T Level Technical Qualification in Digital: Digital Production, Design and Development

Sample Assessment Material

Component: Employer Set Project	Level
This booklet contains material for the completion of the set task under supervised conditions.	**3**
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.	Total Marks **34**
This booklet must be kept securely until the start of the timetabled assessment.	Controlled hours **4**

Task 4a

Developing a solution

Paper Reference

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You must complete the activity within the assessment.

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

You will be given 4 hours for producing the outcomes for this task.

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

The task must be completed under supervised conditions.

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

You are provided with these files for use during this task:
- *Task_4a_data.csv*
- *Task4a_currency_conversion.py*

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

The design ideas for the currency conversion part of the solution that you worked on in Task 3 have been reviewed by your manager. A senior developer has coded the solution and your manager has presented it to RBSX Group ltd.

Since then RBSX Group ltd have requested some additional functionality to be added to further develop the solution.

Activity

The file *Task_4a_data.csv* contains the data that will be used by the solution.

The file *Task4a_currency_conversion.py contains the code that the senior developer has produced.*

Develop the programming code for the data service so that it meets the new system and user requirements provided in the Set Task Information.

During development of the solution make sure that you:
- consider the security requirements and use secure coding principles and practices to mitigate against potential threats and vulnerabilities
- ensure that your code is maintainable, readable and functional
- follow accepted programming conventions

During this task you do **not** need to formally document your testing.

[34 marks]

Outcomes for submission

Save your code as PDFs and as .txt files.

Save a working version of your solution as a .py file.

All files should be saved in your folder for submission

Use this naming convention:

- Task4acode [doc#]_[Registration number]_[surname]_[first letter of first name]

- You may use any appropriate folder structure and naming convention to save the working version of the solution.

RBSX Group ltd have provided updated system requirements.

The updated requirements are:

- the existing code provided allows users to input an amount in one currency and convert this to another currency based on the most up to date figures provided.

- the solution must also identify trends and patterns over time for:
    - the value of the pound (GBP) to the US dollar (USD)
    - the value of the US Dollar (USD) to the pound (GBP).

- the solution must be secure.

RBSX Group ltd have also provided user requirements for the solution. These are:
- be easy to use
- display information in a meaningful way
- make use of appropriate textual, numerical and graphical output in a way that would be relevant to the end user.