Assessment Brief for Programming in C –

NUCLEI Parser/Interpreter

Assessment information	
Unit name	Programming in C
Unit code	COMSM1201
Assessment number	6
Assessment name	Project (Parser/Interpreter)
Assessment prepared by	Neill Campbell
Assessment type	Coursework / Take-home Exam
Credit value	**35%** of 30cp unit – as a proportion of this: 30% : Parsing 30% : Interpreter 20% : Testing 20% : Extension
Expected time to complete	2 weeks, working ~50% of your time, approximately.
Submission format	Via Blackboard – **one nuclei.zip** file. You can submit as often as you like, old files are automatically overwritten. I'll only mark your latest submission. Any submissions that are late (even by 1 second) are automatically given a late penalty; my feedback will not show this.
Deadline	23rd January 2023 @ 13:00
Deliverable	One .zip file containing at least: 1) Makefile and source code allowing me to 'make parse', 'make interp' and 'make extension' 2) testing.txt and extension.txt 3) Other files as you deem necessary
Learning outcomes being assessed	• To be able to write a program, given a brief specification that compiles and executes correctly. • To code a recursive decent parser and understand how to adapt it to make an interpreter. • The ability to program in the C99 (ANSI) C standard, and in the style outlined in the house-style guidelines. • To be able to build a program from a suite of small, well tested functions. • To be able to design, build & debug simple programs on your own without TA/staff support (after the labs in week 12, you need to work independently)
Assessment criteria	Conformance to the house-style guidelines, testing, short readable functions. Does it execute the formal grammar correctly ?
Additional resources	"Live" Q&A sessions, Teams forum
Support for this assignment	6 hours of labs in week 12.
Additional advice to students	Write and understand the noughts/ones example first. Do not try to implement to full grammar – you a cut-down one to begin with.
Feedback information	
Feedback mode/method	Written feedback from Neill, and, additionally, at any time verbally during lab sessions.
Planned feedback date	Before the end of February.
Useful previous feedback	Previous Lisp assignment
Future feedback use	Other programming units.