



You are working for a holiday company called *Treeside Holidays*. They own a number of holiday apartments and villas that they rent out to customers.

Alice is the manager of *Treeside Holidays*.

All files produced must be of a professional standard and suit the business context. All currency must be displayed in dollars (\$) to 0 decimal places. You must use the most efficient method to complete each task.

You have been provided with the following files:

**account.html**  
**customers.csv**  
**letter.rtf**  
**letterT.png**  
**prices.csv**  
**questions.rtf**  
**tree.png**

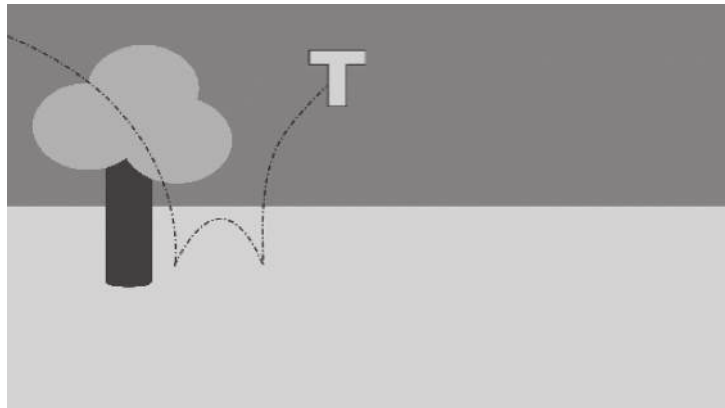
Alice wants a short animation that can be used to advertise *Treeside Holidays*.

1 (a) Create an animation that meets the following requirements:

- The size must be set to 512 pixels wide by 288 pixels high.
- The top half of the background must be set to light blue.
- The bottom half of the background must be set to light green.
- The image **tree.png** must be resized to 140 pixels wide by 170 pixels high and placed like this:

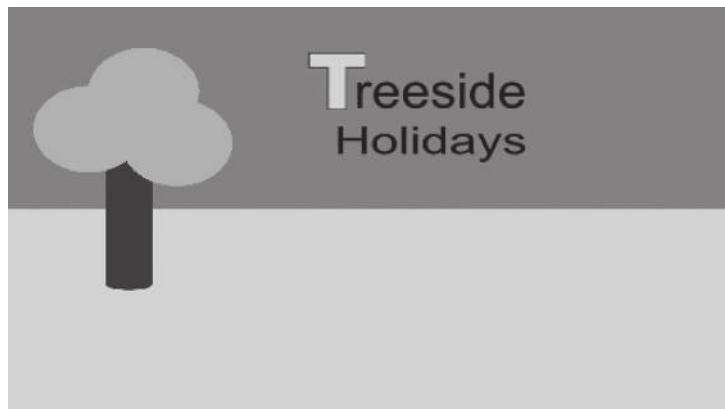


- After 2 seconds the image **letterT.png** must enter from the top left side of the frame, pass in front of the tree and bounce twice on the light green area, following the path shown:



As *letterT.png* follows the path, it must rotate clockwise twice. It must then stop in the light blue area, as shown. The timing for this must be 3 seconds.

- The text **Treeside Holidays** must appear as shown. The image *letterT.png* must be used as the letter 'T' in Treeside. The remaining text must be black, 28pt and appear one letter at a time. The timing for this must be 5 seconds.



- The animation must be:
  - smooth
  - 10 seconds long
  - set to loop
  - exported in a suitable format to be used on a website. [22]

(b) Morphing is often used in animation. Describe what is meant by the term morphing and explain how a morphing effect is created. Use no more than 150 words. Place this in a word processed document and save it with the name **task\_1b\_** followed by your Centre number\_ your candidate number

e.g. task\_1b\_ZZ999\_9999 [4]

Alice wants a spreadsheet to calculate a quote for the cost of renting a holiday apartment or villa.

2 (a) Open the file **prices.csv**

In the column **AccommodationID** create an ID for each accommodation that joins together the **Accommodation\_type**, **No\_of\_bedrooms** and **Style**

Save the file as a spreadsheet with the name **prices\_** followed by your Centre number\_your candidate number

e.g. prices\_ZZ999\_9999

Open a new worksheet in *prices* and set up the layout of the spreadsheet as follows:

	A	B	
1	Type of accommodation		
2			
3	Number of bedrooms		
4			
5	Style of accommodation		
6			
7	Number of nights		
8			
9	Holiday quote		
10			

Edit the spreadsheet to meet the following requirements:

- The type of accommodation must be selectable from a validated list in cell B1. The different types of accommodation can be found in the *prices* worksheet.
- The number of bedrooms must be restricted to only allow numbers between 1 and 4 (inclusive) in cell B3.
- The style of accommodation must be selectable from a validated list in cell B5. The different styles of accommodation can be found in the *prices* worksheet.
- The number of nights must be restricted to only allow up to 3 weeks to be entered, in cell B7.
- A formula must be entered into cell B9 to calculate the price of the holiday. The data must be looked up from the *prices* worksheet.
- If the number of nights rented is greater than 7 nights, a discount of 10% must be applied to the holiday quote in cell B9.

Select the following values in your spreadsheet to be displayed:

- Type of accommodation – Villa
- Number of bedrooms – 3
- Style of accommodation – Standard
- Number of nights – 10

Save your spreadsheet with the correct values displayed.

[25]

- (b) Spreadsheets can often be used to create models. Select two features of modelling software and evaluate how useful they are. Use no more than 250 words. Place this in a word processed document and save it with the name **task\_2b\_** followed by your Centre number\_your candidate number

e.g. task\_2b\_ZZ999\_9999

[6]

*Alice wants a letter to send to customers to tell them about some events that the company has planned.*

- 3 Using the file **letter.rtf** follow the instructions in the file to mail merge a letter to customers. The data for customers can be found in the file **customers.csv**

The following requirements must also be met:

- Letters should only be sent to customers who have said yes (y) to being on the mailing list.
- Lucy Walters and Joseph Scofield do not need a letter as Alice has recently spoken to them about the events.
- Where the letter requires conditional text to be entered the following must be displayed:
  - If a customer is interested in renting an apartment, display the text **Come and see our fantastic new apartments. They are very stylish and very affordable.**
  - If a customer is interested in renting a standard villa, display the text **Come and see our fantastic new villas. They are very stylish and very affordable.**
  - If a customer is interested in renting a luxury villa, display the text **Come and see our fantastic new luxury villas. They are the best around.**
- Display the conditional text in a 12pt serif font.

Save the document with your merge codes as **customer\_letter\_merge\_** followed by your Centre number\_your candidate number

e.g. customer\_letter\_merge\_ZZ999\_9999

Perform the mail merge to create the letters. Save the merged letters as **event\_letters\_** followed by your Centre number\_your candidate number

e.g. event\_letters\_ZZ999\_9999

[25]

Alice wants customers to be able to create an account with *Treeside Holidays*. She wants them to create the account using a webpage.

4 (a) Using the file **account.html** create a webpage to meet the following requirements:

- When the 'Generate Username' button is clicked a username for the customer is generated below the button.
- The customer's username must be their forename, their surname and the year of their birth (yyyy) joined together.
- When the 'Submit Password' button is clicked the page must be rewritten to display only one of the following messages:
  - If the passwords match the text **Your password has been set** must be displayed.
  - If the passwords do not match **Your passwords did not match, please try again** must be displayed.
- Programmer comments must be added to annotate each requirement.

Save your webpage as **myaccount.html** [20]

(b) Open the file **questions.rtf** and enter your answers to the following questions, on programming, in the place indicated in the document:

1. Describe what is meant by a function in programming. Use no more than 150 words. [4]
2. A string of text has been stored in the variable 'word'.

```
var word = "ICT is amazing"
```

Give the answer that would be extracted for each of the JavaScript commands.

- (i) word.length
- (ii) word.slice(8,11)
- (iii) word.charAt(3)
- (iv) word.substr(7,7)

Save your document as **Answers\_** followed by your Centre number\_candidate number.  
For example: Answers\_ZZ999\_9999 [4]



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