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

Specimen Assessment Material for first teaching September 2020

Time 20 hours

Paper reference	XXXXX/XX

Occupational Specialism: Digital Production, Design and Development

TASK 1: Analysing the problem and designing a solution

You do not need any other materials.

Information

- The total mark for this set task is 58.
- 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 3-week assessment window.
- This set task must be undertaken between [Day Month YYYY] to [Day Month YYYY]

Turn over ▶

Instructions for Students

You must complete ALL activities within the assessment.

Your centre will schedule **20 supervised hours during the three-week window** in which you will produce the outcomes for this task.

You are:

- only permitted to produce evidence of your proposal and design documentation during the scheduled supervised sessions

- not permitted to have access to their proposal and design documentation outside of the supervised assessment sessions.

Outside of the supervised assessment sessions you are permitted to:

- carry out research outside the scheduled supervised assessment sessions – see Activity A(i).

- produce notes containing the facts and figures related to their research outside the supervised sessions.

Any notes that you wish to take into the supervised sessions must be submitted as part of the assessment so that they can be checked by your teacher/tutor to confirm that the notes contain **only** facts and figures related to the research carried out.

Notes that you are permitted to take into the scheduled supervised sessions must:

- **not contain** attempts to interpret, analyse or evaluate the research in the context of the scenario

- **not contain** any other content that has not been specified in these instructions

- be submitted as an appendix to the task and be retained by your centre until after the end of the post-results service period.

You are allowed monitored access to the internet during the scheduled supervised sessions.

Your work will be kept securely during any breaks taken.

You are not permitted to take anything into or take anything out of the supervised assessment sessions without the approval of your teacher/tutor/invigilator.

Templates provided for use during this task:

- Task1_Test_Strategy_Template.doc

Your work must:

- be completed independently

- identify work that is not your own through the use of appropriate citation

- be authenticated by your teacher/tutor before being submitted to Pearson.

Your teacher is not permitted to provide guidance or feedback during this task.

Set Task Brief

The software development company that you work for has secured a new contract to develop a digital solution for ToKa Fitness.

ToKa Fitness currently provides customers with:

- personal training sessions

- advice about fitness training

- advice about healthy living.

The client (the owner of ToKa Fitness) would like to develop a digital solution that will:

- provide information and advice about fitness training and healthy living

- provide access to digital content to support customers with their training and healthy lifestyle

- encourage existing customers to use more of the services provided by ToKa Fitness

The client has carried out some market research to identify potential features that their existing customers suggested could be included in the digital solution. The potential features the existing customers identified are:

- free and paid-for content

- accessibility features for users with sight loss

- 'social' features

- customizable workout and eating plans.

Activities

Activity A (i)

In preparation for developing a proposal for the digital solution, you have been asked to carry out research. Your research should consider how digital solutions are used to meet the needs of different users within the health and fitness industry, including:

- how hardware and software are used within the context of the health and fitness industry

- newly emerging technologies

- how digital could be used to meet different user needs

- the industry-specific guidelines and regulations you would be required to follow.

You are permitted to carry out research outside of supervised assessment time. Any notes about your research that you wish to take into the supervised assessment may contain **only** facts and figures related to the research carried out and must be submitted as an appendix to the task.

Activity A (ii)

Produce a detailed proposal for a digital solution you would develop to meet the needs of:

- the client (ToKa Fitness)

- existing and potential customers.

Your proposal should provide a rationale for the solution you are proposing and include:

- the business context

- the functional and non-functional requirements of the solution

- decomposition of the problems that will need to be solved to implement the functional and non-functional requirements.

- the key performance indicators (KPIs) and user acceptance criteria for the proposed solution

- a description of the proposed solution

- justification of:

    - how the recommended solution meets the needs of the client and users

    - how potential risks will be mitigated

    - how relevant regulatory guidelines and legal requirements, in relation to software development and the industry, will be addressed.

(24)

Activity B

Produce a set of design documents for the digital solution that you are proposing. The design documentation must include:

- Visual/interface designs

- Data requirements

- A selection of algorithm designs (maximum of five)

- A test strategy

Your proposed solution **must** be of sufficient scope and complexity to demonstrate the ability to implement code in at least two appropriate languages to implement front-end and back-end processes.

Your design documents should be of sufficient detail to:

- effectively communicate the intended solution to both technical and non-technical stakeholders

- allow the client to make informed decisions

- allow a third-party developer to use the design documents to create the proposed solution.

Your algorithm designs do not need to show the whole solution but should show how you would solve a number of different key problems. You should limit your algorithm designs to a maximum of five complex problems.

Your test strategy does not need detail specific tests for every part of the solution but should provide a selection of tests, as relevant to your proposed solution, that show:

- the order in which you intend to test all components of the solution

- the types of tests to be carried out for each of the components

(34)

Outcomes for Submission

You must submit:

- A proposal for the designed solution, including appendices of relevant research notes to support the rationale.

Save a copy using the following naming convention:

- Task 1_Proposal_[Registration number #]_[surname]_[first letter of first name]

A set of design documents

Save your completed design documents as PDF files in your folder for submission using the following naming convention:

- Task 1_DesignDocs_[document name]_[Registration number #]_[surname]_[first letter of first name]

TOTAL FOR TASK = 58 MARKS

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1.1 Version control

Version number	Summary of changes
1.1	Formatting/branding/wording consistency updates.