Business and IT Department

OAKLANDS COLLEGE

Assignment front sheet

Learner Name	Assessor Name

Date issued	Completion date	Submitted on
Monday 8th September	**Monday 3rd November 2014**	

Qualification	Unit number and title
BTEC Level 3 Extended Diploma in IT	**Unit 6: Software Design and Development**

Assignment title	**Assignment 1 – Which Language?**

In this assessment you will have opportunities to provide evidence against the following criteria.

Criteria reference	To achieve the criteria the evidence must show that the student is able to:	Task no.
P1	Describe the application and limits of procedural, object oriented and event driven programming paradigms	**Task 1**
P2	Describe the factors influencing the choice of programming language	**Task 1**
P3	Explain sequence, selection and iteration as used in computer programming	**Task 2**
P4	Outline the benefits of having a variety of data types available to the programmer	**Task 2**

Learner declaration
I certify that the work submitted for this assignment is my own and research sources are fully acknowledged. I am happy with the grade awarded. Learner signature: Date:

Final Grade (if appropriate)		**Points**	

	Assessment Criteria Achieved (indicate with ✓ and initial)									
	P1	**P2**	**P3**	**P4**						
1st attempt Date										
Final attempt Date										

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Assessor's comments

Qualification	BTEC Level 3 Extended Diploma in IT	Assessor name	
Unit number and title	Unit 6: Software Design and Development	Learner name	

Grading criteria		Assessor Feedback
P1	describe the application and limits of procedural, object oriented and event driven programming paradigms	
P2	describe the factors influencing the choice of programming language	
P3	explain sequence, selection and iteration as used in computer programming	
P4	outline the benefits of having a variety of data types available to the programmer	

Additional Assessor Feedback (including feedback for upgrade) and Action Plan	Action completed by date

Learner Feedback

Learner		Signature		Date	
Assessor		Signature		Date	
Internal Verifier		Signature		Date	
Lead Internal Verifier (if appropriate)		Signature		Date	

OAKLANDS COLLEGE

Assignment brief

Qualification	**BTEC Level 3 Extended Diploma in IT**
Unit number and title	**Unit 6: Software Design and Development**
Start date	**Monday 8th September 2014**
Deadline	**Monday 29th September 2014**
Assessor name	

Assignment title	**Assignment 1 – Which Language?**

The purpose of this assignment is to:

- Know the features of programming languages
- Understand the principles of software design
- Be able to use tools to demonstrate software designs

Scenario
You are working for "Lets Train U", a training organisation that provides training in its own training centres, on customer's sites and as an on-line resource. You have been given the job of producing a document to help attract prospective trainees to the software design and development courses. This will be used on the company's website via the information link.

P1 describe the application and limits of procedural, object oriented and event driven programming paradigms
P2 describe the factors influencing the choice of programming language

Task 1 (P1, P2)

To help novice programmers decide on which course they should do, create a document for the website that describes the application and limits of the following paradigms:- **(P1)**
- procedural programming
- object-oriented programming
- event driven programming

To help to inform any employers who are thinking of sending their staff on a "Lets Train U" course, you should add to your document a description of the factors that influence the choice of programming language. This should relate to the organisation, employees and policy. **(P2)**

Evidence

Document suitable for a web site

P3 explain sequence, selection and iteration as used in computer programming
P4 outline the benefits of having a variety of data types available to the programmer

Task 2 (P3, P4)

You have been asked by your manager to give examples of a visual language to demonstrate its features. The code for your programs may be used as part of the training program for C#.Net.

As a developer, you know that before you start to write programs you need to be aware of the different data types available in the programming language you are using. You feel that this information is necessary for programming trainees so you decide to create a table containing data types that are commonly used. **(P4)**

Write a small selection of programs which give examples of the following: (note: all programs must be fully commented so that trainees are able to follow each part) **(P3)**

Features
- variables (naming conventions)
- input and output statements
- conditional (IF) statements
- case statements
- logical operators (<> AND OR)
- loops
- assignment statements

Evidence

Table of data types
Sample C#.Net programs internally documented