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Unit 24

Enterprise computing

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Please note:

You can use this assignment to provide evidence for summative assessment, which is when the learner has completed their learning for this unit and is ready to be assessed against the grading criteria.

You can use this assignment as it is, or you can modify it or write your own; we give more information in this document under Guidance for tutors.

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Guidance for tutors on using this assignment

General

OCR Cambridge Technical model assignments are available to download from our website: www.ocr.org.uk.

The purpose of this assignment is to provide a scenario and set of tasks that are typical of how IT specialists would use the range of knowledge, skills and understanding from either the Digital Technician pathway or Data Application Practitioner pathway to enable you to assess your learner against the requirements specified in the grading criteria. The scenario and its tasks are intended to give a work-relevant reason for applying the skills, knowledge and understanding needed to achieve the unit.

This assignment will not instruct learners how to meet the highest grade. Whether learners achieve a pass, merit or distinction will depend on what evidence they produce.

You can modify the scenario we provide in this assignment to make it more relevant to your local or regional needs. Please refer to the information under 'Modifying the model assignment' later in this section.

You don't have to use this assignment. You can use it as a guide to help you to design your own assignment, and we provide an assignment checking service. You'll find more information on these matters in section 8 of the qualification handbook.

In the tasks, we'll refer to the format of evidence. Learners are **not** required to follow that format **unless** we tell them otherwise.

It's essential that the work every learner produces is their own. Please make sure you read through the information we give on authenticity in section 8 of the qualification handbook and make sure that your learners and any staff involved in assessment understand how important authenticity is.

We provide this assignment to be used for summative assessment. You must not use it for practice or for formative assessment.

Before using this assignment to carry out assessment

Learners will need to take part in a planned learning programme that covers the knowledge, understanding and skills of the unit.

When your learners are ready to be assessed, they must be provided with a copy of the following sections of this assignment:

- General information for learners
- Assignment for learners
- Evidence Checklist

They may carry out preparation prior to undertaking the tasks and there is no time limit for this.

When completing the assignment

You should use this assignment in conjunction with the unit specification and qualification handbook.

Learners must be allowed sufficient time to complete all of the tasks. The amount of time may vary depending on the nature of the tasks and the ability of individual learners. To help with your planning against each of the tasks we have given an indication of how long it should take.

Learners can produce evidence in several sessions and should be working independently i.e. not as part of a group.

The learners will be required to provide information as to how enterprise computing could be implemented by an organisation who is considering working in a more global market. The learners will use the knowledge, skills and understanding that they have obtained from their particular pathway and provide evidence for the assessment criteria in relation to their pathway.

Information to support the scenario/tasks

Learners should have plenty of experience of presenting their enterprise solutions from other units where they have presented their designs and/or prototypes.

Stakeholders for M3 should be people with a good understanding of business requirements and enterprise computing and should not be members of the learners' group.

As the learners will incorporate the knowledge, skills and understanding that they have obtained from the other units within their selected pathway, it is important that this unit is carried out synoptically when they have completed the other units within the pathway.

Resources to complete the tasks

There are no specific resources that you need to make available to learners when they are taking this assignment. You'll need to give them a copy of the scenario and the tasks'.

Time

You should plan for learners to have 25 – 30 hours to complete this assignment.

Learners must be allowed sufficient time to complete all the tasks. The amount of time may vary depending on the nature of the tasks and the ability of individual learners. To help with your planning, against each of the tasks we've given an indication of how long it should take.

Learners can produce evidence in several sessions.

Format of evidence

Learners have to produce evidence that demonstrates how they have met the grading criteria. At the very least they must produce evidence that meets **all** of the pass criteria.

Please make sure your learners realise that missing just one pass criterion means they will not pass the unit, even if they have successfully met the merit and distinction criteria.

It is expected that the evidence will be primarily in the format of a formal report with appropriate headings page numbering and images to enable the stakeholders for the organisation to not only understand the concept of enterprise computing but also what would be involved for their organisation to implement it. Other evidence could include well structured PowerPoint presentations with detailed speakers notes which learner would use to present to the stakeholders.

For more guidance on generation and collection of evidence, please refer to the section 8 'Internal Assessment', in the qualification handbook.

Group work

This assignment hasn't been written to include group work. If you plan to ask learners to work in a team to complete work for assessment, you need to determine at which point in an assessment task learners can work together.

You must be sure that each learner can produce evidence of their own contribution to each grading criterion. You can give constructive feedback to learners about working as a group and direct them on team working skills because evidence of team working skills is not required by the unit. See our information on authentication, including group work and feedback to learners, in section 8 of the qualification handbook.

If witness statements are used to support learners' evidence, you will need to complete an individual statement for each learner.

After completing the assignment

Once the learner has submitted their work to you to be assessed, you must judge or 'mark' the work against the grading criteria for the unit and identify one grade for the unit. For further information about assessment, please refer to section 8 of the qualification handbook.

Your assessment decisions must be quality assured across the cohort of learners in your centre who are being entered for the same unit. This must be done through an internal standardisation process. We give information on internal assessment and standardisation in the qualification handbook.

Reworking the assignment

If you and the learner feel they've not performed at their best during the assessment, the learner can, at your discretion, improve their work and resubmit it to you for assessment. If a learner is working on improving their work before it is resubmitted, you and the learner must continue to make sure the work is the learner's own.

Any feedback you give to the learner must not direct them on how to improve their work. You can identify what area of the work could be improved but you cannot give the learner any details about how they could improve it. You must follow the guidelines given in section 8 of the qualification handbook under 'Authenticity of learner work'.

Modifying the model assignment

The tasks in this assignment allow learners access to the full range of grades detailed in the grading criteria of this unit.

If you modify this assignment you must not change the grading criteria provided in the tasks for the learner or in the evidence checklist. These grading criteria are taken from the unit.

You can modify the scenario to suit your local or regional needs and the tasks may be contextualised to match any changes you have made to the scenario. If you supply your own drawings to support a different scenario, these must be sufficiently detailed for learners to complete the tasks.

You can modify the type of evidence and the format it takes, unless we expressly state that evidence must take a specific format.

You must also make sure that you avoid discrimination, bias and stereotyping and support equality and diversity. For more information, please see the section 'Designing your own assignments for internally assessed units' in section 8 of the qualification handbook.

If modifications are made to the model assignment, whether to the scenario alone, or to both the scenario and individual tasks, it's your responsibility to make sure that all grading criteria can still be met and that learners can access the full range of grades.

If you're using this model assignment and delivering the Extended Diploma you have an opportunity to secure meaningful employer involvement by working with an employer to modify it.

General information for learners

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

A You need to produce evidence to meet the requirements of **all** the pass criteria for the unit this assignment relates to. If you miss just one pass criterion, you will not achieve this unit and will receive an unclassified result.

Q *What do I need to do if I want to get a merit or distinction for this assignment?*

A For a merit, you need to produce evidence to meet the requirements of **all** the pass criteria for the unit this assignment relates to **and** you need to produce evidence to meet **all** the merit criteria.

For a distinction, in addition to the above, you also need to meet **all** the distinction criteria for this unit.

Q *What help will I get?*

A Your tutor will support you when completing this assignment and will make sure that you know what resources or facilities you need and are allowed to use. We've given your tutor information about how much support they can give you.

Q *What if I don't understand something?*

A It's your responsibility to read the assignment carefully and make sure you understand what you need to do and what you should hand in. If you are not sure, check with your tutor.

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 this off as your own, or if you fail to acknowledge sources properly. This includes information taken from the internet.

It's not just about presenting a whole copied assignment as your own; you will also be plagiarising if you use the ideas or words of others without acknowledgement, and this is why it's important to reference your work correctly (see Q&A below for more information on referencing).

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

Always remember that 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. 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 [The OCR Guide to Referencing](http://www.ocr.org.uk/i-want-to/skills-guides/) available on our website: <http://www.ocr.org.uk/i-want-to/skills-guides/>.

Q *Can I work in a group?*

A Yes. However, if you work in a group at any stage, you must still produce work that shows your individual contribution. Your tutor can advise you how to do this.

Q ***Does my work for each task need to be in a particular format?***

A You can present your work in a variety of ways – it can be handwritten, word-processed, on video or in digital media. What you choose should be appropriate to the task(s) and your tutor can advise you. There may be times when you need proof that you have completed the work yourself: for example, if you do something during work placement that you want to use as evidence, the tutor might ask the employer to provide a witness statement.

Make sure you check the wording in each task carefully. For each task, we'll tell you if your evidence has to be in a specific format:

- If we say use the word '**must**', for example 'You must produce a report' or 'Your evidence/work must include a diagram', then you must produce the work in the stated format.
- If we use the word '**could**', for example 'You could include sketches of your ideas' or 'You could do this by annotating your diagram', this means that you are not required to follow the format we have given, but 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 tutor.

Q ***Can I ask my tutor for feedback on my work?***

A Yes, but they can't give you detailed feedback.

We have given your tutor instructions on what kind of feedback they can give you. For example, 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 and you can use this additional learning to try and improve your work independently. They can say what they've noticed might be wrong with your work, for example if your work is descriptive where an evaluation is required, but your tutor can't tell you specifically what you need to do to change it from a description to an evaluation – you will need to work out what you need to do and then do it for yourself.

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

A 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 tutor will tell you how to do this. You don't need to do this for information contained in references.

You can complete the evidence checklist to show your tutor where they can find the evidence for each grading criterion in your work.

You should make sure your work is labelled, titled and in the correct order for assessing.

Hand in the work that you've completed for each task to your tutor. 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 someone in your centre who has been authorised to do so. They will use the information in the grading criteria to decide which grade your work meets. The grading criteria are detailed in each unit and are also given in the tasks within this assignment. Please ask your tutor if you are unsure what the grading criteria are for this assignment.

Assignment for learners

Unit 24: Enterprise Computing

Scenario

Progress Ultimate Travel Services is an independent travel company which specialises in the following:

- Domestic and International air travel
- Domestic and International rail travel
- Cruises
- Domestic and International holiday packages
- Domestic and International hotel bookings
- Domestic and International car hire
- Domestic and International chauffeur service

It liaises with airlines, rail companies, cruise companies, hotels and car hire companies both within the United Kingdom and abroad as well as customers who access their services via their e-commerce website. The methods of communication used are email and telephone (although it is primarily email). There is currently an office in Paris where a legacy booking system is used which must remain accessible and protected. The travel company is considering opening offices in strategic locations across Europe as well as the mid and far East. It needs to ensure that the hardware and software infrastructure that is put in place will accommodate all locations with respect to accessibility, adaptability, scalability and security.

Progress Ultimate Travel Service has a bespoke online travel reservation system allowing the agents and end users to search, book and manage travel related information efficiently and effectively. It wants to continue to use the travel reservation system and wants its international offices and potential international customers to have an integrated system that will support the continued use of this software. It also has accounting software for the recording of all financial transactions as well as a payroll software for paying staff salaries.

The e-commerce website has dynamic webpages and provides customers with the opportunity to search for their travel requirements and access online webchat if required. In addition, customers can create an account when they book their travel arrangements and amend their booking information if required. Customers pay for their travel via the website.

As the organisation is currently based in just one location, it has six members of staff who monitor the bookings made online and liaise with the external organisations relevant to each booking e.g. the airline, hotel, etc. It also emails customers or speaks to them via the telephone. All of the IT infrastructure is located on site using a client-server model over a Local Area Network (LAN).

Part A – Enterprise Computing the Future for Progress Ultimate Travel Services

Learners work for an IT company which specialise in data infrastructure systems and integration. The IT company has been approached by Progress Ultimate Travel Services and they have been given the information from the scenario above. The first thing that the learners have been asked to do is to prepare a presentation which they will present to the stakeholders of Progress Ultimate Travel Services to help them understand the concept of enterprise computing systems.

Part B – Progress Ultimate Travel Services – The Enterprise Computing Solution

The learners will use the scenario given to investigate and develop an enterprise computing solution for Progress Ultimate Travel Services. Depending on the technical pathway they are following they will either concentrate on the hardware or software side of the solution. In a real working environment, learners would normally have the opportunity to research into the needs of the organisation more fully, but for the purpose of this assignment, it will be acceptable for them to make some assumptions as long as they make it clear what these assumptions are and why they have made them. The learners will be required to:

- investigate the business requirements for the enterprise computer solution based on the information provided in the scenario above and recommend a solution to meet these requirements;
- create an outline scope for the proposed solution, justifying the benefits and security characteristics that the proposed solution must include;
- produce either a logical or physical design for the proposed enterprise solution relevant to the technical pathway the learner is following;
- present the proposed enterprise solution to the relevant stakeholders and refine the proposed solution based on stakeholder feedback, evaluating the proposed solution against the original specified business requirements.

The tasks

Task 1 : Enterprise Computing – clearing the mist!

(This task should take between 2 and 4 hours)

Learning Outcome 1: **Understand the concept of enterprise computing systems**, is assessed in this task.

Your task is to:

Provide an explanation for the term enterprise computing and explain the requirements for an enterprise computing solution. You will be presenting these explanations to the stakeholders of Progress Ultimate Travel Services who do not have the technology knowledge on the subject of IT hardware and software systems and in particular, enterprise computing. It is important that you include examples to aid your explanations to enable a non-expert to understand.

Pass	Merit	Distinction
P1: Explain the term enterprise computing	M1: Explain the requirements of an enterprise computing solution	
Evidence		
A presentation with detailed speaker notes – P1, M1		
<p>This should include detailed speaker notes or a video recording of the presentation being delivered to the stakeholders at Progress Ultimate Travel Services. If the delivery of the presentation is not being videoed as part of the evidence, then there must be detailed speaker notes. The slides must be fit for purpose with bullet points for the key points, the detail should be in the speaker notes. It is important to remember that you will be including technical terminology which needs to have clear explanations for your 'non-technical' client.</p> <p>The presentation must include an explanation for the term enterprise computing and could be supported by one or more examples.</p> <p>When explaining requirements of an enterprise computing solution, you should take into consideration that there are certain requirements that must be met when developing and deploying these solutions. It is therefore important that you include them stating what they are and their purpose. Examples can be used to aid explanations.</p>		

Task 2 : Investigating the requirements

(This task should take between 6 and 8 hours)

Learning Outcome 2: **Be able to investigate business requirements for an enterprise computer solution**, is assessed in this task.

Your task is to:

Investigate the business requirements of Progress Ultimate Travel Services based on the information provided within the scenario. It is acknowledged that in a real working environment you would normally have the opportunity to gather further information from the organisation in question. When making your recommendation for the enterprise computing solution you may have to make some assumptions with respect to the systems already in place, the hardware and software technology already in use. It is important that you identify what these assumptions are and why you have made them.

Pass	Merit	Distinction
P2: Recommend an enterprise computing solution for business requirements		
Evidence		
<p>A report – P2</p> <p>The report should be in a formal style with relevant headings, subheadings and page numbering. All aspects of the business requirements should be considered including how it will benefit the business, protect its current hardware and software and support it's users. It is important that all potential users are included regardless of whether they are internal or external to the business. The following headings may help you to provide the depth of detail required in your report:</p> <ul style="list-style-type: none"> • purpose • intended outcome • intended users <ul style="list-style-type: none"> ○ local ○ international • personalised user experience <ul style="list-style-type: none"> ○ users ○ types of interface ○ an appropriate window for each audience. 		

Task 3 : Developing the enterprise computing solution

(This task should take between 10 and 15 hours)

Learning Outcome 3: **Be able to develop enterprise computing solutions to meet business requirements**, is assessed in this task.

Your task is to:

Develop the enterprise computing solution that you recommended in task 2. You will need to prepare an outline scope justifying the business benefits. In addition you will need to analyse the security characteristics that the proposed solution will need to include. You will produce a logical or physical design for the scoped enterprise solution depending on which technical pathway you are following.

Pass	Merit	Distinction
P3: Create an outline scope for a proposed enterprise solution to meet identified business requirements	M2: Justify the business benefits from the proposed solution	D1: Analyse the security characteristics that the proposed solution must include
P4: Produce a logical or physical design for the scoped enterprise solution		
Evidence		
<p>Outline scope – P3, M2, D1</p> <p>You are required to produce an outline scope for the recommended enterprise computing solution for Progress Ultimate Travel Services. You need to make a decision whether you want to produce a broad scope with less detail or a narrow scope with greater detail. It is important however, that you include the concept of enterprise computing and cover the fact that the organisation will be working in additional global locations and the requirements in order to achieve this.</p> <p>It is important that whichever style of scope you select that you include the objectives and goals as well as the advantages/benefits and disadvantages.</p> <p>Whilst indicating the business benefits within the scope, justify why they are benefits providing a reasoned case as to how the proposed solution will be of benefit to their business.</p> <p>Analyse the security characteristics that the proposed solution should include and include them as part of your scope. The advantages and disadvantages of each characteristic should be included with a reasoned comment as to why it is important that they are considered as well as any potential risks. The characteristics should include:</p> <ul style="list-style-type: none"> • authentication • access control for sensitive resources • data integrity • data privacy • non-repudiation • auditing • recovery plan <p>Logical or physical design – P4</p> <p>Produce a logical or physical design for the scoped enterprise solution. The following should be considered depending on which design you are producing:</p>		

Logical design:

- platform independent
- inputs
- outputs
- processes
- data.

Physical design:

- platform dependent
- hardware
- software
- implementation environment
- The format of the evidence will include structured diagrams accurately labelled supported by appropriate comments and/or notes to provide explanation of the design.

Task 4 : Presenting the solution

(This task should take between 2 and 3 hours)

Learning Outcome 4: **Be able to review the enterprise computing solution with stakeholders**, is assessed in this task.

Your task is to:

Present your proposed enterprise solution to the stakeholder(s) for Progress Ultimate Travel Services. You will refine your proposed solution based on feedback from the stakeholder(s). You will evaluate the final proposed solution against the original specified business requirements.

Pass	Merit	Distinction
P5: Present the proposed enterprise solution to stakeholders	M3: Refine the proposed solution based on stakeholder feedback	D2: Evaluate the proposed solution against the original specified business requirements.
Evidence		
<p>Presentation or formal proposal document – P5</p> <p>It is up to you which way you present your proposed solution to the stakeholder(s). If you are going to deliver a presentation, then you will need to include the resources you use to deliver the presentation e.g. PowerPoint presentation with detailed speaker notes, handouts provided to the stakeholder(s).</p> <p>If the delivery of the presentation is not being videoed as part of the evidence, then there must be detailed speaker notes. The slides must be fit for purpose with bullet points for the key points, the detail should be in the speaker notes.</p> <p>The stakeholder(s) should also be provided with a copy of the outline scope created in Task 3 as well a copy of the physical/logical design.</p> <p>Refined solution – M3</p> <p>You must provide evidence of the feedback provided by the stakeholder(s), this can be in the form of written feedback or a recording of the discussions that took place during the presentation of the proposal. You will need to provide a copy of the outline proposal and logical/physical designs confirming the refinements you have made based on the feedback.</p> <p>Evaluation report – D2</p> <p>You are required to evaluate the proposed solution against the original business requirements e.g. achievable, manageable, extendable, secure, customisable, user personalisation. The evaluation should include qualitative judgements based on the different factors you take into account. The evidence will be a formal report with appropriate headings and page numbering.</p>		

Evidence Checklist

OCR Level 3 Cambridge Technicals in IT Unit 24: Enterprise Computing

LEARNER NAME:

For PASS have you: (as a minimum you have to show you can meet every pass criterion to complete the unit)	Where can your tutor find the evidence? Give page no(s)/digital timings, etc.
Explained the term enterprise computing (P1)	
Recommended an enterprise computing solution for business requirements (P2)	
Created an outline scope for a proposed enterprise solution to meet identified business requirements (P3)	
Produced a logical or physical design for the scoped enterprise solution (P4)	
Presented the proposed enterprise solution to stakeholders (P5)	

For Merit have you:	Where can your tutor find the evidence? Give page no(s)/digital timings, etc.
Explained the requirements of an enterprise computing solution (M1)	
Justified the business benefits from the proposed solution (M2)	
Refined the proposed solution based on stakeholder feedback (M3)	

For Distinction have you:	Where can your tutor find the evidence? Give page no(s)/digital timings, etc.
Analysed the security characteristics that the proposed solution must include (D1)	
Evaluated the proposed solution against the original specified business requirements (D2)	

To find out more

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