



General Certificate of Education
June 2012
Advanced Award
6 and 12 Unit Award

Applied Information and Communication Technology

IT10/PM

Unit 10 Advanced Spreadsheet Design

15 March 2012 to 5 June 2012

AQA-set Assignment – Candidate Booklet

To be given to candidates on or after 15 March 2012

Time allowed

- Investigation time
- 20 hours under controlled conditions

Instructions

- Ensure all printouts that you hand in are clear enough for an examiner to read.

Unit 10: Advanced Spreadsheet Design

The Assignment – Candidate Booklet

Introduction

You should read this booklet together with the unit specification for Unit 10: *Advanced Spreadsheet Design*.

To complete this assignment you must design and produce a reusable working spreadsheet system to meet the needs of a clearly specified client, and produce documentation of the work you have done to meet the requirements of this unit.

You should choose a client who will offer you sufficient scope to meet all of the requirements outlined in the specification for this unit. You must also consider the time available to you to implement, test and document the system.

You should discuss your choice of client with your teacher/tutor. He/she will be able to help you to choose a suitable client. It is important that you choose a client who is accessible to you. This might be an individual, community group, local business or public service organisation.

You may need to contact more than one person or organisation to see whether they would be willing to act as the client for your assignment. You are advised to show the letters or e-mails to your teacher/tutor before sending them in order to make sure that they are appropriate.

If you have difficulty contacting a suitable client, you should discuss this with your teacher/tutor as soon as possible. You must **not** act as your own client or use another student as the client for your assignment.

The work will be completed in two stages:

- investigation time, during which you will carry out preparatory work
- 20 hours of controlled conditions, during which you will complete and evaluate your work.

There are 70 marks available for this assignment. This is the only form of assessment for this unit. This assignment will be marked externally.

You will be awarded marks according to the quality of the work you complete and of the quality of written communication you use. The quality of written communication will be assessed within item (j). In this item you will be marked in part on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.

There are details of what you are required to produce in the *What you should hand in* section of this booklet.

1 What you should hand in

When you have completed the assignment, you should hand in the following.

Completed during the investigation time:

- (a) A time plan to show how you initially intended to complete the work for this assignment (for both the investigation time and the 20 hours of controlled conditions). Your plan should indicate the time allocated to each task. (2 marks)
- (b) Background information about the client and why a spreadsheet system is required. You must identify the intended user(s) of the system and how their skill levels will affect your designs. (4 marks)
- (c) A specification for the spreadsheet system, agreed with the client. This must include a list of client needs, input, processing and output requirements. You must explain how your proposed system will meet the client needs. (9 marks)
- (d) Appropriate qualitative and quantitative evaluation criteria to be used to test that the spreadsheet system meets the client needs. You must state why these are appropriate to assess if client needs have been met. (4 marks)
- (e) A detailed design for a spreadsheet system agreed with your client. You should justify how the user interface and functionality of the software to be used meets the needs of the user(s) and client. Your design should be sufficient for use by a competent third party to implement your system and should be annotated to explain its key features. (9 marks)
- (f) A testing strategy for your spreadsheet system. The strategy should include a full test plan and appropriate sets of test data for testing individual elements and the system as a whole. (4 marks)

Completed during the controlled conditions:

- (g) Evidence that the implementation of your completed spreadsheet system has been fully tested in line with the test plan (f), to ensure that the client needs have been met. (8 marks)
- (h) Documentation to show the spreadsheet system implemented from your designs, including annotated screenshots, evidence of formulae and listings of macro code where appropriate. The annotation should show how the spreadsheet system is effective in meeting the needs of the client and justifies formulae and complex features used. (18 marks)
- (i) Your initial time plan (a), updated by hand to explain how you actually used and monitored your progress during the investigation time and the controlled conditions. (2 marks)
- (j) An evaluation of your spreadsheet system based on your evaluation criteria (d), the client's needs (c), the user's skills (b) and conclusions drawn from testing (f). You should include an evaluation of your own performance in completing the work including your use of time. *The quality of written communication will be assessed in this item.* (10 marks)

(Total = 70 marks)

Turn over ►

Your documentation should provide evidence of planning and managing work effectively, such as using version numbering, appropriate file and folder names, sheet names, named areas and macro names.

The work that you hand in should be organised in an appropriate order and page numbered. You should put your name, centre number and candidate number on each page. The work should be kept securely together eg using treasury tags. Plastic wallets and ring binders must **not** be used. Each of the items (a)–(j) should be clearly identified.

2 The investigation time

The investigation time begins when you are handed this booklet. During the investigation time, you should carry out all the research, planning, designing and testing of designs needed to create your software system in the controlled sessions.

The work must be in hard copy format (ie printed or handwritten on paper) and placed in your preparatory folder. The folder must be handed to your teacher before the start of the controlled conditions.

3 Preparatory folder

This folder should contain, in hard copy format, all of the items (a)–(f) which you should have completed before you start your work under controlled conditions and this *Candidate Booklet*.

You must **not** include any material in your preparatory folder that attempts items (g)–(j).

All material in your preparatory folder must be checked by your teacher before you can use it in the controlled sessions. At the end of each controlled session, your teacher will collect in your preparatory folder and return it to you at the start of the next session.

After the start of the first controlled session you will **not** be allowed to bring in, or submit to your teacher, any further materials.

4 The controlled conditions

‘Controlled conditions’ means ‘examination conditions’. You **must** work independently and in silence.

During the 20 hours of controlled conditions, you will be using your preparatory folder to produce the items listed in (g)–(j) of *What you should hand in*.

Your teacher will tell you in advance when the 20 hours have been timetabled.

During the controlled conditions, you must **not**:

- communicate in any way with anyone except the invigilator
- access the Internet or any intranet
- have access to any material except your preparatory folder
- take in textbooks or photocopies of parts of textbooks
- copy type
- have access to removable media such as CD-ROMs or USB memory sticks.

The work must be completed by the end of the 20 hours of controlled conditions. The work must be submitted on paper as the examiner will **not** look at work submitted on electronic media such as CD-ROMs or USB memory sticks.

Your final work for submission should consist of hard copy evidence of the items in (a)–(j) of *What you should hand in*.

5 Points to consider

- There is no requirement for you to submit work that has been printed in colour. However, you should annotate (where appropriate) any black and white printouts to indicate to the examiner the colours that you have used in your spreadsheet system.
- This unit is assessed by an external examiner who will not have seen your spreadsheet system working, and who must rely on your documentation to award marks. It is, therefore, essential that your documentation is complete, accurate, readable and logically organised.
- Planning and monitoring should not be neglected. They are an important aspect of any project work. It is very unlikely that anyone could produce a piece of work of this complexity without having to modify their plans several times. These changes should be fully documented. If a test fails, for instance, you will need to correct the problem and this should be reflected not only in your test results, but also in your time plan.
- Make sure that you include printouts that are annotated, so that it is clear to the examiner what you are trying to show. Do not be afraid to write on printouts; you will not be penalised for handwritten annotation. In fact, where particularly relevant, this may help the examiner to award marks.
- Make sure that printouts of screenshots are large enough and clear enough to be read by the examiner.

END OF CANDIDATE BOOKLET

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