Platinum - Unit 42 - Undertaking a Real-World Project

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Overview

The candidate will use their skills and understanding in a real-world contect. They will research and plan a project with a real client. They will analyse the situation and work out the overall requirements and discuss these with the client. They will write out a detailed document showing the applications and data needs. They will use these findings to carry out and complete the task required. They will then follow up with some other suggestions.

A work activity will typically be 'non-routine or unfamiliar' because the task or context is likely to require some preparation, clarification or research to separate the components and to identify what factors need to be considered. For example, time available, audience needs, accessibility of source, types of content, message and meaning, before an approach can be planned; and the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Example of context – candidates can develop a basic system with any of the optional units, such as a sales based spreadsheet system for a customer or a working CRM. Install a home server for someone, such as Amahi [3].

Activities supporting the assessment of this unit **[4]**

Example of work at this level **[5]**

Assessor's guide to interpreting the criteria

General Information

RQF general description for Level 3 qualifications

- Achievement at RQF level 3 (EQF Level 4) reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgment within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.

- Use factual, procedural and theoretical understanding to complete tasks and address problems that, while well defined, may be complex and non-routine.

- Address problems that, while well defined, may be complex and non-routine. Identify, select and use appropriate skills, methods and procedures. Use appropriate investigation to inform actions. Review how effective methods and actions have been.

- Take responsibility for initiating and completing tasks and procedures, including, where relevant, responsibility for supervising or guiding others. Exercise autonomy and judgement within limited parameters information and ideas

Requirements

- Standards must be confirmed by a trained Platinum 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 and files 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 3 learner 11 hours TQT to complete.

Assessment Method

Assessors can score each of the criteria N, L, S or H. N indicates no evidence. L indicates some capability but some help 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 a S on all the criteria to achieve the full award.

Expansion of the assessment criteria

1. Candidates will research and plan a real-world project to apply my theoretical knowledge in a practical way.

1.1 I can state the aims and objectives of the project

Candidates should be able to clearly set out their overall aims and objectives in relation to their project.

Evidence: will be provided directly from student portfolios and assessor feedback.

Additional information and guidance

Candidates need to set themselves some clear and achievable targets for their project. They can use some SMART targets in order to get some clarity. There will be some generic aims, such as making a

system user friendly, as well as some more specific quantitative aims such as the system carrying out a certain operation in under 10 seconds etc. The clearer these are in the beginning, the easier to project will be to complete. It will be worth the candidates working closely with clients or other team members to make sure they agree to the set aims and objectives. The can carry out interviews or hand out questionnaires to the main stake-holders to make sure they introduce the features that users actually want and need.

1.2 I can show a real need for the project undertaken
Candidates should be able to show through examples that their project meets an actual need.

Evidence: will be provided by portfolios and reports as well as client feedback.

Additional information and guidance
Working closely with a client will ensure that the final project plan, including the above aims and objectives is properly “signed off” and the client agrees that this project will help them in some way. If the client is unsure or not sufficiently tehnical to appreciate exactly what they require, then the candidates need to be comprehensive and convincing in their evidence and conclusions. They should show some confidence in their ability and understanding.

1.3 I can define the client base

Candidates should be able to clearly show the range and complexity of who will use their solution.

Evidence: will be provided directly from student portfolios and assessor feedback.

Additional information and guidance

The candidates need to do some extensive research to make sure that everyone who uses the system or might use the system is catered for, at least within the scope of what they are hoping to achieve. If they are making a small sales system for a local business, then they need to be aware that a range of people will use the system in different ways. Some people will just be searching the system for name and contact details, others will be entering data and will need a different set of tools, others will be interrogating the system to get reports.

By writing a definition of the client based and describing what they need and how it might be achieved, it will help the project be more defined and easier to complete.

1.4 I can provide a list of alternative solutions

Candidates should be able to detail some options and recommendations

Evidence: will be provided directly from student portfolios and assessor or client feedback.

Additional information and guidance

In some cases, the candidates might recommend some other system which is beyond their abilities as a solution. As long as they back up their conclusions with quality evidence, they will still be helping the client. An example here might be in recommending a number of CRM systems to a client. The candidates might recommend Drupal as a system since they are most familiar with this. However, they may have explored Sugar CRM as part of their research work and recommend that they did not have time
to learn it, but felt it was a better system for the client to give them some future proofing. Similarly, they may have trialled Salesforce and recommend this even though it is an expensive proprietary system. This knowledge is still invaluable to many clients who don’t have the time or expertise to make these conclusions.

1.5 I can evaluate the alternatives

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Candidates should be able to evaluate and scale alternatives for reference.
Evidence: will be provided by portfolios and reports with tables.

Additional information and guidance
Linked closely with the above criterion, candidates should show a reasonable depth of research and analysis to back up their recommendations and claims. The candidates will be familiar with certain tools in their day to day IT use, but should try and explore alternatives and test them as thoroughly as possible. They may not want to use them, but they need to be objective and look from the client's perspective.

Some graphic applications may be very powerful and the candidates can use them efficiently because they have done so for a number of years, however, clients might not be able to pick them up and have time to learn them to this level, so they need something as a transition package. Candidates can put together a table of comparative features and give examples of these features against each other with some examples.

2. Candidates will analyse the service and security requirements for the project to be a success.

2.1 I can identify the service requirements for the project

Candidates should be able to give some detail of the range of services they are trying to improve as part of this project.
Evidence: will be provided directly from student portfolios and assessor feedback.

Additional information and guidance
The service requirements of the project will vary depending on the overall scope. If it is a minor change to an existing system it may just require an overview presentation of the new features and some basic documentations. If the project is a significant change from the previous system, then candidates might need to carry out some training and short-term support of the client, as well as some nominal help desk features, in order to help them transition. As with some other criteria here, the idea if to show what will be required through an initial investigation in order to better plan for time and other resources. many large scale public project come undone because the developers and planners have not fully anticipated the services required from the outset and they are then very difficult and expensive to turn around.

2.2 I can identify the security requirements of the client

Candidates should be able to detail the main security issues for investigation and development.
Evidence: will be provided directly from student portfolios and client feedback.

Additional information and guidance
Security is increasingly becoming the central focus for any project. The more connected we become, the more incentive there is for people to control or damage our systems. The nature of the project will determine the style and level of security, albeit very few organisations will not want quite high levels. There may be specific legal issues that dictate what candidates need to deploy. For example, if they are assisting a local primary school, they need to be extra vigilant about personal information being available, whereas if they are producing something like a website for a local charity, then it is more an issue of preventing it from being hacked and stopped. Security concerns can also be physical ones, such as who can have physical access to hardware and software. Once the range has been identified, the requisite solutions can be recommended and later tested and developed.

2.3 I can produce an outline plan for the project
Candidates should be able to fully plan what they intend to do, how and when.

Evidence: will be provided directly from student portfolios and assessor feedback.

Additional information and guidance
Once candidates have gathered all of their research materials and begun to think about all of the solutions in different areas, they can begin to put it together as a more formal plan. They can set out their aims and objectives, and associate some provisional timelines to these. They can use some aspects of SMART targets to give themselves milestones and markers to work towards. The plan should include some idea of resources required and some of these may require time to get or develop. If they need to use a new piece of software or hardware to solve the issues, this will need to be learnt and mastered to some degree.

The plan will be in outline at this stage because it is likely to change as problems are encountered and dealt with and as expectations change based on what works and what doesn't. having a plan will give a clear focus to the work ahead however.

3. Candidates will describe the applications and data requirements needed in line with client needs and expectations and to cope with scaling and flexibility

3.1 I can identify a range of hardware and software solutions

The candidate should should be able to list and define the range of hardware and software they are likely to need and use.

Evidence: will be provided by portfolios and reports as well as assessor feedback.

Additional information and guidance
This is part of extending the planning and development of the project and beginning to look in detail at the resources. In most cases, it will be documenting the hardware and software required and giving some idea of why and how it is to be used. As with other criteria here, the level of detail will depend on the project as some will require a great deal of detail and possibly client training, while others will just require some detail listing how they will be used. If the project is using Internet based services, perhaps setting up an internal web server for a client, then there will more than likely be a hardware upgrade to a more robust router and firewall. They may also need to look at making the software more secure and use elements such as SSL certificates. All of this will need to be discussed and determined.

3.2 I can explain the limitations and the cost implications of each solution to the client

The candidate should be able to give details for the client to make informed decisions.
Evidence: will be provided by portfolios and reports as well as client feedback.

Additional information and guidance
In many cases, the most expensive may well be the best, but it depends on many factors. Many companies continue to use something like Microsoft Office because they are most familiar with the way it works. However, the later versions of Office tended to include additional features that 90% of companies will never use and the interface became more complex to reflect the way people used devices. Is this a necessity?

Most free and open source office software includes all of the main features of Office. The main thing

they lack is the ability to deal with complex formatting and some macro functions but these are very specialised and few people use them. Therefore, recommending this type of system will be better as a solution and more cost effective. if companies insist on expensive and proprietary systems, they need to be aware of licensing costs and support costs over the lifetime of the product or TCO (Total Cost of Ownership). is the candidate's solution the best on all of these issues?

3.3 I can describe the backup and disaster recovery processes to ensure system stability
The candidate should be able to describe the way the system will be protected in the medium and long term.

Evidence: will be provided by portfolios and reports as well as assessor feedback.

Additional information and guidance
Building a system is only the beginning of the process of making it work and be accepted. The one thing which is often overlooked is the scaling and longevity of the system. If the system has time sensitive data or data that is required to be kept, such as a school, how will this be managed? What is the best way to guarantee the company can get th data they need when they need it? Recent tests have shown that CDs and DVDs only last 5-10 years. IDE based hard drives are not supported as well on modern computer motherboards as SATA interfaces have replaced them. If people put important data on these types of media and require them at a later date, they may be disappointed to find they are no longer available. Technology moves along very quickly and the system will need to build in, as far as possible, this future proofing.

What provision will the candidates use for disaster recovery? The incidence of flooding is becoming more prevalent and as data becomes more valuable there will be higher levels of theft. How can a company get back their data? Studies show that companies that lose their data tend to fold very quickly, so disaster recovery is imperative. The cloud is a good option, but the large companies can be quite expensive initially, but small companies can disappear quickly without warning.

Candidates need to address these concerns and offer workable solutions as much as possible.

4. Candidates will produce a project based on my research and understanding to meet the client’s needs

4.1 I can produce a working system to satisfy the client’s needs and objectives set out in the planning process

The candidate should be able to put all of their research and planning together to make it work.

Evidence: will be provided by a working project and assessor and client sign-off.

Additional information and guidance
Much of this will be produced in other criteria, but the simple outcome for this criterion is a working project.

5. Candidates will recommend services and applications to meet client needs

5.1 I can evaluate the solution with respect to the client budget

The candidate should be able to assess how well they kept their solution within the demands of a client budget.

Evidence: will be provided by portfolios and reports as well as client feedback.

Additional information and guidance
An important skill and consideration is working towards some type of budget. Most solutions will cost something in terms of resources and costs (such as wages). In this case, the cost might be in buying some hardware or software that they recommend for their solution. They need to show that they considered costs and worked with the client towards sticking to some agreed amount. If they were over or under, it would be useful here, or in the next criterion, to consider why.

5.2 I can test and evaluate the solution to meet the client's needs

The candidate should be able to make sure the solution works as expected.

Evidence: will be provided by portfolios and reports as well as client feedback.

Additional information and guidance
Once the system is built, a series of tests of functionality and performance can be carried out against the targets set out in the planning stages. Is it as easy to use as expected? Does it solve the issues that the client identified with the candidate in the beginning? Does it exceed what the client wanted? If they set out a series of clear test markers, they can evaluate the solution against these and then recommend further development or ways to refine the system if it does not meet expectations. There is no such thing as a perfect system so this is an important phase in the life-cycle of a project.

5.3 I can evaluate the solution with respect to local conventions and legal requirements

The candidate should be able to show how and why they worked to legal requirements and local ways of doing things.

Evidence: will be provided by portfolios and reports as well as client feedback.

Additional information and guidance
Many companies will have their own policies and procedures and ways of working and candidates need to show that their system adhered to these where appropriate. Some companies that are publicly funded and controlled might also be subject to very strict legal guidelines and conventions, so some analysis and evaluation of these needs to be
shown in the working of the project.

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 dialog 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 and through signed witness statements associated with the criteria matching marks in the on-line markbook. Before authorizing certification, the Account Manager must be satisfied that the assessors judgements are sound.

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