

L6 Assignment Brief: Comp3402 Nature of Computing 2020-21

Assignment 3 (Part 2)	Position Paper 3 (Part 2)
Word Limit or equivalent (e.g. time)	No word limit. Indicative time 14 hours
Weighting	1 / 6 of total module marks
Learning Outcomes Assessed	6. Critically appraise the principles of a modern operating system.
Submission date	25 th April 2022
Feedback date	One week following submission
Module Leader	Dr Colin Price c.price@worc.ac.uk
Verified by	Dr Pete Moody

If anything about this assignment is not clear to you, please contact your module leader.

What do I need to do to make a success of this assignment?	You will write a position paper addressing the question <p style="text-align: center;">“What are the important features of a modern operating system?”</p>	
	There are two main sections to this paper. The first section is based on investigations using Arduino with a RTOS and parallel processing using OpenMP. The second section has two options, either application of RTOS or OpenMP to a significant problem, or a research-based option.	
	Section 1	Section 2
	Option 1	Option 2
You will investigate some features of FreeRTOS on an Arduino. <p style="text-align: center;">AND</p> You will investigate some features of OpenMP running in Visual Studio C.	You will apply FreeRTOS to create a sophisticated drobot control architecture running on the Parallax Robot. <p style="text-align: center;">OR</p> You will apply OpenMP to a challenging computational problem	Review the literature related to Super Computers and discuss either their <i>architectures</i> OR their <i>applications</i> .

<p>How should I present my work?</p>	<p>You may choose to write the paper in an ‘essay’ style without any headings, or you may structure your paper with headings, like a report.</p> <p>Please look at the assessment matrix, especially at the weightings; you will see that the focus is on explaining operating system features. You may choose to include ‘code snippets’ to help your explanations along, or outputs captured from running programs.</p> <p>One way of including journal articles is to write a short introduction paragraph where you outline what is to follow in your paper and cite the articles there.</p>
<p>How can I obtain guidance on my assignment?</p>	<p>You can submit an assessment plan of your work in progress or a short piece of text (no longer than two sides of A4, incorporating images, diagrams, tables) to enable you to obtain guidance on the overall structure and direction of your assignment. You should submit this no later than one week before the submission deadline to enable you to review and address feedback provided to develop your work. This will be in a Blackboard drop-box, alternatively you may choose to demonstrate your work in class.</p> <p>You will receive an assignment briefing during the session w/c 21st March.</p>
<p>How and when do I hand my assignment in?</p>	<p>Your work must be word-processed/typed and should clearly show your student number.</p> <p>You should submit your work by the 3pm deadline on 25th April 2022. You should submit your work to the Blackboard drop-box which is available via MyDay. You are required to keep a copy of work handed in.</p> <p>See the University’s guide to uploading and submitting assessment items via Blackboard: https://help.blackboard.com/Learn/Student</p> <p>If you have issues with Blackboard, Turnitin or PebblePad you will need to contact tel@worc.ac.uk</p>

How will my assignment be marked?	<p>Specific marking criteria for your assignment is provided in the Grading Matrix within this document.</p> <p>You are strongly advised to check your completed work against the Grading Matrix to ensure have completed all areas required before you submit it.</p> <p>Please consult the document on the module website which provides a glossary of terms used in this assignment and the grading matrix.</p> <p>You should also ensure you adhere to the word limit / word count stated in your assessment brief document, details of which can be found in the University's Assessment Policy http://www.worc.ac.uk/aqu/documents/AssessmentPolicy.pdf</p>
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L6 Grading Matrix for Comp3402 Position Paper 3 (Part 2)

This matrix captures the assessment criteria for this part of the coursework.

Student Number/Name:	Academic Year and Semester: 2021-22 AS	Learning Outcomes: 6. Critically appraise the principles of a modern operating system.
Module Code / Title: Comp3402 Nature of Computing	Assignment No/Weighting: Ass 3 (part 2). Weighting 1/6	
	Assessment Title: Position Paper 3 (Part 2)	

To best understand this matrix, start by reading the 'baseline' grade C

	Knowledge and understanding	Autonomy in Learning		Communication
		Option 1	Option 2	
	Investigations into FreeRTOS and OpenMP	Application of either FreeRTOS OR OpenMP to a sophisticated application	Research into the architectures OR applications of Supercomputers	Well-written Paper
	45	45		10
A	Investigation and evaluation are both comprehensive AND detailed.	Detailed presentation AND critical evaluation	Detailed material AND critical evaluation.	Position is coherent and persuasive.
B	Comprehensive OR detailed investigation and evaluation.	Presentation is detailed	Material is detailed	Position is coherent.
C	Investigation and evaluation of one feature of FreeRTOS and one feature of OpenMP.	Correct solution to problem is presented.	Material presented has been carefully selected.	Statement of position in clear language.
D	Investigation and evaluation, does not include both FreeRTOS and OpenMP	Attempt at a solution, though there may be errors	Some material presented, though may be arbitrary	Statement of position is too short or unclear.
F	Little or no attempt, or work contains errors.	Little or no attempt at a solution.	Little or no attempt to present material.	Little or no statement of position.

Feedback on your assignment.

Please review this feedback and use it to develop your work in your next assignment in this and your other modules. If anything is unclear, please ask the marker.

Aspects done well and why:			
Aspects for improvement and why:			
Development for future assignments:			
How successful completion of this assignment helps your employability and achievement of graduate attributes:			
Grade awarded:		Marker:	Moderator*:

** This person is responsible for moderating a sample of student work for this module. Your work may, or may not, have been included in this sample.*

I do not want my work to be used anonymously to help future students

RESULTS ARE PROVISIONAL UNTIL AGREED BY THE BOARD OF EXAMINERS