CSU33D03 Project 3 2022

Due date: Per blackboard deadlines. No extensions.

Project 2 is a group project.   You will do it in pre-assigned groups of 4.   Groups are already assigned on blackboard as 202122-P3-Groupxx

Please ONLY use the tools available in Blackboard and on Piazza for group collaboration as your participation in and use of these will form part of your participation mark for the module e.g Collaborate, Discussion Board, Piazza, etc.

Background:

In projects one and two you all created plans and concepts for your networking protocol/service, with the following assessment headings for your P1 document: A Preferred focus and Use Case; B Protocol Overview; C Communications Model; D Module Descriptions; E Summary of Algorithms; F Software Development Practices;

and for your P2 document: A Use Case; B Picture / Diagram / Logical Diagram; C High Level Messaging / Functionality / Functional description / Purpose; D Algorithm / Pseudo Code / Structure / Logical thinking; E Networking / Comms model: e.g. Client Server or Peer-to-Peer - > Any lower layers (Application and/or Network); F Other considerations e.g. Security, SW Eng, etc.; G Implementation details; H Highlights/Unique Selling Points of your system/implementation; I Changes, advances and/or improvements from Project 1, and why.

And for the Video submission:

1	Discovery	30 secs	How - approach, success
2	Support request, response, relevant status responses, and content types	15 secs	Types - messages - purpose
3	Demonstrate data transfers between multiple nodes	2 mins	Demonstrate data moving between nodes. Robustness to node failure or unavailability
4	Explain code/implementation	1 min	Code - language, key features you are proud of, why key design decisions
5	Explain how any libraries/third party code used.	30 secs	Libraries - what, why, why no write your own
6	Low level elements - bonus	30 secs	Bonus content - functionality, why, how, why deserve bonus
7	Additional functionalities	15 secs	Anything not already covered

Task:

For project 3 I want your group to agree on an evolution of your various P2 activities, and to implement a credible networked service that offers clear potential for a meaningful contribution or advance towards a global concern e.g. pandemics(but specifically NOT COVID), climate change, energy, extremism, inequality, cancel culture, food security.

Please take an aspect of the global concern you are targeting, and propose a well-considered solution to a problem of your choice that can make a meaningful difference in that specific space. Your group chooses its own focus, and determines its own scope for its planned activities.

Your solution should demonstrably draw on your synthesised Project 2 experience and knowledge – i.e. it must have and be demonstrably related to networking/communications and the module!

Specifically you should

i)   Form a brief (1 page max) summary of the various strengths and beneficial features of your collective Project 2 knowledge and experience – effectively a synopsized aggregation of your lessons learned and expert knowledge that you have all discussed and agreed on at the outset

ii)   Identify the aspect or facet of the situation and its needs and requirements that you plan to target to advance capacity in

iii)   Identify the networking/communication aspects of your planned approach and solution

iv)   Identify and other requisite knowledge and/or skills necessary to realise your solution/approach

v)   Agree on the solution, or subset thereof, that you can credibly implement in 10-14 days

vi)   Plan your test cases and validations for your implementation

vii)   Plan the activity in a demonstrably fair balanced fashion and agree distributed responsibilities across the group

viii)   Tightly and collaboratively manage, agree and execute the implementation

ix)   Validate and execute your test cases and implementation

x)   Reflect on and comment on the value and potential importance of your solution and implementation

xi)   INDIVIDUALLY: Include a paragraph on your individual group and peer learning experiences on this task (~10 lines each)

Alongside the 10 lines please also include an individual feedback component on each group member in the group in the table format below -- *IF* you are happy to do so.

- Insert team member initials in column headers.
- Effort must be high/medium/low/zero
- Effectiveness must be high/medium/low/zero
Use zero if someone really didn't participate at all. Include your evaluation of yourself as well as other team members.
- Be honest.

We MAY use an online tool to individualise the collection of peer feedback

		Name 1	Name 2	Name 3	Name 4
Name initials					
Effort					
Effectiveness					

xii)   Any other observations or content not otherwise covered above

Deliverables:

Presentation (all group present) on Teams Thurs-Friday 7th-8th April   OR Mond-Tues 11th-12th April 2022 depending on my schedule.   Please plan to be ready for demo for the 7th /8th April. Booking system will be released next week.

Report (6 page max) to succinctly include such detail as you feel appropriate on EACH of the above elements in the itemized list. Submitted to this task.

Code and any platform elements required in a zip to the separate task. A readme/instructions that completely itemize the steps the demonstrators should follow for your solution to run and be evaluated (please ensure these are wholly complete as the demonstrators will follow them verbatim)