

OCR-set Assignment 1

Scenario: Hotel Eventing

Assessment Material

OCR Level 1 / 2 Cambridge National Certificate in Information Technologies

Assessment Unit R013: Developing technological solutions

**THIS SET ASSIGNMENT MUST BE USED FOR
THE JUNE 2018 EXAMINATION SERIES ONLY**

Centres must not change any aspect of this assignment.

INSTRUCTIONS TO TEACHERS

The OCR administrative codes associated with this unit are:

- Unit entry code R013
- Certification code Certificate J808

The regulated qualification number associated with this unit is:

- 603/1311/0

Duration: Approximately 20 hours

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Information for Learners

OCR-set Assignment 1

Scenario: Hotel Eventing

OCR Level 1 / 2 Cambridge National Certificate in Information Technologies
Assessment Unit R013: Developing technological solutions

General information for learners

Q What do I need to do to pass this assignment?

- A You need to show you can complete all of this assignment. The assignment describes what work you have to do. The Learner Checklist at the end of this booklet identifies the evidence you need to provide to show what you have done. It's really important that you can do the work yourself without help from anybody else. That includes teachers, parents and other students. If we think you have not done this work yourself it could mean your marks are changed.

Your teacher marks your evidence and uses the marking criteria grid provided by OCR. You can ask to see the marking criteria. The marking criteria grid is divided into three mark bands. Each one has a range of marks – for example Mark Band 1 = 1–3 marks; Mark Band 2 = 4–6 marks and Mark Band 3 = 7–10 marks. Your teacher will decide which mark band description most closely describes your evidence and then decide how many marks from the mark band to give your evidence.

Q What help will I get?

- A Your teacher can make sure you understand the assignment. If you get stuck then they can give you some general advice but there are rules about the kind of help and how much they can give you. Too much help might mean you haven't done the work yourself.

Q What if I don't understand something?

- A If you are not sure, always check with your teacher. They know how much help they are allowed to give you.

Q I've been told I must not plagiarise. What does this mean?

- A Plagiarism is when you take someone else's work and pass it off as your own. The work could come from the internet, a book or another student's project work. It doesn't matter where it came from, it's what you do with it that could make it plagiarism.

There are a few ways plagiarism can happen that you need to know about.

- A student is asked to describe or explain something and they find good information on the internet or from a book. They use it in the evidence they give to their teacher to mark. They don't follow rules about saying where it came from. The 'rules' are about how to reference somebody else's work.
- A student uses information from a book and changes words but copies the sentence structure of a source and doesn't reference where the original work came from.
- A student copies so many words or ideas from a source that it makes up the majority of their work. In this case it does not matter if they have referenced it or not. When the majority of work is somebody else's ideas or thoughts it is not the student's own work.

Plagiarism has serious consequences; you could lose the grade for this unit, your mark could be significantly reduced or you may not be allowed to achieve the whole qualification.

The work you produce must be your own work. You will be asked to sign a declaration to say that it is.

Q What is referencing and where can I find out more information about it?

A Referencing is the process of acknowledging the work of others. If you use someone else's words and ideas in your assignment, you must acknowledge it, and this is done through referencing.

You should think about why you want to use and reference other people's work. If you need to show your own knowledge or understanding about an aspect of subject content in your assignment, then just quoting and referencing someone else's work will not show that you know or understand it and it is likely to be seen as plagiarism. Make sure it's clear in your work how you are using the material you have referenced to inform your thoughts, ideas or conclusions.

You can find more information about how to reference in the OCR Guide to Referencing available on our website: <http://www.ocr.org.uk/i-want-to/skills-guides/>.

Q Can I work in a group?

A No, you cannot work in a group whilst working on this assignment.

Q Does my work need to be in a particular format?

A You can present your work in a variety of ways – please refer to the learner checklist for example formats of evidence.

- Evidence submitted should be electronic and digital documentation or files in the form of planning documentation, spreadsheets/database, presentations, photos, video, audio files, websites/social media, mobile apps, PDFs, word processed documents, desktop publishing.
- What you choose should be appropriate to the assignment and your teacher can advise you. You must ensure that your centre number, candidate number and the assessment unit code appears on each page of a document as a header or footer.
- You must make sure that the work you do produce allows you to demonstrate the requirements of the grading criteria.
- If you are unsure about what evidence you need, please ask your teacher.

Q Can I ask my teacher for feedback on my work?

A We have given your teacher instructions on what kind of feedback they can give you. They are **not** allowed to tell you exactly what to do to make your work better, but they **can** remind you about what they've taught you. You can use that reminder to try and improve your work yourself. They can say what they've noticed might be wrong with your own work. For example if you describe something where the marking criteria ask for an evaluation they can point that out to you. Your teacher can explain the difference between a description and an evaluation. It is then up to you to decide if you need to change your work. If you think it needs to change you need to make the change yourself.

Q When I have finished, what do I need to do?

- A You should make sure any printed work is in the right order and that all electronic files are sensibly labelled.

If you have included the personal details (such as name, address or date of birth) of someone other than yourself in your work, this must be blanked out (anonymised). Your teacher will tell you how to do this.

Hand in the work that you've completed to your teacher. They might ask to see your draft work, so please keep your draft work in a safe place.

Q How will my work be assessed?

- A Your work will be marked by your teacher. They will use the information in the unit specific marking criteria grid to decide which mark band your work meets. The marking criteria grid is detailed in the specification and included in this assignment booklet. Please ask your teacher if you are unsure what the marking criteria are for this assignment.

Scenario for the assignment

Hotel Eventing is situated in a prime location for several events held in the local area. The events include:

- F1 grand prix – (5th – 7th July 2019)
- MotoGP – (26th – 28th July 2019)
- annual music festivals
 - Spring is Here Music Festival – (17th – 19th May 2019)
 - Forever Autumn Music Festival – (27th – 29th September 2019)
- annual firework display – (1st – 3rd November 2019)
- a very large Christmas market (15th November 2019 – 8th December 2019)

The hotel offers rooms with transport to the different events and a discount for people who book for more than one event as follows:

- One event booked – standard booking rate
- Two events booked – 10% discount on standard booking rate for second booking
- Three or more events booked – 15% discount on standard booking rate for second and subsequent bookings

The hotel has 20 rooms as follows:

10 double rooms (Room Nos 1, 2, 3, 4, 6, 8, 10, 12, 14, 16) – £120 per night per room

6 family rooms (Room Nos 5, 7, 9, 11, 17, 19) – £160 per night per room

4 suites (Room Nos 13, 15, 18, 20) – £200 per night per room

Example of a guest booking 3 events for a double room:

F1 event = 2 nights × £120

MotoGP event = (2 nights × £120) – 15%

Annual firework display = (2 nights × £120) – 15%

Not all guests that book accommodation will attend an event and therefore are charged the following room rates:

Double room – £100 per night per room

Family room – £130 per night per room

Suite – £160 per night per room

There is no discount for guests who book multiple stays but who are not attending events.

The final booking system must be able to accept bookings from the 1st January 2019.

The hotel is becoming very popular with visitors to the area and they have decided that they need to be using better systems which will be easier for the staff recording the bookings and allow the management to access 'live' (updated) information on the bookings and potential income.

Read through the task carefully, so that you know what you will need to do to complete this assignment.

Important:

- You will need to refer to the marking criteria grid. Your teacher can explain the marking criteria if you need further clarification.

Your Task

Task

You need to follow the project life cycle to plan and develop a fully working integrated IT system for Hotel Eventing that will:

- Include a simple user interface to allow the bookings team to add, delete and amend bookings
- Automatically calculate any discount allowed for multiple event bookings
- Support the preparation of receipts to be distributed to the guests confirming their bookings and the payments they have made via credit card
- Enable the bookings manager to query the data to gather information on:
 - the number of bookings for different events
 - availability of rooms during the events
 - availability of rooms at any given time
- The board of directors require the bookings manager to provide them with real-time information of:
 - income generated from bookings
 - any potential loss of income from un-booked rooms
 - a comparison of bookings for each room type for each month.

They also wish to have a presentation providing information relating to the up and coming events to display on a continuous loop on the screen in the main reception. They have asked that the presentation is interesting and eye catching and provides the guests with sufficient information to encourage them to book one or more events.

You will need to refer to the marking criteria when completing this assignment.

Through every phase of this project you should draw upon all areas of the teaching content, including knowledge, understanding and skills.

To complete the task above, you will need to follow the project life cycle below:

- Initiation and planning phase:
 - Analyse the requirements of the brief to identify user requirements and constraints.
 - Consider how to mitigate the risks and issues which may occur.
 - Consider the documentation that you will use and produce during the initialisation and planning phases of the project.
 - Consider how you will undertake iterative testing and document it.
 - Consider how you will carry out a final evaluation and document it.
 - Use a range of tools and techniques to create and monitor the plans and test plans.
 - Consider the security, legal, moral and ethical issues that could affect the project and implement measures to mitigate them.

- Execution phase:
 - Select appropriate software to develop a solution to import and manipulate data.
 - Select appropriate software to develop a solution to export and present the information.
 - Use a range of tools and techniques to support the development.
 - Consider the security, legal, moral and ethical issues that could affect the project and implement measures to mitigate them.
 - Carry out Iterative testing.
- Evaluation phase:
 - Carry out iterative reviews through initiation, planning and execution phases.
 - Carry out a final evaluation of your project.

Marking Criteria Grid

0 marks must be given where there is no evidence or no evidence worthy of credit.

Project life cycle		Use of IT Tools and Techniques		
1a To initiate/plan	10 marks	MB1: 1 to 3 marks	MB2: 4 to 6 marks	MB3: 7 to 10 marks
		Limited use of tools and features results in potential of technology being under-utilised for the intended purpose. May use only one application but where more than one is being used they are used in isolation.	Adequate use of tools and features results in potential of technology being utilised for the intended purpose. There are aspects of integration across two or more applications that are used.	Effective use of tools and features results in potential of technology being fully utilised and clearly aligned to the intended purpose. Applications used are fully integrated.
1b To import and manipulate data (Execution 1)	10 marks	MB1: 1 to 3 marks	MB2: 4 to 6 marks	MB3: 7 to 10 marks
		Limited use of tools and features results in potential of technology being under-utilised for the intended purpose. May use only one application but where more than one is being used they are used in isolation.	Adequate use of tools and features results in potential of technology being utilised for the intended purpose. There are aspects of integration across two or more applications that are used.	Effective use of tools and features results in potential of technology being fully utilised and clearly aligned to the intended purpose. Applications used are fully integrated.
1c To select and present integrated information (Execution 2)	10 marks	MB1: 1 to 3 marks	MB2: 4 to 6 marks	MB3: 7 to 10 marks
		Limited use of tools and features results in potential of technology being under-utilised for the intended purpose. May use only one application but where more than one is being used they are used in isolation.	Adequate use of tools and features results in potential of technology being utilised for the intended purpose. There are aspects of integration across two or more applications that are used.	Effective use of tools and features results in potential of technology being fully utilised and clearly aligned to the intended purpose. Applications used are fully integrated.

Project life cycle	Project Life Cycle Processes and Methods			
2a Analysis of brief and planning approach (Initiation/ planning)	13 marks	MB1: 1 to 4 marks	MB2: 5 to 8 marks	MB3: 9 to 13 marks
		<p>Objectives and requirements are stated and there is a list of tasks. Consideration of dependencies can be assumed but there is no evidence of it. Success criteria are described.</p> <p>Constraints, risks, resources and milestones have been identified although some obvious ones have been missed and no links are made between them.</p> <p>Although there are obvious gaps in planning activities, the plan is feasible.</p>	<p>Objectives and requirements are stated. There are logical dependencies shown for some tasks and sub-tasks although it is not presented as a critical path. There is an explanation behind the choice of success criteria.</p> <p>Links between constraints, risks and resources have been identified although some links are missed or not made clear. Ways to mitigate are stated but the consequences of actions are not evidenced.</p>	<p>Objectives and requirements are stated. A critical path is defined, with logical dependencies shown between key milestones and sub-tasks. There is a justification of the success criteria chosen.</p> <p>Links between constraints, risks and resources are clearly defined and contingencies identified. Mitigation for the plan is explained.</p>

		MB1: 1 to 4 marks	MB2: 5 to 8 marks	MB3: 9 to 13 marks
		<p>The solution allows for data to be imported and manipulated. There will be inefficiencies and inaccuracies that will impact on the quality of the data and the objectives of the solution.</p> <p>The solution is open to security and legal risks.</p>	<p>The solution allows for data to be imported and manipulated so that most of the requirements of the project can be met. There are some inefficiencies but they will not impact on meeting the requirements.</p> <p>The security and legal risks identified in the planning phase have been carried forward into the solution and evidenced although only one or two tools and techniques are used to preserve data integrity by protecting the data from malicious intent and/or unauthorised access. Some opportunities for safe, secure and responsible practices have been missed.</p>	<p>The solution allows for data to be imported and manipulated efficiently and effectively so that all requirements of the project can be met.</p> <p>The security and legal risks identified in the planning phase have been carried forward into the solution and evidenced by a range of tools and techniques used to preserve data integrity by protecting the data from malicious intent and/or unauthorised access. This takes into account both how the data will be processed and how the information will be presented.</p>

2bImporting and
manipulating
data

(Execution 1)

13
marks

		MB1: 1 to 4 marks	MB2: 5 to 8 marks	MB3: 9 to 13 marks
		<p>The data created has only been used in a minimal way to support the information being presented.</p> <p>Nonetheless information has been communicated to address some of the requirements of the project. How the data has been structured will affect the clarity of the information communicated. The same method and the same distribution channel have been used to communicate information to all audiences. There will be no integration of the data with the selected communication method.</p>	<p>The data is suitably used to support the information being presented which addresses some of the project requirements.</p> <p>Different methods have been selected for different audiences but what is used is passable for the type of information and its audience. There is some integration between processed data and the communication methods. The quality and quantity of information provided meets the requirements of each audience, but there will be some instances of misinformation. Only one distribution channel has been selected to communicate the information to all audiences.</p> <p>Security and legal actions taken are aligned with at least one distribution channel to minimise risks from cyber-security attacks. Some of those actions are not effective.</p>	<p>The data is suitably used to support the information being presented which addresses all of the project requirements.</p> <p>They have utilised suitable opportunities to integrate processed data with communication methods and each distribution channel to communicate the information to each intended audience. The quality, quantity and accessibility of the information provided clearly meets the requirements of each audience.</p> <p>Security and legal actions taken are directly aligned with the selected distribution channels to minimise risks from cyber-security attacks.</p>
2c	13 marks			
Selecting and presenting information (Execution 2)				

Project life cycle	Evaluation			
3a Iterative review and final evaluation (Evaluation)	11 marks	MB1: 1 to 3 marks	MB2: 4 to 7 marks	MB3: 8 to 11 marks
		<p>There is an attempt to carry out an iterative review at the end of one or more phases of the project life cycle that states what went well and/or what did not go well, but without reasons for why that was.</p> <p>Carries out a final evaluation at the end of the project that states what went well and/or what did not go well. There will be limited recognition of what changes were made, if any, during the project.</p>	<p>Iterative reviews have been carried out for one or more phases of the project life cycle, showing consideration of both positive and negative aspects to inform the immediate next stage.</p> <p>The review will lack detail about what went well and what did not with reasons for why that was. Resolutions and adaptations are described and some are explained although they are not justified.</p> <p>Carries out a final evaluation against their success criteria, identifying if the objectives were met.</p> <p>Evidence of a reflection on the planning phase outputs, project objectives and success criteria. Identifies any gaps or issues that emerged in a later phase and/or those that they would like to consider if they were repeating the project (lessons learnt).</p>	<p>Iterative reviews have been carried out for all phases of the project life cycle, showing consideration of both positive and negative aspects of the current phase and any phases that preceded it to inform direction and decisions for all phases to follow.</p> <p>Resolutions and adaptations are explained and some are justified.</p> <p>Carries out a final evaluation that measures the success of the project against their success criteria.</p> <p>Evaluation includes an analysis of the original planning documentation compared to the final product and the effects of constraints on the project such as processes and resources are evaluated and lessons learnt recorded.</p>

Learner Checklist

What do learners need to produce? (evidence)		Examples of format of evidence (this list is not exhaustive)
Planning documentation created during the initialisation and planning phases, ensuring that all aspects are clear to see.		<ul style="list-style-type: none"> Electronic and digital documents e.g. Spreadsheet, planning, word processed, desktop publishing, PDF, online/website Written information
Data manipulation product	Iterative Testing* and Review	<ul style="list-style-type: none"> Electronic and digital documents e.g. Spreadsheet/database Written information Written narrative for iterative review
Product to communicate the information		<ul style="list-style-type: none"> Electronic and digital documents e.g. Spreadsheet/database, photos, audio files (sound bites), video, presentation, online/website/social media, mobile apps, PDFs, word processed, desktop publishing Written information Written narrative for iterative review
Final evaluation		<ul style="list-style-type: none"> Electronic and digital documents e.g. Spreadsheet, photos, audio files (sound bites), video, presentation, PDFs, word processed, desktop publishing Written information

* = evidence of iterative testing can include screenshot evidence.

Evidence requirements

Initiation and Planning phase. Have you:	Completed (✓)	Ref/Page no(s)/DVD timings
Analysed the requirements of the brief?		
Considered mitigating risks and issues during planning?		
Considered the documentation that you are going to use and produce during the initiation and planning phases of the project?		
Considered how you are going to undertake iterative testing and document it?		
Considered how you are going to carry out a final evaluation and document it?		
Used a range of tools and techniques?		
Considered the security, legal, moral and ethical issues that could affect the project and implemented measures to mitigate them?		
Execution phase. Have you:	Completed (✓)	Ref/Page no(s)/DVD timings
Selected appropriate software to develop a solution to import and manipulate data?		
Selected appropriate software to develop a solution to export and present the information?		
Used a range of tools and techniques?		
Considered the security, legal, moral and ethical issues that could affect the project and implemented measures to mitigate them?		
Carried out iterative testing?		
Evaluation phase. Have you:	Completed (✓)	Ref/Page no(s)/DVD timings
Carried out iterative reviews through initiation, planning and execution phases?		
Carried out a final evaluation of your project?		

Information for Teachers

OCR-set Assignment 1

Scenario: Hotel Eventing

OCR Level 1 / 2 Cambridge National Certificate in Information Technologies
Assessment Unit R013: Developing technological solutions

Guidance on using this assignment

1 General guidance

- 1.1 Assessment of any set-assignment for R013: Developing Technological Solutions **must** adhere to JCQ Instructions for Conducting Coursework, with the exception of the re-sit rule 18.2. If, after moderation, a learner wants to re-sit this assignment to improve their grade, they **must** take a new OCR set-assignment. A new assignment will be set for each series and then withdrawn. For more information see section 9.6 of the specification.
- 1.2 OCR has provided a document '*Guide to Generating Evidence*' which is available at <http://www.ocr.org.uk/Images/284791-guide-to-generating-evidence.pdf>
- 1.3 OCR set assignments **must** be used for summative assessment of learners. They **must not** be used as practice materials. Learners draw on their teaching and learning to respond to the assessment tasks in this set assignment. The rules for carrying out internal assessment are in the specification in Section 6. Pay particular attention to rules on:
 - Feedback (section 6.2)
 - Revising and redrafting work (section 6.1)
 - Authentication (section 6.1)

The rules are covered in more detail in the document '*Guide to Generating Evidence*' which is available at <http://www.ocr.org.uk/Images/284791-guide-to-generating-evidence.pdf>

2 Before carrying out the assignment

- 2.1 Give each learner a copy of the *Information for Learners* section of this assignment. You **must not** change or modify any of the tasks in this assignment in any way.
- 2.2 Learners will not need to carry out any preparations prior to undertaking the assessment tasks, such as collating resources to use in the assessment.
- 2.3 Learners must have access to an appropriate range of software that fully meets the requirements of this unit as specified in the Teaching Content. Learners will be required to make their own decisions as to the choice of software and the techniques to be used when carrying out activities to generate assessment evidence.

3 During the assessment

- 3.1 We have estimated that it will take approximately 20 hours to complete all tasks. These timings are for guidance only, but should be used by you, the teacher, to give learners an indication of how long to spend on each task. You can decide how the time should be allocated between each part or individual task. You are also permitted to spread the tasks across several sessions, and therefore, it is permissible for evidence to be produced over several sessions.

4 When completing the assignment and producing evidence

- 4.1 Each learner **must** produce **individual** and **authentic** evidence for the task within the assignment.

4.2 You may give general support and guidance to learners. This support and guidance should:

- focus on checking that learners understand what is expected of them
- give generic feedback that enables the learner to take the initiative in making improvements, rather than detailing what amendments should be made.

It is not acceptable for you to provide solutions/examples, to provide writing frames or templates, to work through answers in detail or to detail specifically what amendments should be made.

4.3 Learners may use information from any relevant source to help them with producing evidence for the tasks. Learners **must not** copy published material and claim it as their own work. They **must** also acknowledge the source even where they paraphrase the original material.

4.4 We have specified what evidence the learner is expected to produce and given examples of the format it could take. The learner can use a different, appropriate format unless we state they must not. The format should be what the learner considers to be the most appropriate for the purpose of, and target audience for, each individual task.

5 Presentation of work for marking and moderation

5.1 The guidance in Section 6.5 of the specification **must** be followed when marking, annotating and presenting work.

5.2 Centres should **produce digital evidence in the form of an e-portfolio**. Refer to Appendix A in the specification.

5.3 Encourage learners to present their work so that it is secure and easily accessible. The learner **must** ensure that their centre number, candidate number and the assessment unit code appears on each page of their evidence as a header or footer.

5.4 Centres **must** provide guidance on the Unit Recording Sheet (URS) to show where specific evidence can be found. This may be through the use of the 'page number' column and/or by referencing file names and locations.

5.5 If electronic submissions are used (blogs, websites, Google Drives, generic file sharing spaces) then:

- you should sort out student access to these at the start of the course, including providing logins and passwords
- any work uploaded electronically to a blog or website should comply with JCQ child protection regulations e.g. no images or videos of candidates with their real names associated with it (should be candidate numbers only)
- once work has been marked, to ensure security of work through the moderation and results enquiries period, you should revoke student access to blogs, websites, Google Drives and generic file sharing spaces. If they have set these up at the start of the course it is much easier to do this as you can simply change the passwords. The danger is that if students still have access, the work might change between a teacher marking it and a moderator seeing it – which also has implications for EARs.

6 Conditions for using this OCR-set assignment

You must not change any aspect of the OCR-set assignment. The set of tasks form a coherent whole, addressing all the learning outcomes and allowing access to the full range of marks.

7 Specific guidance on the tasks

It is important that candidates are made aware from the start of their work on this assignment of the format their evidence will take. This is detailed in the Learner Checklist & Evidence Requirements section of the Learner Information.

There are 30 marks in the marking grid which are targeted at candidates' ability to use IT tools and techniques to initiate and plan their project; import and manipulate data; and finally present information to end user(s). Throughout this process candidates will need to be the decision-makers, choosing the software applications they are going to use to complete the tasks in the set-assignment and using these applications as efficiently as possible. As part of the assessment you will need to judge the extent to which a candidate uses IT tools and techniques to create an integrated approach to their planning, data manipulation and output of information.

So what does all of this mean in practice?

When initiating and planning the project, you should start to see candidates integrating documents for MB2 to be awarded – e.g. using hyperlinks to link a word-processed document with a Gantt chart, screen plans, data dictionaries, etc. As the candidate brings automatic integration into their initiation/planning documentation which delivers efficiencies throughout the project life cycle (e.g. timelines automatically update as project develops) then it is appropriate for you to start looking at candidate evidence in relation to MB3. It is accepted that candidates will be able to access project planning software (e.g. Project Libre) where the integration occurs automatically. If this approach is used then this should not be a barrier to MB3 as long as candidates have used the features and functionality within the software effectively, together with other relevant software to cover the key initiation/planning requirements as listed in the specification.

When importing and manipulating data candidates will need to decide whether they are going to use spreadsheet and/or database software to manipulate the information they are given. For MB2 to be awarded candidates must demonstrate their ability to manipulate data within these applications, e.g. using multiple tabs of a spreadsheet or creating a number of different spreadsheets to respond to the requirements of the set assignment. As candidates start to generate automatic updates within the developed application or between developed applications and use more complex functionality to deliver efficiencies then MB3 marking criteria should be applied.

When presenting information to end user(s) candidates have a variety of methods that they can use to meet the needs of their target audience. As stated in the specification word processing/ DTP software, presentation software and web/mobile technologies can all be used to share information with a target audience. For MB2 to be awarded candidates will need to integrate their processed data within suitable presentation media. As candidates set up their spreadsheet/ database solution to automatically update their presentation outputs then MB3 marking criteria should be applied.