

ETBA2024 ASSIGNMENT 01

(Due Date: September 16, 2024)

Instructions: The following points should be noted.

- If you use a word processing software to edit your answer, please make sure that the file to be submitted is either in WORD or PDF format. (My computer is unable to read those files generated by Macintosh.)
- You need to submit the answer file before the due date to the Gmail account johnsum.nchu@gmail.com.
- Email heading must be conformed to ETBA2024_Assignment01_studentID.
- File name must be conformed to ETBA2024_Assignment01_studentID.
- It is a bonus assignment. If you are too busy to complete the assignment, you can just skip it.
- You can answer the questions in either Chinese or English. I prefer English.

The assessment of this course is solely depended on your work in the course project including your written report and your oral presentation. The score obtained from this assignment is bonus which is added up on top of your project score.

Question 1

Emerging technology is a key to this course. State your definition of *emerging technology* and list five technologies which are emerging technologies in conforming to your definition.

Question 2

In the lecture, John Sum has introduced a background history of the GPU developed by Nvidia. No doubt, GPU is an emerging technology.

- (a) What is the full name of GPU?

- (b) What is the usages of GPU?
- (c) State two processors in which GPU has been embedded.
- (d) Apart from Nvidia, state three tech firms which have developed GPU.

Question 3

Today, there are many emerging technologies available for use.

- (a) Siri (resp. voice assistant) and Google Map (resp. Apple Map) in a smartphone are two examples. Owing to use such technologies, your smartphone has to be connected to the Internet. Explain why Internet access is necessary for the usages of such emerging technologies, like Siri and Google Map.
- (b) State five emerging technologies that you can find in your smartphone or notebook computer.

Question 4

- (a) What is the name of the professor who is teaching this course?
- (b) Where is the birthplace of the professor?
- (c) State the names of the universities in which the professor obtained his BEng degree, Master degree and PhD degree.
- (d) How many years the professor has been living in Taiwan?
- (e) How many research papers (including the journal papers, book chapters and conference papers) the professor has published?
- (f) What is the title of the textbook for this course?