



Cambridge International AS & A Level

INFORMATION TECHNOLOGY

9626/04

Paper 4 Advanced Practical

February/March 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.

You have been supplied with the following source files:

WorldMap.png
Delivery_Customers.csv
UpdateCards.rtf
Booking_Form_Trial.html

Create a folder called **Examination**. You must save all your work in this folder.
 Copy these files into this folder.
 Do **not** delete these files when submitting your work.

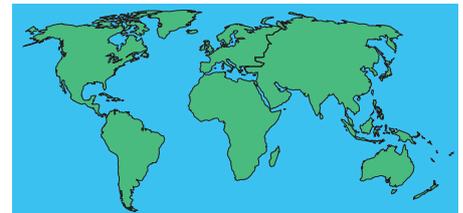
You must use the most efficient methods to solve each task. All work produced must be of a professional standard and contain your candidate details.

Task 1

Recolour and save a copy of the *WorldMap.png* file as **WorldMap_Colour_** followed by your centre number_candidate number
 e.g. *WorldMap_Colour_ZZ999_9999*

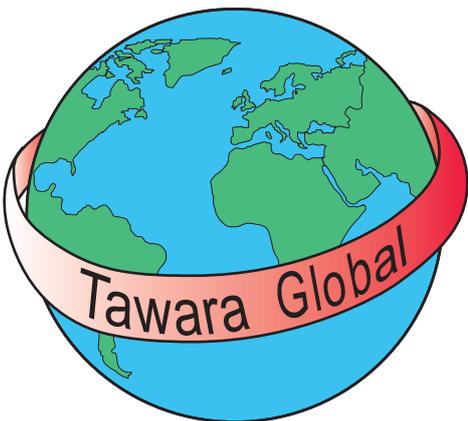


Land areas must be green.
 Sea areas and lakes must be light blue.



Use the *WorldMap_Colour* image to create this logo for **Tawara Global** deliveries.

Do **not** use any wrapping tools that may be available in your application.



- The land areas shown here must be visible.
- The ring must have a left to right, light to dark red, gradient fill.
- The text must be in a black sans-serif font.

Save the image in a **scalable vector graphics** format as **GlobalLogo_** followed by your centre number_candidate number
 e.g. *GlobalLogo_ZZ999_9999*

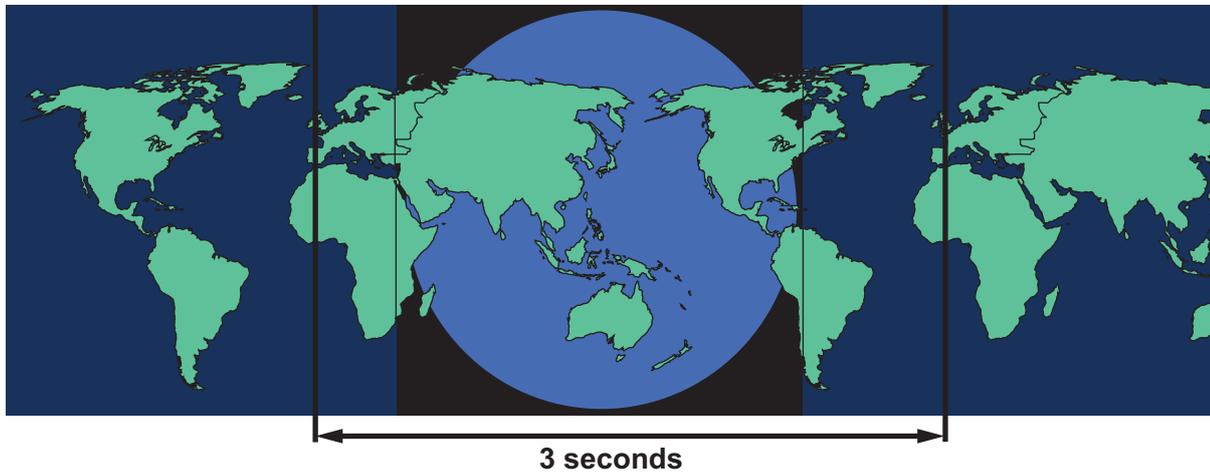
Using the same filename, export the image with a height of 500 pixels as a **bitmap** with a transparent background.

[25]

Task 2

Use your *WorldMap_Colour* image to create an animation that appears to show a globe continually spinning on a black background.

The animation should be created from the *WorldMap_Colour* image scrolling behind a fixed circular mask and the globe should appear to rotate once every 3 seconds.



Set the animation size to 500 pixels by 500 pixels and save the animation as an **animated gif** or a **.swf** file named **World_Spin_** followed by your centre number_candidate number
e.g. World_Spin_ZZ999_9999

[20]

Task 3

Create a database to store records of customers and any deliveries they may book in the future.

Name the database **Delivery_Bookings_** followed by your centre number_candidate number e.g. **Delivery_Bookings_ZZ999_9999**

The data on customers is contained in **Delivery_Customers.csv**
Customers may book more than one delivery.

The fields in the bookings table must include **Delivery_ID**, **Collection_date**, **Delivery_date**, **Weight(kg)** and **Charge**

The *Delivery_date* will always be the day after the collection date, unless the collection is on a Saturday, in which case the delivery will be made on the next Monday. There will be no collections or deliveries on a Sunday.

The *Charge* will be calculated using these rules:

- Up to and including 1 kg: £1.50
- Over 1 kg and up to and including 3 kg: £2.50
- Over 3 kg: £4.00

Deliveries weighing more than 5 kg are not accepted.

If the £ currency symbol is not available use your local currency.

Create a form in which to enter a new booking. The form should look like this:

Tawara UK

Collection and Delivery booking form

Delivery_ID	<input type="text" value="2"/>	
Customer_ID	<input type="text" value="105"/>	105 ▾
Collection_date	<input type="text" value="13/03/2021"/>	
Delivery_date	<input type="text" value="15/03/2021"/>	
Weight(kg)	<input type="text" value="0"/>	
Charge	<input type="text" value="£0.00"/>	

Grey 40pt
Red 24pt
sans-serif text on a yellow
background

The user must be able to select the customer from a drop-down list showing the customer details from *Delivery_Customers.csv*

Tawara UK

Collection and Delivery booking form

Delivery_ID

Customer_ID

Collection_date

Delivery_date

Weight(kg)

Charge

Customer_ID	GivenName	Surname
105	Lydia	Abbott
909	Robert	Adams
173	Evie	Ahmed
311	Patrick	Akhtar
14	Sophia	Alexander
558	Jack	Alexander
911	Madison	Alexander
648	Demi	Allan
30	Sienna	Allen
981	Nicole	Allen
457	Lola	Anderson
759	Rebecca	Anderson
126	Corey	Andrews
134	Corey	Andrews
262	Rachel	Andrews

Customer_ID selection drop-down

Records in alphabetical order of surname

The collection date must be selected by a date-picker.

If a user selects a Sunday date a warning must be displayed.

Tawara UK

Collection and Delivery booking form

Delivery_ID

Customer_ID

Collection_date

Delivery_date

Weight(kg)

Charge

March 2021

Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

Today

If a Sunday is selected a warning must be displayed

i There are no collections or deliveries on Sundays

OK

Tawara UK

Collection and Delivery booking form

Delivery_ID	<input type="text" value="2"/>
Customer_ID	<input type="text" value="105"/> 105 ▼
Collection_date	<input type="text" value="14/03/2021"/> 14/03/2021 📅
Delivery_date	<input type="text"/>
Weight(kg)	<input type="text" value="0"/>
Charge	<input type="text" value="£0.00"/>

For entries of weights more than 5 kg a warning must be displayed.

Tawara UK

Collection and Delivery booking form

Delivery_ID	<input type="text" value="2"/>	<div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <div style="display: flex; align-items: center;"> <div style="border-radius: 50%; width: 20px; height: 20px; background-color: #007bff; color: white; display: flex; align-items: center; justify-content: center; margin-right: 5px;">i</div> <div> <p style="margin: 0;">We do not accept items weighing more than 5kg</p> <p style="text-align: center; margin-top: 5px;"><input type="button" value="OK"/></p> </div> </div> </div>
Customer_ID	<input type="text"/>	
Collection_date	<input type="text" value="13/03/2021"/>	
Delivery_date	<input type="text" value="15/03/2021"/>	
Weight(kg)	<input type="text" value="12"/>	
Charge	<input type="text"/>	

[30]

Task 4

Open **UpdateCards.rtf** in a word processing application. You must use this file as a template for mail merging letters to customers. Read the instructions in the template carefully and insert appropriate merge fields to replace the instructions.

The merged letters must be consistently formatted and of a professional standard.

Use your database to create a data source to include the customers with ASSOC credit cards and also customers whose credit cards will expire in March 2021.

Letters to customers who have ASSOC cards should include the following text:

We regret that we can no longer accept payments made using ASSOC credit cards.

Letters to customers with other cards which will expire in March 2021 should include the following text:

We have the expiry date of your credit card as <CCExpires merge field>.

Save the merge document as **UpdateMergeDoc_** followed by your centre number_candidate number
e.g. UpdateMergeDoc_ZZ999_9999

Merge the letters and save the file as **UpdateLetters_** followed by your centre number_candidate number
e.g. UpdateLetters_ZZ999_9999

[20]

[Task 5 is printed on page 8.]

Task 5

Open **Booking_Form_Trial.html** in your browser to inspect the webpage.

Open *Booking_Form_Trial.html* in a text editor.

Insert code to display an alert with the text **We do not accept items weighing more than 5 kg** if an entry exceeds 5 kg.

Save the file as **Booking_Form_Weight_** followed by your centre number_candidate number
e.g. **Booking_Form_Weight_ZZ999_9999**

Insert code to display an alert with the text **Please complete all the information** if any fields are not filled.

Re-save the file as **Booking_Form_Fill_** followed by your centre number_candidate number
e.g. **Booking_Form_Fill_ZZ999_9999**

Insert code to display an alert with the text **We do not accept bookings on a Sunday** if the date input is a Sunday.

Re-save the file as **Booking_Form_Date_** followed by your centre number_candidate number
e.g. **Booking_Form_Date_ZZ999_9999**

Insert code so that if all fields are completed with valid data the page displays the text **The test booking entries are valid**

Re-save the file as **Booking_Form_Complete_** followed by your centre number_candidate number
e.g. **Booking_Form_Complete_ZZ999_9999**

[15]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.