

OCR-set Assignment
Cambridge National Certificate in
Information Technologies
Learner Assessment Material

OCR Level 1 / 2 Cambridge National Certificate in Information Technologies

Assessment Unit R013: Developing technological solutions

FOR USE IN THE JANUARY 2020
EXAMINATION SERIES ONLY

Centres **must not** change any aspect of this assignment

INSTRUCTIONS TO TEACHERS

- Teachers should read the teacher guidance document before delivering this set assignment.
- Please refer to the specification for specific requirements when delivering this set assignment.
- This work **must** be completed by 10 January 2020.

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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Candidate Instructions and Information

Candidates must be familiar with the following instructions and information before commencing the set assignment

How do I complete the assignment?																																
<ul style="list-style-type: none"> You should try to complete all of the assignment. The assignment says what you need to do for each task. There is a check list for you to use at the end of this document. This will help you to track the evidence you need to produce. You must complete the assignment on your own. You are not allowed help from anyone else. If we think that you had extra help, your marks may be changed or reduced to zero. 																																
How is the assignment marked?																																
<ul style="list-style-type: none"> Your teacher will mark your work after you hand it in. They cannot mark it in stages for you. Your teacher will use the mark scheme that we give them to give you marks. You can ask to see the mark scheme and you can have the mark scheme explained to you. The mark scheme has three bands. Your teacher decides which mark band your work meets and then gives you a mark from that mark band. 																																
<table border="1"> <thead> <tr> <th></th> <th colspan="3">Mark Band 1</th> <th colspan="3">Mark Band 2</th> <th colspan="4">Mark Band 3</th> </tr> </thead> <tbody> <tr> <th>Marks</th> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> </tbody> </table>												Mark Band 1			Mark Band 2			Mark Band 3				Marks	1	2	3	4	5	6	7	8	9	10
	Mark Band 1			Mark Band 2			Mark Band 3																									
Marks	1	2	3	4	5	6	7	8	9	10																						
<ul style="list-style-type: none"> Your teacher will then add up the marks and give you a total. Your final grade for the assignment depends on your final total mark. 																																
What help can my teacher give to me?																																
<p>Your teacher can:</p> <ul style="list-style-type: none"> ✓ Read the assignment to you. ✓ Help you understand what you need to do <ul style="list-style-type: none"> ○ e.g. explain the difference between Explain and Evaluate. ✓ Give you some general help if you get stuck. ✓ Explain the mark scheme. ✓ Give general advice and guidance. ✓ Remind you about what you have been taught. ✓ Remind you of the content expected. 						<p>Your teacher cannot:</p> <ul style="list-style-type: none"> ✗ Tell you what to do. ✗ Tell you how to do it. ✗ Help you to solve a problem. ✗ Give you templates or solutions. ✗ Say how to improve your work. ✗ Mark your work in sections and give feedback. 																										
What if I get stuck?																																
<ul style="list-style-type: none"> You can ask the teacher to explain the task again. Move on to another part of the assignment. Come back again later to have another go. 																																

What is plagiarism and referencing?	
<ul style="list-style-type: none"> • Plagiarism is where you use someone else's work or ideas, but do not say you have done so. • Plagiarism is very serious. • If you plagiarise, you may be given 0 marks for this unit, or fail the whole qualification. • You must always say when you use someone else's work or ideas – this is called referencing. • Examples of when you may need to reference are: <ul style="list-style-type: none"> ○ Using ideas from a book ○ Using some research from the internet ○ Copying something someone says – like a quote. • When you hand in your work, you will be asked to sign a form. • This form says that all the work you have done is your own, and that you have referenced all the resources you have used. • You can learn how to reference using our skills guide on referencing. 	
Using online resources/the internet.	
<p>You should:</p> <ul style="list-style-type: none"> ✓ Search for techniques not solutions. ✓ Reference any websites/sources you use. ✓ Develop these ideas into your own words. ✓ Show that you have created new ideas. 	<p>You must not:</p> <ul style="list-style-type: none"> ✗ Simply copy and paste ideas. ✗ Discuss live tasks online in chat rooms etc. ✗ Post your work to any online channels. ✗ Use the internet to work outside of lessons.
Can I work in a group?	
<ul style="list-style-type: none"> • No, all the work you produce must be done on your own. 	
How should I present and save my work?	
<ul style="list-style-type: none"> • You will use many different software packages in your work. • Your work will be sent to the exam board electronically. • The Candidate Assignment Check List shows you examples of the file types you can use. • You should choose suitable programs that allow you to meet the marking criteria. • Use file names which make your evidence easy to find. • As you develop your solution, use "Save As" to create a new file <ul style="list-style-type: none"> ○ e.g. MySpreadsheet_v1 & MySpreadsheet_v2. 	
What do I do when I have finished?	
<ul style="list-style-type: none"> • Make sure that you have saved all your work. • Your files should have sensible names. • Make sure your work does not contain any personal information of real people (e.g. date of birth). • Make sure that your name, candidate number, centre number and page numbers are on your work. 	

Set Assignment Brief

The Scenario

Progress Beauty is a new beauty salon. The staff have limited IT skills and require an integrated system to:

- store client information
- store client appointment history and appointments booked
- store information on the stock of products for sale
- store information on the beauty therapists
- notify the end user if they have made a data entry error
- email appointments to clients.

Progress Beauty also requires:

- business cards
- a price list of treatments.

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

For the purposes of this set assignment all beauty product names, client names and therapist names are fictitious and must not be altered.

Task

You need to follow the project lifecycle to plan and develop a fully working integrated IT system for Progress Beauty.

Your integrated system **must** include:

1. A **Client Record Interface** to include the following:
 - name of client (first name and surname)
 - email address
 - telephone number
 - date of birth.

There must be a separate section within each client record to store information on the client medical history, appointment history and appointments booked.

Use the *Clients.csv* file to populate the **Client Record Interface**.

Client Medical History:

- allergies
- medical operations
- skin type
- other information.

Appointment History:

- date
- total payment
- treatment
- treatment price
- product purchased
- product price.

The total payment is the treatment price plus the price of any product(s) they may have purchased.

Appointments Booked:

- date
- treatment
- name of beauty therapist
- treatment completed (Y/N).

2. **Beauty Therapist** details to include the following:

- first name
- surname
- working days
- qualifications.

The data is in the *Therapists.csv* file.

3. A **Stock Inventory** for the products that Progress Beauty sells to clients to include the following:
- product name
 - purchase price
 - retail price
 - number of items in stock
 - number of items sold
 - balance of items in stock.

The data is in the *Beauty_Products.csv* file.

Progress Beauty requires the system to enable end users to:

- navigate the system via a menu
- add new client records in the **Client Record Interface**
- update client records
- search client records
- select treatments in **Appointments Booked** using a drop-down menu
- select the beauty therapist carrying out the treatment from a drop-down list
- print out daily appointments booked
- print out weekly appointments booked
- add new beauty therapists to the **Beauty Therapist** details
- update the **Beauty Therapist** details
- automatically update **Appointment History** when the treatment is complete
- automatically update the **treatment price** in **Appointment History** based on the treatment provided and/or any product purchased
- select the product(s) sold to the client from a drop-down list linked to the **Stock Inventory**
- print out the **Stock Inventory**
- query the **Appointment History** to produce a list of clients who have had the same treatments.

Progress Beauty also requires the **Stock Inventory** to:

- calculate the retail price of the product(s) which is calculated at 7.5% of the purchase price plus the purchase price
- display the following in bold and red **Low Stock – Re-order** when the stock of a product is two or less
- automatically deduct the product items purchased by the client from the **Stock Inventory**.

4. The following appointments have been booked and need to be manually entered into **Appointments Booked**:

Client Name	Date	Treatment	Name of Therapist	Treatment Completed
Skyla Rose	13/02/2020	Indian Head Massage	Sarah Reginald	N
Isabella Viking	11/02/2020	Standard Manicure	Mandy Rice	N
Richard James	12/02/2020	Aromatherapy Body Massage	Yvette Coleman	N

5. The following data must be manually entered into **Appointment History**:

Client Name	Date	Treatment	Name of Therapist	Product Purchased
Mary Reece	08/02/2020	Hydra lifting deluxe	Sarah Reginald	Freedom Facelift
Leslie Grundy	06/02/2020	Holistic facial	Louise Sheriton	
Andrea Jenkins	05/02/2020	Full leg	Yvette Coleman	Hard Skin Foot Rub

6. Using the logo provided (*Salon_Logo.jpg*), design business cards for Progress Beauty to include the following:
- name of salon
 - address: 77 Progress Avenue, Coventry, CV77 8JQ
 - telephone number: 02476 713624.
7. Using the logo provided (*Salon_Logo.jpg*), design a price list of treatments available. The treatment information is available in the file named *Treatments.csv*
8. You have been presented with the following information to set up as an email template for merging with client email addresses.

Dear <name of client>

We are looking forward to seeing you for your beauty appointment on <date of appointment>.

Should you be unable to attend, please contact Progress Beauty on 02476 713624.

Kindest regards

Progress Beauty

Use the three clients from **Appointments Booked** to prepare the merged emails to be sent to clients.

Candidate Assignment Check List

Candidate Name:	
Class:	
Assignment:	

Initiation and Planning Phase

For this section you should create planning documentation. This should record the initialisation and planning phases.

Examples of evidence that you may create are:

Spreadsheets	Planning documents	Word processed documents
Desktop Publishing files	PDF documents	Written information

Have I....	Done?	Where is it saved?
Analysed the requirements of the brief?		
Considered how to mitigate risks and issues during planning?		
Decided on what documents I need to produce for initiation and planning?		
Discussed how I will test my solution iteratively and how I will show this?		
Discussed how I will carry out my final evaluation and record this?		
Discussed the security, legal, moral and ethical issues which affect my project?		
Discussed what things I will do to reduce or remove these issues?		

Execute Phase

For this section you should build the solution you have planned. You will need to record the iterative testing you do and show how this helps the development of your product. Your solution will need to manipulate data and communicate information in a suitable way.

Examples of evidence that you may create are:

Spreadsheets	Databases	Screenshots of testing
Iterative review evidence	Audio/Video files	Website/Social media

Have I....	Done?	Where is it saved?
Used appropriate software to import and manipulate data for my solution?		
Used appropriate software to export and present information in my solution?		
Used a range of tools and techniques with the software I have selected?		
Mitigated the security, legal, moral and ethical issues which affect my project?		
Shown how I have tested my solution iteratively as I created it?		

Evaluation Phase		
For this section you should review the solution you have created.		
You will need to evaluate progress and outcomes at the end of each section and how this affected the next steps you took.		
You will need to create an evaluation of the whole project. This will show how you have met your success criteria.		
Examples of evidence that you may create are:		
Spreadsheets	Photos	Audio files
Video presentations	Word processed documents	Presentations
Have I....	Done?	Where is it saved?
Carried out a review of my initiation stage?		
Carried out a review of my planning and execution stage?		
Used these reviews to show how they affected the next steps of my project?		
Evaluated my final project for success or failure?		
Linked this evidence to my testing?		
Shown whether I have met each success criteria?		