

Calderdale College Assignment Front Sheet

PROGRAMME
NAME:
CODE: 21413P
NVQ LEVEL:

HNC/HND Computer studies

NVQ CODE:

SUBJECT/UNIT/MODULE TITLE: Object Orientated Programming

ASSIGNMENT TITLE/NO: The Java Calculator

TUTOR: Grayde Bowen

STUDENT:

ENROLMENT NO:

DATE SET: 19/10/01

COMPLETION DATE: 23/11/01

UNIT/OBJECTIVES TO BE ASSESSED

Reuse system components using object-orientated programming principles

- incorporate elements from a class library into simple programs

use native Java classes

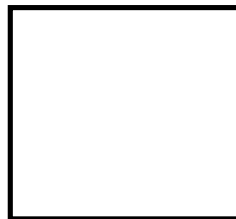
CORE SKILLS ASSESSMENT:

See second sheet

COMMENTS/FEEDBACK:

OVERALL GRADE

TUTOR



RESUBMIT BY:

Common Skills as defined in BTEC's Common Skills Handbook (Assessed skills marked with *) Description of Skill		Student Demonstrated				
		F	R	P	M	D
		Competence in Skill				
	1. Manage own roles and responsibilities					
*	2. Manage own time in achieving objectives					
	3. Undertake personal and career development					
	4. Transfer skills to new & changing situations					
	5. Treat others values with respect					
	6. Relate and interact with other people and groups					
	7. Work effectively as a team member					
	8. Receive and respond to a variety of information					
	9. Present information in a variety of forms					
	10. Communicate in writing					
	11. Participate in oral and non-verbal communication					
*	12. Use information sources					
	13. Deal with routine and non-routine tasks					
	14. Identify and solve non-routine problems					
	15. Apply numerical skills and techniques					
	16. Use a range of technological equipment and systems					
*	17. Apply skills and techniques to develop ideas					
	18. Use a range of thought processes					

You are asked to "claim" in writing any of the common skills listed above that you think you are entitled to.

The Java Calculator

Code a Java Applet that will perform the actions of a desktop calculator. Suitable Java GUI widget Classes (Button, TextField) will be used to create objects for the user interface. The program must run in a web browser outside the Java IDE used for creation of the byte code. The program must run without any errors. A Layout other than the Flow Layout must be used to position widgets on the user interaction screen.

What you have to hand in:

- A disc containing the Java and Class files for the calculator simulation.
- A print out of all Java code.
- A screen print of the user interface.
- A table of test data showing that data input and calculations are handled correctly.

Grading

Distinction

All the merit criteria plus, try and catch are used to trap errors due to inappropriate user input such as entering numbers of format “1.023.2.11”. A memory function allows up to 4 sets of data to be remembered, added to, subtracted and recalled. It is not necessary to save the memory data to disk.

Merit

All the pass criteria plus, the user can input floating-point numbers as well as integers. The mathematical function keys update the running total as they are pressed. Entering +, for example, will act as = in showing the current result of the continuing calculation.

Pass

The following functions are supported, add, subtract, multiply, divide, clear, total. Data entry is by key only, the user cannot type data into the program.

Refer

Any criteria are not fulfilled. A Java IDE indicates that errors are present although the program may still run with those errors present. The assignment is not handed in on time.

Fail

The assignment has been referred and is not resubmitted in a satisfactory format before the resubmission date