

T Level Technical Qualification in Digital, Digital Production, Design and Development (Level 3)

# **Thursday 9 November 2023**

Time 3 hours

**Paper** reference

19538

**Core: Employer Set Project** 

Task 2: Identifying and fixing defects in existing code

You must have:

Task2\_Test\_Log\_Template.docx, Task2\_NonWorkingCode.txt.

## Information

- This booklet contains material for the completion of the set task under supervised conditions.
- This booklet is specific to each series and this material must only be issued to students who have been entered to undertake the task in the relevant series.
- This booklet must be kept securely until the start of the timetabled assessment.

**Continue** ▶





## **Instructions for students**

You must complete **ALL** parts of the activity within the assessment.

The task must be undertaken at the time and date specified by Pearson.

You will be given 3 hours for producing the outcomes for this task.

Your centre will advise you of when supervised breaks have been scheduled.

You are **not** permitted access to the internet during this task.

You are permitted to use **offline** versions of relevant software to produce evidence for this task.

Files provided for use during this activity:

- Task2\_Test\_Log\_Template.docx
- Task2\_NonWorkingCode.txt

Your work and any material provided must be kept securely at all times.

W76543A 2

#### **Set Task Brief**

You are a member of the programming team that is developing a program to meet the requirements in the Set Task Information.

Your manager has asked you to look at some code that a Junior Software Developer has produced but is not yet functional. The code that is not yet functioning is provided for you in the *Task2 NonWorkingCode.txt* file.

The code should meet the requirements in the Set Task Information.

### **Activity**

You will need to use:

- the information provided in the Set Task Information
- the non-functioning code provided in the file *Task2\_NonWorkingCode.txt*.

#### You must:

- produce and apply a test plan to identify the defects that are preventing the program code in the file Task2\_NonWorkingCode.txt from functioning
- apply a solution to fix the defects in the program code provided
- document the process that you followed to fix the code.

When applying a solution to fix the defects you must:

- ensure the code meets the requirements in the Set Task Information
- use the Python 3 programming language
- follow accepted programming conventions
- test your solution to ensure that it functions as expected.

Two files are provided for use during this activity:

- Task2\_Test\_Log\_Template.docx
- Task2\_NonWorkingCode.txt

(21)

#### **Outcomes for submission**

Save your code as PDF files **and** as .txt files.

Save your testing document as a PDF file.

All files should be saved in your folder for submission.

Use these naming conventions:

W76543A

Task2Code\_[Registration number]\_[surname]\_[first letter of first name]

Task2Test\_Log\_[Registration number]\_[surname]\_[first letter of first name]

3

#### **Set Task Information**

Snowy Animal Rescue has provided you with this information to develop the program.

## Requirements

The program will be integrated into the charity's new customer website. The code will be part of a feature that provides information and advice about adopting a dog.

The program must allow the user to enter this information:

- dog's details:
  - size of dog
  - how active the dog will be
  - the type of food that they need.

The program should then provide the user with a summary of the predicted costs of owning a dog. The summary should show:

- dog's details
- approximate amount of food the dog should be given
- itemised lists of associated costs
- estimated monthly cost
- annual Subtotal (before vaccinations)
- annual Final total (after vaccinations).

The program should output the summary to the screen.

The information should be formatted appropriately.

The program should be able to handle user errors.

## **Feeding guide**

Dry food	Wet food
Amount per day:	Amount per day:
• Small dog - 180 g	• Small dog - 400 g
Medium dog – 350 g	Medium dog – 800 g
• Large dog – 520 g	• Large dog – 1200 g
Cost: £0.30 per 100 g	Cost: £0.40 per 100 g

<sup>&</sup>quot;Not Active" dogs should be given 10% less food per day.

#### **Annual Vaccinations**

Vaccinations cost £70 per year.

W76543A **4** 

<sup>&</sup>quot;Very Active" dogs should be given 15% more food per day.