Gold - Unit 21 - Data Management Software

Relevant LINKS

BACK TO ITQ UNITS **[1]**

Overview

This is the ability to select, use, manage and present data using specific data management software packages for the task.

This unit is about the skills and knowledge needed by an IT User to use data management software as well as deploying tools and techniques appropriately for straightforward or routine information. Any aspect that is unfamiliar will require support and advice from others. **Data Management Software** tools and techniques will be described as 'basic' because: the tools and functions will be predefined or commonly used; and the techniques for inputting, manipulation and outputting will be straightforward or routine.

Example of context: The software will depend on the type of data managed, but will include text, sounds, videos, images etc. It could include an address book, an image library or other catalogue system. Students can also be exposed to CRM systems used by sales companies.

Activities supporting the assessment of this award

Assessor's guide to interpreting the criteria

General Information

QCF general description for Level 2 qualifications

- Achievement at QCF level 2 (EQF Level 3) reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgement subject to overall direction or guidance.
- Use understanding of facts, procedures and ideas to complete well-defined tasks and address straightforward problems. Interpret relevant information and ideas. Be aware of the types of information that are relevant to the area of study or work.
- Complete well-defined, generally routine tasks and address straightforward problems. Select and use relevant skills and procedures. Identify, gather and use relevant information to inform actions. Identify how effective actions have been.
- Take responsibility for completing tasks and procedures subject to direction or guidance as needed.

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Requirements

- Standards must be confirmed by a trained Gold Level Assessor or higher
- Assessors must at a minimum record assessment judgements as entries in the on-line mark book on the INGOTs.org certification site.
- Routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work will be available from their e-portfolios and on-line work. Assessors should ensure that relevant web pages are available to their Account Manager on request by supply of the URL.
- When the candidate provides evidence of matching all the criteria to the specification subject to the guidance below, the assessor can request the award using the link on the certification site. The Account Manager will request a random sample of evidence from candidates' work that verifies the assessor's judgement.
- When the Account Manager is satisfied that the evidence is sufficient to safely make an award, the candidate's success will be confirmed and the unit certificate will be printable from the web site.
- This unit should take an average level 2 learner 20 hours of work to complete.

Assessment Method

Assessors can score each of the criteria L, S, H. N indicates no evidence and is the default starting position. L indicates some capability but secure capability has not yet been achieved and some help is still required. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least S on all the criteria to achieve the unit.

Expansion of the assessment criteria

1. Enter, edit and maintain data records in a data management system

1.1 **I can describe the risks to data security and procedures used for data protection**

Evidence: Candidates demonstration and assessor observations

Additional information and guidance
All data, regardless of type or purpose, really needs to be secure and is generally governed by various rules and regulations. Candidates can be introduced to some of the school or college's data security policies and procedures or to local companies as a way of introducing and discussing the reasons and methods (the local government or police may be helpful here). They can reflect on this in a blog or e-portfolio and add their own opinions as to the value of these actions and their effectiveness.

1.2 I can enter data accurately into groups of records to meet requirements

Evidence: Candidates' working files or portfolio reflections. Perhaps a centre set task.

Additional information and guidance
Candidate should show that they can use the features of data management software effectively, such as using checks of data entry to get their tasks completed. Users should also demonstrate they are comfortable with the software and that their entry is free from errors. They may be able to demonstrate the import of data sets into systems using something like a csv file for example.

1.3 I can locate and amend data associated with groups of records

Candidates should be able to demonstrate they can make basic changes to a records across data sets.

Evidence: Assessor witnessing.

Additional information and guidance
Candidates should be comfortable with the software and demonstrate competence in amending records. In some cases, these can be provided for them, though some level of independence should be encouraged where appropriate. The key here is that they can work with more complex systems with a range of data sets ansd groups aand they can manage this situation reasonably well.

1.4 I can check data records meet needs, using IT tools and making corrections as necessary

Candidates should be able to demonstrate they know how to solve basic input error issues.

Evidence: Assessor witnessing. Centre set test or task.

Additional information and guidance
Some data management systems, such as data records for something like public records (i.e. the population census) require large volumes of relatively similar data such as names and dates. Candidates should be able to use tools such as spell checkers for text or built in calculators (using the number pad) to check data entry for accuracy.

1.5 I can respond appropriately to data entry and other error messages

Candidates should be able to show understanding and awareness of error correction best practise.

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Evidence: Assessor witnessing. Centre set test or task.

Additional information and guidance
A practical exercise using a data management system with some obvious errors should present no issues to candidates and they can reflect on this in a blog or to the assessor verbally. The key thing here is that they show an understanding of error messages from the system, such as date in wrong format or post code etc and do not continue but correct the problems. They might also be encourage through practical exercises to deal with issues such as file incompatibility or wrong data types in data sets.

1.6 I can apply local and/or legal guidelines for the storage and use of data where available

Candidates should be able to demonstrate they know the best way to use data in line with local guidelines.

Evidence: Assessor witnessing.

Additional information and guidance
The school or college will have a policy on the use of sensitive data and students will need to sign off that they understand this and will abide by the guidelines. They might also be able to evidence this is their work placement is with a firm where they carry out some form of data entry and management.

2. Retrieve and display data records to meet requirements

2.1 I can identify what queries and reports need to be run to output the required information

Candidates should demonstrate the ability to find data from the management system using queries and format it for presentation

Evidence: Candidate reflections and documentation as well as assessor observations.

Additional information and guidance
A short task to demonstrate what data they can find and how they can then format it to create useful information. The focus here is on interrogating the database managing the data to demonstrate an understanding of something like SQL (Structured Query Language), rather than relying on pre-set data searches. This may be a pre-set tasks such as producing a report from a spreadsheet or database or if using a specific management software, showing the skills to use the built in search and retrieval elements. A good example here would be something like a CRM (Customer Relationship Management) or ERP (Enterprise Resource Panning) package to track and report on sales activity for a company. One of the world's wealthy companies [2] Oracle is built on these software packages. If required, TLM has demo sites of these packages that can be used for this task.

Please contact your account manager.

2.2 I can select and use queries to search for and retrieve information to meet given requirements

Candidates should be capable of generating reports on demand using query techniques.

Evidence: Candidate's work and assessor witnessing the process. Centre set test or task.

Additional information and guidance
In situations where candidates will come across data management software, the power in the system is to find the exact piece of information from the system to make decisions. In many cases, this may not be part of the existing system, but the system will have tools to achieve this. Once they have identified the correct terminology in 2.1, they can then run this and modify it to get the information that is needed. Depending on what the data management system is will determine the reports, but if using something like a CRM, a report might be the sales revenue generated for a particular month or calendar period.

2.3 I can create and view reports to output information from the system to meet given requirements

Candidates should show some competence in gathering data and creating or modifying a range of reports using the data management software.

Evidence: Candidates work and assessor observations

Additional information and guidance
The nature of the data being input to the software will vary and therefore the nature of reports and outputs will also vary. Candidates could be observed creating reports to the screen, or could be asked to output to print and compile as a small report.

Moderation/verification

The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialogue with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book. They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios. Before authorising certification, the Account Manager must be satisfied that the assessors judgements are sound.

Source URL: https://theingots.org/community/sil2u21x

Links

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[1] http://theingots.org/community/ITQ_UNIT_development
[2] http://www.crn.com/slide-shows/channel-programs/240154736/the-25-biggest-tech-companies-on-the-fortune-500.htm/pgno/0/12

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