Cambridge International AS & A Level

INFORMATION TECHNOLOGY **9626/02**

Paper 2 Practical **October/November 2021**

2 hours 30 minutes

You will need: Candidate source files (listed on page 2)

INSTRUCTIONS

- Carry out **every** instruction in **each** task.
- Save your work using the file names given in the task as and when instructed.
- You must **not** have access to the internet or any email system during this examination.
- You must save your work in the correct file format as stated in the tasks. If you save work in an incorrect file format, you will **not** receive marks for that task.

INFORMATION

- The total mark for this paper is 110.
- The number of marks for each task or part task is shown in brackets [ ].

This document has **8** pages. Any blank pages are indicated.

You have been supplied with the following source files:

n21car.csv
n21customer.csv
n21music.mp3
n21TEC1.png
n21TEC2.mov
n21TEC3.png
n21TEC4.mov
n21voice.mp3

Tawara Eco-Cars are developing a short video to advertise the company.

The original video clips were recorded by Tawara Video Ltd and the audio was recorded by KMBaudio.

All video and audio clips produced must be of a professional standard and suit the business context.

1   Open and edit the file **n21voice.mp3** so it plays at 1.5 times the original speed. Trim the end of the clip that says, '***We are a true eco-friendly company***' and place it at the start of the clip. Amplify the sound to the maximum volume without clipping. Make sure that the new clip is less than 13 seconds in length.

Add the file **n21music.mp3** so that both clips start at the same time. Make sure that the voice clip becomes the same length as the music clip without loss or distortion.

Set the music clip as the left channel and the voice clip as the right channel of stereo output.

Export your stereo audio clip in **.mp3** format as **n21sound_** followed by your centre number_candidate number

e.g. n21sound_ZZ999_9999   [13]

2   Open your video editing software and set the aspect ratio to 16:9.

Open and examine the following files:

n21TEC2.mov
n21TEC4.mov

Export each video clip in **.mp4** format with a resolution of 854 x 480 using the original file name followed by your centre number_candidate number

e.g. n21TEC2_ZZ999_9999 and n21TEC4_ZZ999_9999   [3]

3 Use the files saved in steps 1 and 2, and the source files specified, to create a video clip to match this storyboard.

All text must be displayed in a consistent sans-serif font.

Do **not** use transitions unless instructed to do so.

Time 0 seconds:

   Background image **n21TEC1.png**

Time 2 seconds:

   The background remains, with the name of the company placed as a title in the top right corner.

Time 5 seconds:

   The background and title remain, with the text **Sustainable cars for a sustainable world** added as a subtitle below the title.

Time 8 seconds:

   All elements added so far remain.

   Audio clip *n21sound* saved at step 1 starts.

Time 10 seconds:

   Take a still image from the first frame of the video file *n21TEC2* saved at step 2 and display this as a background. Use a dissolve (or similar) transition to change to this background.

   No text displayed.

   When the transition has finished, play the video file *n21TEC2* saved at step 2.

Time 14 seconds:

   Place the image **n21TEC3.png**, resized if necessary to fit the frame size.

   Use the same transition to open and close this background image.

Time 18 seconds:

   Video file *n21TEC4* saved at step 2 starts.

   Make the last 5 seconds of this video the background used to display appropriate credits scrolling up the screen. Include the text **Created by:** and your name, centre number, candidate number in the credits. [29]

4 Export your video clip in **.mp4** format as **n21video_** followed by your centre number_candidate number

e.g. n21video_ZZ999_9999 [1]

Tawara Eco-Cars started manufacturing cars in 2018. You will create a database to store details of cars and customers.

You must use the most efficient method to solve each task. All documents produced must be of a professional standard and suit the business context.

Tawara Eco-Cars have provided the following information:

> *Each car has a unique registration number. The company has vehicles with the following drive types:*
> - *Electric Cell*
> - *Dynamic Electric*
> - *Quantumdrive*
> - *Hydrodrive*
> - *Residual Battery*
>
> *The company makes cars in 8 different colours.*
>
> *The only extras that the company offers are cruise control, leather seats and sunroofs.*
>
> *Use your local currency where appropriate. Store and display this to 0 decimal places. All field names must be consistent, short, meaningful and contain no spaces.*

5 Examine the data in the files:

n21car.csv
n21customer.csv

Use these data files and the information provided by Tawara Eco-Cars to create a relational database, normalised to third normal form (3NF), named **TEC_** followed by your centre number_candidate number

e.g. TEC_ZZ999_9999

Use appropriate data types, field lengths and validation routines in your database. [45]

6 Create a dynamic parameter query and a report showing details of cars that have been sold. The report must be formatted to look like this:

Selected vehicles by A Candidate ZZ999 9999							
Reg_No	Model	Colour	Drive_Type	Extras	Price	Year	Body_Style
BQ272BT	Alphadrive	Sunrise	Dynamic Electric	C	£8,800	2019	Coupe
Mrs.	Ava	Robinson	75 Northgate Street	Bierton			HP22 1XF
070 7201 9099	AvaRobinson@rhyta.com						
CM330TB	Alphadrive	Sunrise	Dynamic Electric	C	£8,800	2021	Coupe
Ms.	Paige	Garner	54 Holburn Lane	Hedsor			HP10 9FN
079 8413 4017	PaigeGarner@rhyta.com						
AK186RR	Alphadrive	Sunrise	Electric Cell	C	£7,600	2020	Coupe
Ms.	Katie	Perkins	52 Mill Lane	Cornquoy			KW17 9ES
077 6927 9122	KatiePerkins@dayrep.com						

The query must ask the user to input the model name, car colour and the code for the extras. Save the query with the name **step_6**

Use your query to produce a single-page report to display all the midnight blue Alphadrives with all three extras. Export this report in **pdf** format with the file name **step_6a_** followed by your centre number_candidate number

e.g. step_6a_ZZ999_9999

Use your query to produce a single-page report to display all the black Finesse cars with leather seats and no other extras. Export this report in **pdf** format with the file name **step_6b_** followed by your centre number_candidate number

e.g. step_6b_ZZ999_9999 [19]

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