BTEC Assignment Brief

Qualification	Pearson BTEC Level 3 National Foundation Diploma in Information Technology
Unit Title	Unit 4: Programming
Learning aim(s)/objective(s)	Learning aim B : Design a software solution to meet client requirements Learning aim C : Develop a software solution to meet client requirements.
Assignment title	Unit 4: Programming.
Assessor	Lee Curtis
Start date	06/12/2022
Hand in deadline	27/03/2023

Vocational Scenario (or Vocational Context)	You are a junior employee at a small software development company. Your company has asked you to design and develop a Python text adventure game to demonstrate your understanding of the language. Scenario You are to create a text-based adventure game using python. The game that you make is up to you, however, it must meet the following minimum requirements: 1. The game must make use of navigation. 2. The game must include some form of NPC Interaction. 3. The game must include the use of / interaction with objects and items. 4. The player must be able to interact with the game world. 5. The game must have some sort of goal to complete 6. The game must have a tutorial for the player or a help command 7. The game must include some sort of bad ending where the player loses and a good ending where they win.

Task 1: Design **Formative deadline: 27/01/23**	**Design** Produce a design for the text adventure game including clear and effective diagrams, illustrations and algorithm designs. You will produce a design in which you will: • Design your game ensuring that you detail exactly how you will be meeting the client requirements (P4) • diagrams of how the program will run (P4) • pseudo-code of how you intend to meet the requirements of the client (P4) • illustrations of how the game will play (P4) • records of review discussions (what was discussed and what decisions were made?) (P5) • test plans (what will be tested and how?) (P4) • Finally you will justify your design decisions showing how the design will result in an effective solution (M2)
Checklist of evidence required	• all of your design documents such as, diagrams, pseudo-code and illustrations. • records of review discussions (what was discussed and what decisions were made?) • test plans (what will be tested and how?) • Design justification

Criteria covered by this task:	
Criteria reference	**To achieve the criteria you must show that you are able to:**
B.P4	Produce a design for a computer program to meet client requirements.
B.P5	Review the design with others to identify and inform improvements to the proposed solution.
B.M2	Justify design decisions, showing how the design will result in an effective solution.

Task 2: Develop and Review **Formative deadline: 10/03/23**	**Develop and Review** Following the design, you will develop the text adventure application. You will implement the program to provide the functionality required by the brief. You will produce a development report in which you will: • demonstrate your use of a programming language, including the use of any pre-defined code and library routines within your program identifying how they improve program efficiency (P6) • run your test plans from the design stage, ensuring that the program is thoroughly tested and that any errors found are documented with reasons why the error occurred and suggestions for repair (P6) • repair errors found during the testing process with clear documentation for how repairs were made and results of retesting (M3) • document errors that cannot be repaired, giving reasons why this is the case and suggest repairs for future reference (M3) • review your program following feedback from users to identify areas for improvement and optimisation and prioritise which improvements to make with regard the time frame available to you. (P7) + (M3) • using your design and optimised program evaluate your design against the client requirements (D2) • finally using all the evidence you have gathered, demonstrate that you have shown individual responsibility and effective self-management (D3)
Checklist of evidence required	• program code • program files (your working program) • test logs (results of your test) • error reports (what went wrong and how it was fixed) • optimisation logs (what was improved) • your evaluation of the development and the completed program • a document which demonstrates that you have shown individual responsibility and effective self-management

Criteria covered by this task:	
Criteria reference	**To achieve the criteria you must show that you are able to:**
C.P6	Produce a computer program that meets client requirements.
C.P7	Review the extent to which the computer program meets client requirements.
C.M3	Optimise the computer program to meet client requirements.
BC.D2	Evaluate the design and optimised computer program against client requirements.
BC.D3	Demonstrate individual responsibility, creativity and effective self-management in the design, development and review of the computer program.

Sources of information to support you with this Assignment	

LEARNER ASSESSMENT SUBMISSION AND DECLARATION

When submitting evidence for assessment, each learner must sign a declaration confirming that the work is their own.

Learner name:	**Assessor name:** Not yet in plan	
Start date: Not yet in plan	**Hand in deadline**	**Submitted on:**
Qualification: Pearson BTEC Level 3 National Foundation Diploma in Information Technology		
Unit name(s): Unit 4: Programming		
Assignment title: Unit 4: Programming.		

Please list the evidence submitted for each task. Indicate the page numbers where the evidence can be found or describe the nature of the evidence (e.g. video, illustration).

Task reference	Evidence submitted	Page numbers or description
Additional comments to the Assessor:		

Learner declaration
I certify that the work submitted for this assignment is my own. I have clearly referenced any sources used in the work. I understand that false declaration is a form of malpractice.

Learner signature:
Date: