

Principal Examiner Feedback

June 2011

Applied GCE ICT

6957 – Using Database Software

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General Comments

It was pleasing to see that the majority of candidates took into account the clear instructions in the examination paper with regards to the ordering of evidence and the printouts required. On the whole, significantly less paper is being submitted which is good. It is understandable that some candidates may need to produce more than the minimum prints required in activity 3 but the best advice, as shown by many candidates, is keep to the task and keep it simple.

It is apparent that a lot of candidates are taking on board comments made in previous reports with regards to marks that are lost because of poor screenshots, with the majority ensuring screenshots were clear. However, there are still some who either crop screenshots too much – missing off names of tables, numbers of records on datasheets, truncating macro screenshots etc, and some candidates who print them out too small or with poor print quality (possibly photocopied), making the evidence illegible.

It is worthwhile reiterating here what is deemed acceptable with regards to help and assistance before and during the exam period. The role of the teacher is to prepare the candidates for the exam by developing the **technical skills** necessary to create a database at this level. The scenario is released prior to the examination. Teachers are allowed and encouraged to discuss with their students possible answers to the questions. The scenario had very clear tasks in order to aid this process. At this point the teacher does not know the final construction of the dataset, so that any datasets they give to their students for practice can only be guesswork.

Once the teacher becomes aware of what is in the live data files, they should no longer discuss the examination in context, although they are allowed to discuss with the students aspects of databases in general terms.

For example, they can revise the generation of primary keys, as long as the examination data files are not used as an example. Therefore, questions raised about the data file prior to the examination going live would appear to suggest that this may not be happening. The data file(s) in any examination contain data that the candidates have to accept as being the way we want it. It is up to them how they cope with any anomalies that may be present. This is true of any 'live' situation in the real world where they would have to make their own decisions about how to proceed.

Administration

On the whole, administration is sound but there are still some candidates losing one or two standard ways of working marks in the paper by not assembling the tasks in the correct order or, where they are in the correct order, attaching them to the answer booklet incorrectly.

When the examiner opens the booklet they should be greeted with Activity 1 facing toward them ready to mark. This is not always the case, and when the examiner opens the booklet they are faced with the back of the activity 6. Very few candidates do not ensure their name; centre number etc is present on every print though it does still occur. In a very few instances

the candidate details were handwritten on each answer sheet which is not acceptable.

Activity 1

It was nice to see the majority of candidates attempting all sections of this activity. Candidates did answer the A section very well with the majority achieving full marks.

The B section tended to be attempted but examiners were looking for the candidates to have taken into account what was written in the scenario. For example, it was a given that both Charlotte and members would need to log in, so answers which generally discussed passwords i.e. *Charlotte could use a password that members would not know* were not deemed acceptable.

The C section tended to either see the candidates achieve full marks or 1 mark. Quite a few did not take into account that storage in a table is output.

There were very few instances of candidates ticking more than one answer at the same time. Those who did were not awarded the marks for the relevant columns.

It was nice to see many candidates taking into account that the entire activity could fit onto one sheet of A4 paper though some did use too much, i.e. three separate sheets.

Activity 2

On the whole this question was well answered and it was particularly pleasing to see the majority of candidates had read the examination paper and only provided the evidence requested. This good practice and they are to be commended for it.

However, there were some who did not, submitting far too much evidence or evidence in the incorrect order.

Candidates tended to do very well in the A section marks with many achieving all 8. However, some missed at least one of the relationships either from the member or film aspect. It was sad to see that some candidates are still missing the relationship marks purely because they do not ensure referential integrity is enforced. In this exam paper, this resulted in 4 marks lost out of 8, which is significant.

Most candidates did achieve the first B mark for the correct primary keys. Quite a lot did achieve the second; quite a lot did not achieve the third, as they failed to recognise the need for a Memo data type for the comments field.

It was pleasing to see the majority of candidates could identify the evidence required for each of the five different validation techniques, with some very good evidence which did take into account the scenario.

However, some are still failing to recognise that an input mask is a suitable format check and choose to show formatting of dates etc which Access does for you simply by selecting your option from a list. These were not deemed **appropriate** evidence. Input masks used on generated fields were not deemed **appropriate** either, for example, UserName in the member table.

It was very nice to see candidates bringing forward their data analysis of the scenario for the range check, i.e. that the scenario included a statement that could clearly be interpreted as a range check: *"the payments must be between £3 and £10"*, and most candidates did use this. However, if they had used other range checks that were appropriate, then they were not penalised.

It was clear to see that candidates did understand the purpose of a presence check and most could apply it to an appropriate field. However, some chose to include it on primary keys which were deemed **inappropriate** as, by default, primary keys have to be present.

Candidates also proved they could use combo boxes etc correctly with many including these as their form of a list check. However, quite a few omitted to provide evidence that they had set the limit to list option to "yes".

A default value was requested for the first time and the majority of candidates did pick up on the fact that the scenario had asked for the password to be set to 'teapot'. However, any appropriate default value was acceptable, other than default values applied to the accepted field.

With regards to section D, candidates generally did well and seem to have grasped an understanding of what is required. Centres seem to have prepared candidates better to evidence this, although there were still some candidates cropping off the number of records present in the table. The marks for this aspect of the question can only be awarded if the examiner can clearly see what table it is and the total number of records present. Those who failed to do so lost 5 marks in this section.

Activity 3

All candidates attempted this activity, which was pleasing to see. On the whole, it would appear those centres that have taken the time to use the Principal Examiner examination solutions from the website as revision did well, as these really do show the type and quantity of evidence expected by examiners.

It is worth noting that Activity 3 is really all about the **design view** aspects of building the forms and generating the processes. Candidates are specifically told what screenshots should be design view and what screenshots should be form view. Quite a few candidates included far too much evidence that was not really of any use, i.e. the system working and what happens when they complete the forms etc. Activity 4 is designed to test the system and show it working, so this does not need to be shown in Activity 3. This is all about building the system. The majority of marks in this section are awarded for the design.

At other times, candidates did not include enough evidence, which will become apparent from the comments given.

Section A required the candidates to create a registration form. The examination paper clearly **stated** what fields to include and it was pleasing to see that the majority of candidates took this on board and ensured they were present. However, some did not. Others chose to use two or three forms for this part of the activity. This was not asked for and was not required. Candidates are told exactly what forms to build. It was clear that some were bringing what they had practised in class into the exam. It is really nice that they are practising, but should be made aware what they practise is not always going to be what is required, so they have to read the examination paper carefully.

It is worth noting at this point that (i) did state that the form should not display information about existing members. Could assume from this that examiners want some evidence to show how they clear the form at the end of the task.

Most candidates attempted (ii) and did so very well. There were numerous different calculations used of varying complexity. We were happy to accept all that worked, including more simple solutions. Where marks tended to be lost here, it was because the field was truncated, meaning not all of the calculation could be seen.

With regards to (iii) and the generation of UserName there were some very good methods used on the form itself and very good methods involving either queries or code. Where marks were lost here it tended to be because:

- a) Candidates did not read the exam paper properly and used fields in the wrong order or too many/too few letters
- b) Candidates truncated the evidence meaning the full solution could not be seen
- c) If queries had been used they were not shown.

It should be noted that examiners can only award the marks if they can see the solution.

It was pleasing to see that many candidates could customise a form well. This included the use of a good title customising the layout to include field widths suitable for the data in them, appropriate field labels, appropriate field order etc.

Most candidates achieved some of the marks in the B section which was very nice to see and the evidence is getting better. Many used macros and queries and many used code. Either was acceptable, so long as the evidence could be clearly seen. Where marks were lost in this section, it tended to be because candidates truncated the macro evidence. The rows can be made deeper in early versions of Access and the columns wider. Candidates should really be encouraged to use these facilities. Examiners need to be able to see the **conditions**, **actions** and **arguments** clearly and in full. Many

candidates did not show the argument column, choosing to use the comments column to tell the examiner what they had done. Comments are not hard evidence of macros that work. Others chose not to show the macros at all and presented evidence of the system apparently working. Candidates should not show of the system in action here - that comes into Activity 4.

With regards to the save itself, if candidates have used queries etc in conjunction with macros/code then examiners need to see design view evidence of these too, so that a judgment can be made as to whether or not they would work.

Section C was attempted well, with good evidence put forward. Where marks were lost, it was for the same problems encountered in the A section, i.e. truncation of calculations, not showing how things were generated.

Section D was well attempted too, with most candidates achieving some (if not all) of the marks.

Most candidates who included evidence of section E achieved some of the marks. Many achieved all of the marks. Where marks were lost, it tended to be because macro evidence was truncated, text fields used were not named appropriately (meaning it was very hard for the examiner to determine what was happening), or candidates choose to ignore the request that an error message should appear in either the username, password or both.

On the whole there was some excellent evidence put forward for this activity.

Activity 4

Overall, the candidates did well on this activity with many achieving the full 7 marks with evidence of good understanding and skill.

Where marks were lost it tended to be either misspelling the details they were given, misspelling the same details only for them to be 'perfectly' stored or where candidates had clearly fabricated the evidence. It is worth nothing that marks for the messages appearing were only awarded if the save was correct.

Activity 5

Most candidates who had managed their time well got onto this activity and managed to complete it.

Quite a lot of candidates were able to create the query which did find the relevant months, however, some chose to allow the user to specify the months. This was not what was required and attracted no marks.

With regards to the report itself the evidence varied. Quite a lot of candidates demonstrated the use of grouping really well with the relevant details present. However, some are still applying too many levels of grouping. If grouping is going to be requested it will be on one level only.

Calculations were very well evidenced with the majority achieving both marks. Where grouping had been applied correctly most achieve the placement mark.

It was pleasing to see that candidates did make a good attempt at formatting the report. However, some did not check their data carefully enough for **presentation** i.e. checking for truncation of labels or fields etc.

Activity 6

It was very nice to see that the majority of candidates had taken note of what was asked of them in the examination paper and carefully ensured their evaluation reflected this with some excellent, well thought evaluations, raising some very good points about future functionality. However, others still see it as an opportunity to talk about how well they have completed the examination questions or give a running commentary of what they did to build it. To reiterate, the first part of the evaluation should see the candidates evaluate how well their database carries out the tasks from the scenario. The second should see them discuss further functionality. Please stress to candidates that we do not want to see screenshots of how they have built aspects. We have already seen that in activity 3 and candidates can waste a lot of valuable time doing this.

For example:

Mark Band 1

I did not get all of activity 3 done because I could not do the save bit. I tried and tried but could not get it to work. I did do well in activity 1 and 2 I think because I managed to get the relationships and I think I was good at the validation.

This is all about the candidate's own performance and is not an evaluation of the database

Mark Band 2

*I have a registration form and members fill in their details. The UserName is generated for them and uses letters from their first and last name. The form has a save button and when that is clicked it checks to see if they have entered their details and, if they have, it saves them straight into the member table. **So I have met this requirement.***

This is very descriptive and not really evaluative aside from what is highlighted in bold. However, if they have good recommendations for the second section then mark band two can be entered.

Mark Band 3

*There was a need for a registration form. I wanted this to be very easy for students to use. **I made sure they knew what they needed to type in because I clearly told them on the form and included red asterisks. These are common things used on the likes of websites and people are used to seeing them and knowing what they are for so I think both would be very useful to the student.*** The age check was automatically done using a calculation. **This would be very useful to Charlotte for a number of reasons. One is that anyone too young won't be in the database for her to look at in the first place; another is that she won't have to manually calculate how old they are. She could make a mistake if she did this which means someone too young would slip into the database.** The UserName was also automatically generated. **This was much better than giving instructions telling the student to use four from their first name, three from their second and how they would know the right number I do not know. It was instantly done and they did not have to worry about it at all and it would make sure the data was valid and correct before the save.** I am pleased with this as I think I have done everything Charlotte wanted but I don't think it is perfect. I am not sure why the students can't pick their own username and password at this stage and will discuss that in my recommendations.

This is fully evaluative. As evidenced, there is no need for candidates to outline how something has been done, as this has been seen in Activity 3. Rather, the candidate can demonstrate reflection on what they have done with regards to how it makes the system easier to use for the user(s). Candidates who perform well can see the weaknesses in the prototype and can take them forward into the second section where they have to make recommendations for further functionality.

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