Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
January 2012
Applied Information and Communication Technology

Assessment Unit AS 2 assessing
Unit 2: Software Applications and Tools [A3J21]

## MONDAY 9 JANUARY - FRIDAY 13 JANUARY

## TIME

2 hours 30 minutes.

## INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page. Save each document using the name specified in each task. Always add your Candidate Number, Centre Number, Question Number and Printout Label to every printout produced. All printouts may be labelled by hand. All printouts must be attached to the examination paper at the end of the examination in the correct order. Use the treasury tag provided to attach your printouts to the examination paper.
You may not take the examination paper with you.

## INFORMATION FOR CANDIDATES

The total mark for this paper is 100 .
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

In order to complete this examination you should have access to the following:
cars12_jan database, cars12_jan spreadsheet, cars12_jan document and images12_jan folder

| For Examiner's <br> use only |  |  |  |
| :---: | :---: | :---: | :---: |
| Question | Marks <br> Available | Marks | Re-mark |
| DB1 | 6 |  |  |
| DB2 | 2 |  |  |
| DB3 | 2 |  |  |
| DB4 | 9 |  |  |
| DB5 | 5 |  |  |
| DB6 | 12 |  |  |
| SS1 | 6 |  |  |
| SS2 | 4 |  |  |
| SS3 | 8 |  |  |
| SS4 | 6 |  |  |
| SS5 | 8 |  |  |
| WP1 | 5 |  |  |
| WP2 | 4 |  |  |
| WP3 | 4 |  |  |
| WP4 | 4 |  |  |
| MM1 | 4 |  |  |
| MM2 | 11 |  |  |
| Total | $\mathbf{1 0 0}$ |  |  |

The owners of Community Cars are developing a database to store data about the cars, bookings and customers, which make up their business.

Open the database and examine the relationships between the tables.

## TASK DB1

This database currently consists of four tables called CAR, CUSTOMER, CATEGORY and BOOKING.

Create a new table called SERVICE. This table will hold service details for each car.

| Field Name |  | Data Type | Length |
| :--- | :--- | :--- | :--- |
| ServiceRef | Primary key | Text | 3 |
| CarNo |  | Number | Long integer |
| ServiceDate |  | Date/Time | Short date |
| Mileage |  | Number | Long integer |
| Comments |  | Memo |  |

- Produce a screenshot of the design of the SERVICE table showing clearly the Field Name and Data Type for each of the fields within the table.
- Save the screenshot as SERVICEDESIGN.
- Print SERVICEDESIGN.
- Label the printout SERVICEDESIGN.
- Close the SERVICE table and save the changes.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

## TASK DB2

Cars must have regular services in order to ensure that they are safe to transport members of the public. In order to store this data, a relationship must be established between the CAR table and the SERVICE table.

- Using the relationships feature, create a one-to-many relationship between the CAR table and the SERVICE table.
- Print a copy of the new relationship layout for the database ensuring that all tables are visible.
- Label the printout RELATIONSHIPS.
- Close the relationships view and save changes.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

## TASK DB3

For legal reasons, service details can only be recorded for services that have already been completed.

- Add a validation rule to a suitable field within the SERVICE table to ensure that only dates in the past will be allowed.
- The validation text that should appear is 'Invalid service date entered'.
- Produce a screenshot of the SERVICE table showing the validation rule that has been applied.
- Save the screenshot as VALIDATION.
- Print VALIDATION.
- Label the printout VALIDATION.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Service data is currently stored in a paper folder. Community Cars needs a way they can easily add all this data to the database.

- Create a form as shown below.

- The form should display details from the SERVICE, CAR and CATEGORY tables.
- Save the form as SERVICEHISTORY.

Three services have been carried out recently.

| ServiceRef | CarNo | ServiceDate | Mileage | Comments |
| :--- | :--- | :--- | :--- | :--- |
| A09 | 1 | $03 / 01 / 2012$ | 4600 |  |
| A10 | 2 | $03 / 01 / 2012$ | 9007 | Further work <br> needed |
| A12 | 2 | $04 / 01 / 2012$ | 9059 |  |

- Use the form you have just created to enter this data.
- Print the SERVICE table showing that the above records have been added.

Ensure that all data is fully visible.

- Label the printout SERVICEDATA.
- Produce a printout of your form showing details for ServiceRef A10.
- Ensure that all field names and data are fully visible.
- Label the printout FORM.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

As competition increases between local companies, Jim is keen to ensure that he keeps his regular customers. He has decided to give loyalty discount vouchers to those customers who have made more than 20 bookings with Community Cars.

In this task you will use the CUSTOMER table and the BOOKING table.

- Produce a query to show those customers who have made more than 20 bookings.
- The query should show CustomerForename, CustomerSurname and CustomerNo.
- The calculated column in the query should have a title of Bookings Made.
- The records should be displayed in alphabetical order by surname.
- Save the query as LOYALTY.
- Run the query and print your results.
- Label the printout LOYALTY.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

## TASK DB6

Jim is considering buying some new cars for his fleet and has asked for a report to show bookings to date for each category of car.

- Produce a report as shown below.


## Bookings by Category

| Category |  |  |  | No of Bookings |
| :---: | :---: | :---: | :---: | :---: |
| C1 | Standard |  |  |  |
|  |  | SIW 7789 |  | 32 |
|  |  | HT 89 DOK |  | 58 |
|  |  | RIW 9082 |  | 15 |
|  |  | RUI 9085 |  | 11 |
|  |  | SWE 9983 |  | 10 |
|  |  | RKZ 8521 |  | 2 |
|  |  |  | Bookings for Category: | 128 |
| C2 | Seven Seater |  |  |  |
|  |  | WIW 9872 |  | 27 |
|  |  | BIG 9008 |  | 14 |
|  |  | TKZ 9942 |  | 13 |
|  |  | FRN 9721 |  | 14 |
|  |  | TRK 865 |  | 14 |
|  |  |  | Bookings for Category: | 82 |
| C3 | Disabled |  |  |  |
|  |  | KR 09 RTE |  | 20 |
|  |  | QR 08 RDT |  | 13 |
|  |  | FR 99 THU |  | 14 |
|  |  | WIW 9521 |  | 9 |
|  |  | TKZ 664 |  | 2 |
|  |  |  | Bookings for Category: | 58 |
|  |  |  | Overall Bookings: | 268 |

- Calculations should be included for No of Bookings, Bookings for Category and Overall Bookings.
- Save your report as BOOKINGS.
- Print your report on one A4 page ensuring that all data is visible.
- Label the printout BOOKINGS.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

The database activities are now complete.

Open the spreadsheet called cars12_jan
Sarah Smith, the administrative assistant in Community Cars, has to keep records on how much each full time driver collects. She must present the owner Jim McDuff with reports on various aspects of the business. Jim would like to invest in new limousines but must first see how much income the company is making before investing in the new cars.

- Open the sheet labelled Sheet1.
- Insert a new row above the text 'Jim McDuff'.
- Each column represents the money collected by each driver each month. Insert a heading above each column to represent each month from January in B1, February in C1 through to December in M1.
- Format the numerical data as currency.
- Rename Sheetl as Income 2010.
- Move to Sheet2 and repeat the steps as given above for Sheet1.
- Rename Sheet2 as Income 2011.
- Set the page setup in both sheets to be Landscape.
- Move to sheet Income 2010.
- Produce a screenshot of the data on this sheet on one A4 page in landscape view.
- Save the screenshot as INCOME2010.
- Print INCOME2010.
- Label the printout INCOME2010.
- Move to sheet Income 2011.
- Print the sheet ensuring that gridlines and row and column headings are showing.
- Label the printout INCOME2011.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Sarah needs to calculate the annual totals for the money collected by the drivers over the past two years.

- Move to sheet Income 2010.
- Copy the names of the drivers.
- Insert a new sheet before Income 2010.
- Move to cell A1 and paste the drivers' names.
- Insert a new row above Jim McDuff.
- In cell B1 enter 2010 formatted as text.
- In cell C1 enter 2011 formatted as text.
- Move to cell B2.
- In B2, using the sheet named Income 2010, enter a formula that will calculate the total that Jim McDuff has collected for 2010.
- Copy this formula down for the other drivers.
- Move to cell C2.
- In C2, using the sheet named Income 2011, enter a formula that will calculate the total that Jim McDuff has collected for 2011.
- Rename the sheet as Total Income.
- Produce a screenshot showing these formulae together with the renamed sheet.
- Save the screenshot as FORMULAE.
- Print FORMULAE.
- Label the screenshot FORMULAE.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Sarah has decided to present the totals collected from each driver as a chart.

- Use the chart wizard to produce a chart as shown below.
- Save the spreadsheet.
- Print the chart.
- Label the printout CHART.


Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Jim thinks the chart will look better if vertical bars are used.

- Using the chart you have created make the following changes:
- Change the chart type to show vertical bars.
- Select the complete 2010 data series and change the colour to white.
- Select the complete 2011 data series and change the colour to black.
- Change the title of the chart to INCOME COMPARISON 2010-2011
- Insert your candidate number, your centre number and today's date in the header.
- Insert the text: Unit 2 GCE APPLIED ICT into the footer.
- Save the chart as CHANGES.
- Print CHANGES.
- Label the printout as CHANGES.
- Save the spreadsheet.

Jim has asked Sarah to investigate expenditure for the business.
Expenditure is calculated each year as a percentage of the annual total.

- Move to the sheet labelled Total Income.
- Move to cell A1.
- Insert a new row above cell A1.
- In cell A1 insert the text Expenditure \%.
- In cell B1 enter $60 \%$.
- In cell C1 enter $62 \%$.
- In cell A10 enter Income.
- In cell A11 enter Expenditure.
- In cell A12 enter Profit.
- Move to cell B10.
- Enter a formula to calculate the total money collected by the drivers in the year 2010.
- Move to cell C10.
- Enter a formula to calculate the total money collected by the drivers in the year 2011.
- Move to cell B11.
- Calculate the expenditure for the year 2010.
- Move to cell C11.
- Calculate the expenditure for the year 2011.
- Move to cell B12.
- Enter a formula to calculate the Profit gained by the company in the year 2010.
- Move to cell C12.
- Enter a formula to calculate the Profit gained by the company in the year 2011.
- Produce a screenshot showing these formulae.
- Save the screenshot as PROFITS.
- Print PROFITS.
- Label the printout PROFITS.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

The spreadsheet activities are now complete.

## TASK WP1

Sarah wants to design an advertisement to place in the local press to promote the company.

- Open a new blank document.
- Using the document cars12_jan produce an advertisement exactly the same as the one below:


This is a replacement image - © iStockphoto / Thinkstock

- Include the following features:
- 'Arial' font is used throughout.
- Company logo in the main document in the top-right corner.
- Use of bold text and underline.
- Text alignment.
- Identical bullet points.
- Produce a screenshot that shows the whole advertisement.
- Save the screenshot as SCREENSHOT1.
- Print SCREENSHOT1.
- Label this printout SCREENSHOT1.
- Save the document as ADVERT1.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Jim McDuff would like the following changes made to the advertisement, ADVERT1, before it is sent to the printers.

- Apply $1 \frac{1}{2}$ line spacing to the entire document.
- Page Border - shadow setting, double line border, 3 point.
- Produce screenshots showing the above amendments to the advertisement on one A4 page.
- Save the screenshots as SCREENSHOT2.
- Print SCREENSHOT2.
- Label this printout SCREENSHOT2.
- Save the document as ADVERT2.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

Community Cars clean their cars on a monthly basis. The cleaning company, "Vehicle Valet", require a list of car registrations to be sent to them.

- Create a new document as shown below.


## Community Cars: Valeting Schedule

## Dear Sir/Madam

I enclose a list of cars to valet on site. Each car must receive a full and professional valet service to the satisfaction of Community Cars management.

| Car Number | Car Registration | Car Owner |
| :---: | :---: | :---: |
|  |  |  |

Yours faithfully
Jim McDuff
Community Cars (Manager)

- Save the document as LETTER.
- Print LETTER.
- Label the printout LETTER.

Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

- Use the mail merge facility in the document called LETTER to insert the fields for Car Number, Car Registration and Car Owner from the CAR table in the cars12_jan database.
- Produce a screenshot showing the fields that are to be merged.
- Save the screenshot as MERGEFIELDS.
- Print a copy of MERGEFIELDS.
- Label the printout as MERGEFIELDS.
- Preview the merged letters.
- Complete the merge.
- Save the merged document as MERGE.
- Print the SEVENTH page of the mail merge.
- Label the printout MERGE.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

The word processing activities are now complete.

Jim has decided that all employees of Community Cars should attend customer care training. Jim has decided to develop an in-house presentation for company employees.

- Create a master slide, as shown below:


This is a replacement image - © iStockphoto / Thinkstock

- Insert the Community Cars logo from the images12_jan folder in the topright corner of the master slide.
- Change the layout of the Date Area, Footer Area and Number Area of the master slide as shown above.
- Insert the text exactly as shown above in the Date and Footer Area of the master slide.
- Produce a screenshot of this layout.
- Save the screenshot as SCREENSHOT3.
- Print SCREENSHOT3.
- Label the printout SCREENSHOT3.
- Save the presentation as SLIDEMASTER.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

- Using SLIDEMASTER and a suitable layout, insert the following information on the title slide:


This is a replacement image - © iStockphoto / Thinkstock

- Insert three additional slides with the text shown and one graphic as outlined below:

| Slide Title | Text | Graphic |
| :---: | :---: | :---: |
| Guidelines | - Ensure the vehicle has been cleaned by 'Vehicle Valet' each month. <br> Greet customers in a polite manner. | Homes |
| Issues | - Text the code ' 111 ' if a customer becomes agitated. <br> - All money must be logged in the main office every two hours. | Car |
| Contacts | - Your first contact is the manager, Jim McDuff. <br> - Tel: 02890421618. <br> - If Jim isn't available contact Sarah Smith. <br> - Tel: 02890421619. | Globe |

- Save the presentation as LAYOUT.
- Print LAYOUT in Handout View showing four slides per page.
- Label the printout as LAYOUT.


## Do not forget to include your Candidate Number, Centre Number and Question Number in a header or footer on the above document.

The multimedia activities are now complete.

Final check

You should have the following 20 printouts in this order.
Each should have your Candidate Number, Centre Number and Question Number and labelled printout name in each task.

Indicate that you have completed the task by ticking the appropriate box in the table below.

|  | Label | Task | Completed |
| :--- | :--- | :---: | :---: |
| 1. | SERVICEDESIGN | DB1 |  |
| 2. | RELATIONSHIPS | DB2 |  |
| 3. | VALIDATION | DB3 |  |
| 4. | SERVICEDATA | DB4 |  |
| 5. | FORM | DB4 |  |
| 6. | LOYALTY | DB5 |  |
| 7. | BOOKINGS | DB6 |  |
| 8. | INCOME 2010 | SS1 |  |
| 9. | INCOME 2011 | SS1 |  |
| 10. | FORMULAE | SS2 |  |
| 11. | CHART | SS3 |  |
| 12. | CHANGES | SS4 |  |
| 13. | PROFITS | SS5 |  |
| 14. | SCREENSHOT1 | WP1 |  |
| 15. | SCREENSHOT2 | WP2 |  |
| 16. | LETTER | WP3 |  |
| 17. | MERGEFIELDS | WP4 |  |
| 18. | MERGE | WP4 |  |
| 19. | SCREENSHOT3 | MM1 |  |
| 20. | LAYOUT | MM2 |  |
|  |  |  |  |

## THIS IS THE END OF THE TASK PAPER

