writing their evaluation candidates are expected to cross reference their test evidence. This year an increasing number of candidates made assertions about the functionality of their programs without backing them up.

Common misconceptions

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Avoiding potential malpractice

Candidates must clearly reference any code, libraries or tutorials they have used in their project.

This reference must be in both their project and their source code itself. It is essential teachers regularly monitor the work being produced by candidates, so that they can vouch for the authenticity of any code written.

They should make sure candidates don't end up following tutorials and tweaking code.

Helpful resources

Centres are reminded that there are several exemplars provided by OCR that can be referred to when assessing candidates' coursework.

OCR offer a project checking service.

Supporting you

For further details of this qualification please visit the subject webpage.

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