

INFT3800
Assessment IV - Professional Practice in IT
S1 2021 – Group Seminar (40%)
Due date: Week 11 - Friday, 21th May 2021

Title: Research Seminar on Sustainable Computing

Link: <https://hbr.org/2020/09/how-green-is-your-software>

Task:

A link of an article related to sustainable computing has been provided. Read the article and based on it, students need to answer the questions given below. Students need to do additional researches to support their answers and give a seminar presentation on their findings on each answer.

Below are the questions that need to be answered by the students in this task:

- What is sustainable computing? Why do you need computing to be sustainable?
- Will block chain technology promote green computing?
- What are the strategies to produce green software?
- What are the advantages and disadvantages of developing green software?

Please justify your answers based on data analysis and facts and apply real world examples in each answer when appropriate.

Students *present* in groups of 4-5 students or individually (depending on the total number of students in the course). These students will also lead the workshop discussion, facilitating a stimulating exchange of ideas (please see marking criteria for details on the main areas that the presentation should cover). Students can write out the key questions to stimulate thinking and discussion during the presentation.

Your research findings will be presented to the class using the following structure:

- Introduction (answer to Q1)
- Literature Review (related past researches on Q2 – Q4)
- Problems and Discussions (answer to Q2-Q4)
- Conclusion
- References

Other helpful resources:

- <https://devblogs.microsoft.com/sustainable-software/>
- <https://tel.archives-ouvertes.fr/tel-01724069/document>
- https://www.researchgate.net/publication/272148058_Understanding_Green_Software_Development_A_Conceptual_Framework

Submission:

Students send their presentation file (e.g., pptx, pdf) before the day of the presentation to the course coordinator Dr. Teuku Geumpana (Teuku.Geumpana@newcastle.edu.au; Callaghan) or local lecturer. Students who wish to earn high marks will ensure that their presentation is clearly linked to items pointed out in the marking criteria. Moreover, they will ensure that standards of academic integrity are maintained by adequately citing all references (Formatting for references: APA style1).