Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education 2011

Applied Information and Communication Technology

Assessment Unit AS 2
assessing

# Unit 2: Software Applications and Tools 

 [A3J21]MONDAY 16 - FRIDAY 20 MAY, 2011


Number of printouts attached (to be completed at the end of the examination)

## TIME

2 hour 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:
cars11_may database, cars11_may spreadsheet, cars11_may document and images11_may folder

| For Examiner's <br> use only |  |  |  |
| :---: | :---: | :---: | :---: |
| Question | Marks <br> Available | Marks | Re-mark |
| DB1 | 5 |  |  |
| DB2 | 5 |  |  |
| DB3 | 7 |  |  |
| DB4 | 7 |  |  |
| DB5 | 1 |  |  |
| DB6 | 10 |  |  |
| SS1 | 3 |  |  |
| SS2 | 4 |  |  |
| SS3 | 7 |  |  |
| SS4 | 6 |  |  |
| SS5 | 9 |  |  |
| SS6 | 5 |  |  |
| WP1 | 3 |  |  |
| WP2 | 3 |  |  |
| WP3 | 4 |  |  |
| WP4 | 9 |  |  |
| MM1 | 8 |  |  |
| MM2 | 4 |  |  |
| Total | $\mathbf{1 0 0}$ |  |  |

## $\overline{6702.07 R}$

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

A database has been set up called cars11_may
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.

Staff must be able to assign a car to a particular category. In order to do this a relationship must be established between the CATEGORY table and the CAR table.

- Open the CATEGORY table and examine the field properties carefully.
- Open the CAR table in design view and add a new field to store CategoryID.
- Produce a screenshot of the table design showing clearly the Field Name, Data Type and Field Size of the new field you have added.
- Save the screenshot as CARDESIGN.
- Label the printout CARDESIGN.
- Close the CAR table and save changes.
- Using the relationships feature, create a one-to-many relationship between the CATEGORY table and the CAR 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 documents.

## TASK DB2

Prices are calculated based on the number of passengers who travel. For this reason, a facility must be added to the BOOKING table to enable passenger numbers to be entered.

- Open the BOOKING table in design view and create a new field as follows:

| Field Name | Passengers |
| :--- | :--- |
| Data Type | Number |
| Field Size | Byte |

Bookings should not be accepted for groups of more than 6 .

- Create a validation rule for the Passengers field in the BOOKING table which will ensure that the number of passengers does not exceed the permitted group size.
- Display the validation text "We cannot cater for groups of this size".
- Produce a screenshot of the BOOKING table showing clearly the fieldname, data type and field size of the new field you have added.
- Save the screenshot as BOOKINGDESIGN.
- Print BOOKINGDESIGN.
- Label the printout BOOKINGDESIGN.
- Close the BOOKING 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 DB3

Community Cars must be able to add new car details to the database. Four new seven seater vehicles are to be made available for use.

- Use the form wizard to create a form, as shown below, that will use details from the CATEGORY table and the CAR table to enter the four new records.


## Car Details



- Save the form as CARDETAILS.
- Produce a printout of your form showing only the details for CategoryID C2 ensuring that the whole form is fully visible.
- Label the printout SEVENSEATER.

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

Staff at Community Cars have asked for a list of those customers who were picked up on Upper Street on either the 12th or 13th of January 2011.

In this task you will use the BOOKING table, the CAR table and the CUSTOMER table to create a query.

- Using the query function, create a query that will only show Date, Time, CustomerForename, CustomerSurname and CarRegistration.
- Include only those bookings which were for the 12th or 13th of January and where the customer was picked up on Upper Street.
- The records should be displayed in ascending Date and Time order.
- Save the query as UPPER.
- Produce a screenshot of the design of your query ensuring that all fields and criteria are fully visible.
- Save the screenshot as UPPERDESIGN.
- Print UPPERDESIGN.
- Label the printout UPPERDESIGN.

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

## TASK DB5

Customer details are currently stored in the database at Community Cars but these may also be needed in other applications to produce bills.

In this task you will use the CUSTOMER table to produce a data file that can be imported to another application.

- Create a query that will show all fields from the CUSTOMER table.
- Save the query as EXPORT.
- Produce a screenshot of the design of EXPORT.
- Save the screenshot as EXPORTDESIGN.
- Print EXPORTDESIGN.
- Label the printout EXPORTDESIGN.


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

Community Cars has recently added some new cars to its fleet. Jim McDuff wants to know the number of bookings that have been made. You should produce a report for Jim as shown below.

| BOOKING SUMMARY BY CAR |  |  |
| :---: | :---: | :---: |
| Car No | Registraion | Number of Bookings |
| 1 | SIW7789 | 17 |
| 2 | HT 89 Dok | 38 |
| 3 | wrw 9872 | 16 |
| 4 | RIW 9082 | 9 |
| 5 | KR 09 RTE | 14 |
| 6 | QR 08 RDT | 10 |
| 7 | RU1 9885 | 7 |
| 8 | SWE 9883 | 6 |
| , | FR 99 THU | 10 |
| 10 | wrw9 921 | 5 |
|  | Total Number of Bookings: | 132 |

- The report should show CarNo and CarRegistration.
- The report should be grouped by CarNo.
- Calculations should be included for number of bookings for each car and total number of bookings.
- Save your report as SUMMARY.
- Print the report on one A4 page ensuring that all data is visible.
- Label the printout SUMMARY.


## 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.

Sarah Smith is responsible for maintaining the system in Community Cars. She has imported customer and booking data from the database.

Open the spreadsheet called cars11_may

- Rename Sheetl as CUSTOMER.
- Rename Sheet2 as BOOKING.
- Format the time in column C to display in 24 hour clock format.
- Produce a screenshot that shows all changes made.
- Save the screenshot as CHANGES.
- Print CHANGES.
- Label the printout CHANGES.


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

## TASK SS2

Sarah is going to use a subtotal function to calculate how many trips each customer has made.

- In the BOOKING sheet, sort the data by CustomerNo in ascending customer number.
- Use the subtotal function to count the number of journeys made by each customer.
- Note: This total should be placed in the column containing CustomerNo.
- Insert a page break between each group.
- Produce a screenshot to show all data for customers 3, 4 and 5 .
- Save the screenshot as SUBTOTAL.
- Print SUBTOTAL.
- Label the printout SUBTOTAL.


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

Sarah wants the CUSTOMER sheet to update automatically.
By using the CUSTOMER and BOOKING sheets together she also wants the CUSTOMER sheet to automatically update when she imports data from the database into the BOOKING sheet.

- Move to the CUSTOMER sheet and enter the text "Bookings" in cell F1.
- Enter a suitable formula to display the number of journeys made by each customer (as calculated in the BOOKING sheet).
- Produce a screenshot to show the formulae for each customer.
- Save the screenshot as TOTAL.
- Print TOTAL
- Use Row and column headings
- Use Landscape
- Use 1 page only
- Label the printout TOTAL.

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

## TASK SS4

For each booking Jim has said that there should be a minimum charge for the car that is hired. The minimum charge will be $£ 4$ per booking but he will give a discount depending on how many times a customer books a car.

- In the sheet called CUSTOMER, move to cell A1.
- Insert a new row.
- Insert the following text in the cells shown below

|  | A | B |  |
| :---: | :---: | ---: | ---: |
| 1 | Booking charge |  | $£ 4.00$ |

- Move to cell G2 and enter the text "Cost".
- Move to cell G3.
- Enter a formula using absolute cell referencing to calculate the cost of all bookings for customer number 1.
- Copy this formula for all remaining customers.
- Produce a screenshot to show all formulae entered.
- Save the screenshot as FORMULAE.
- Print FORMULAE on one page.
- Label the printout FORMULAE.


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

The discount will be based on the following table.

| Number of bookings | Discount (\%) |
| :--- | :--- |
| $0-10$ | 0 |
| $11-24$ | 2 |
| $25-50$ | 5 |

- In the sheet called CUSTOMER, move to cell H2 and enter the text "Discount".
- Move to cell H3 and enter a formula to calculate the discount based on the discount rates shown above.
- Copy this formula to the other cells in the column.
- Produce a screenshot to show all the formulae you have entered.
- Save the screenshot as DISCOUNT.
- Print DISCOUNT on one page only.
- Label the printout DISCOUNT.

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

## TASK SS6

- In the CUSTOMER sheet move to cell I2 and enter the text "Final Cost".
- Move to cell I3 and enter a formula to calculate the final cost to the customer when discount is applied.
- Copy this formula for all remaining customers.
- Produce a screenshot to show all the formulae you have entered.
- Save the screenshot as FINALCOST.
- Print FINALCOST on one page.
- Label the printout FINALCOST.


## 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

In this task you will use a wordprocessor to design a brochure to present the company background of Community Cars in a professional manner.

- Open the cars11_may document.
- Insert the Community Cars logo from the images11_may folder in the document header.
- Scale the logo to $30 \%$ of its original size.
- Align the logo to the right of the header.
- Produce a screenshot to show this formatting.
- Save the screenshot as SCREENSHOT1.
- Print SCREENSHOT1 on one A4 page.
- Label the printout SCREENSHOT1.
- Save the document as LEAFLET1.

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

## TASK WP2

Printers often use Drop Cap to enlarge the first character of a sentence and make the document more attractive.

$\square$his is an example of Drop Cap.

- Using LEAFLET1, apply the "Drop Cap" effect to the first character in the document.
- Select the following options
- Position "Dropped"
- Lines to drop: 5
- Distance from text: 0.5 cm
- Produce a screenshot showing the above formatting in an appropriate dialogue box.
- Save the screenshot as SCREENSHOT2.
- Print SCREENSHOT2.
- Label the printout SCREENSHOT2.
- Save the document as LEAFLET2.


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

## TASK WP3

- Using LEAFLET2, insert a page break after the fourth paragraph.
- Select the text on page 1 and apply the following format
- Number of columns: 3
- Line between: $\quad \checkmark$
- Width: 4 cm
- Spacing: $\quad 1.62 \mathrm{~cm}$
- Produce a screenshot of the document showing the above formatting in an appropriate dialogue box.
- Save the screenshot as SCREENSHOT3.
- Print SCREENSHOT3.
- Label the printout SCREENSHOT3.
- Save the document as LEAFLET3.


## Do not forget to include your Candidate Number, Centre Number and

 Question Number in a header or footer on the above document.
## TASK WP4

- Using LEAFLET3, apply the following bullet point style to the adult and child charging rates.
- Modify LEAFLET3 to display the COMMUNITY CARS - SHIFT SYSTEM as shown below.

| COMMUNITY CARS - SHIFT SYSTEM |  |  |  |
| :--- | :--- | :--- | :---: |
| Monday - Thursday | Friday $-5 a t u r d a y$ | Sunday |  |
| $7 \mathrm{am}-2 \mathrm{pm}$ | $7 \mathrm{am}-2 \mathrm{pm}$ | $7 \mathrm{am}-2 \mathrm{pm}$ |  |
| $2 \mathrm{pm}-9 \mathrm{pm}$ | $2 \mathrm{pm}-9 \mathrm{pm}$ | $2 \mathrm{pm}-9 \mathrm{pm}$ |  |
| $9 \mathrm{pm}-2 \mathrm{am}$ | $9 \mathrm{pm}-4 \mathrm{am}$ | $9 \mathrm{pm}-1 \mathrm{am}$ |  |

- Save the document as LEAFLET4.
- Print the second page of LEAFLET4.
- Label the printout LEAFLET4.

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.

## TASK MM1

Community Cars would benefit from a multimedia presentation to promote the company.

- Create the first two slides of a multimedia presentation as shown below.

Some of the text can be copied from the cars11_may word processing file. Images can be found in the images 11_may folder.

- Insert a third slide with the heading "Charging Rates".
- Using the same style, add suitable text and an appropriate graphic.
- Print your presentation in "handout view" showing the three slides you have created on one A4 page.
- Label the printout SLIDES.
- Save the presentation as CARS.



## Company Background

- Community Cars is a new venture designed to provide a local service at competitive prices.
- The company was started by a recently retired bus driver Jim Mc Duff, who realised just how difficult transport arrangements could be for some members of the public.
- With your slides in "Slide Sorter View", apply the following slide transition:
- Effect: Dissolve.
- Speed: Fast.
- Sound: Chime.
- Advance the first slide after 3 seconds.
- Advance remaining slides after 5 seconds.
- Produce a screenshot displaying this information.
- Save the screenshot as TRANSITION.
- Print TRANSITION.
- Label the printout TRANSITION.

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 19 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 | CARDESIGN | DB1 |  |
| 2 | RELATIONSHIPS | DB1 |  |
| 3 | BOOKINGDESIGN | DB2 |  |
| 4 | SEVENSEATER | DB3 |  |
| 5 | UPPERDESIGN | DB4 |  |
| 6 | EXPORTDESIGN | DB5 |  |
| 7 | SUMMARY | DB6 |  |
| 8 | CHANGES | SS1 |  |
| 9 | SUBTOTAL | SS2 |  |
| 10 | TOTAL | SS3 |  |
| 11 | FORMULAE | SS4 |  |
| 12 | DISCOUNT | SS5 |  |
| 13 | FINALCOST | SS6 |  |
| 14 | SCREENSHOT1 | WP1 |  |
| 15 | SCREENSHOT2 | WP2 |  |
| 16 | SCREENSHOT3 | WP3 |  |
| 17 | LEAFLET4 | WP4 |  |
| 18 | SLIDES | MM1 |  |
| 19 | TRANSITION | MM2 |  |

THIS IS THE END OF THE TASK PAPER

