



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

Monday 24 March 2025 – Friday 25 April 2025

Time 30 hours

Paper reference

19540

Occupational Specialism

Task 2: Developing the solution

You must have:

Task2_Test_Log_Template.doc

Instructions

- The total mark for this task is 48.
- 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 should be kept securely until the start of the assessment window.



Instructions for students

You must complete ALL activities within the assessment.

This task is to be completed under supervised conditions during a window of four weeks.

Your centre will schedule **30 supervised hours during the window** in which you will produce the outcomes for this task.

During this task, you are allowed:

- monitored access to the internet
- access to a copy of your proposal and designs produced in Task 1.

You are **not** allowed to make changes to the evidence produced in Task 1.

Your work will be kept securely during any breaks and between scheduled sessions.

Templates provided for use during this task:

Task2_Test_Log_Template.doc

During this task, your tutor is permitted to provide general feedback about:

- the appropriateness of the solution you designed in Task 1
- whether the solution you are developing will function as intended.

Your tutor is **not** permitted to provide guidance on how to improve your solution.

Set Task Brief

You work for a software development company. The company has secured a contract to develop a solution for a local green technology company, Rolsa Technologies. Rolsa Technologies specialises in:

- solar panel installation and maintenance
- electric vehicle (EV) charging stations
- smart home energy management systems.

The clients (owners of Rolsa Technologies) would like to develop a digital solution that will:

- provide customers with information about:
 - green energy products currently on the market
 - how to reduce their carbon footprint
- allow customers to:
 - schedule consultations and installations
 - calculate their carbon footprint.

The client has conducted market research with existing customers to identify features that could be included in the digital solution. The suggested features by the client are:

- account registration to allow customers to manage their consultations and data
- accessibility features to support a wide range of users
- a tool for calculating and tracking energy usage.

Activity

Developing the prototype

Develop a functional prototype of your proposed digital solution to meet the client's needs.

During development, make sure you:

- implement secure code in at least two appropriate languages to implement frontend and back-end processes
- gather and prepare appropriate assets to be used in the development of your digital solution
- make use of, and document, iterative testing
- document the iterative development process, including changes made to the solution during development
- produce code that can be maintained by a third party
- ensure a high-quality user experience
- follow legal and regulatory guidelines and standards.

When gathering assets, you need to record the sources you use in an assets log.

Your log must:

- record all the sources you have used
- describe the content and its intended purpose
- log the date on which you retrieved the information.

Your testing documentation does not need to include details of every test carried out. However, it should demonstrate:

- an iterative approach to testing
- understanding of how to test inputs, calculations, validation and processes using appropriate test data.

(48)

Outcomes for submission

Prototype

Save copies of key versions of your functional prototype in your folder for submission.

Use any sensible folder structure and naming convention.

Development documentation

Save your development documents as PDF files in your folder for submission. Use this naming convention:

Task2[Document name]_[Registration number]_[Surname]_[First letter of first name]

Save your content and assets log as a PDF in your folder for submission. Use this naming convention:

Task2ContentAssetsLog_[Registration number]_[Surname]_[First letter of first name]

Test log

Save your test log as a PDF file in your folder for submission. Use this naming convention:

• Task2_Test_Log_[Registration number]_[Surname]_[First letter of first name]

Code for prototype solution

Save copies of key versions of the source code for your prototype in your folder for submission.

Use any sensible folder structure and naming convention.

Note: Ensure you submit your source code files in the original file format, and not as PDF files.

TOTAL FOR TASK = 48 MARKS