

ASSIGNMENT 4 (INDIVIDUAL)

INSTRUCTIONS

Answer the following questions in a few sentences. It would be best to express yourself in your own words, based on the knowledge you gained from the *Reading Assignment*, *Video Lectures* and *Mentor sessions*. You must also construct good, correct sentences that are free of grammatical errors. Only answers should be typed and uploaded to the Sakai course site as instructed. There is a deadline to meet.

NB: *All submissions will be subjected to PLAGIARISM CHECKING. Students are therefore advised to desist from any such act as that will attract severe consequences.*

1. Describe software architecture in your own words.
2. Assume that the Mentcare system (*as described in the key text*) is being developed using an object-oriented approach. Draw a use case diagram showing at least six possible use cases for this system. (*Use tools such Figma, MS Office Visio or any other suitable tool to deliver on your drawing*)
3. Some people argue that developers should not be involved in testing their code but that all testing should be the responsibility of a separate team. Give arguments for and against testing by the developers themselves.
4. Explain why a software system used in a real-world environment must change or become progressively less helpful. (*Students are required to express themselves using their own words, drawing inspiration from the Reading Assignments, Video lecture and Mentor session relating to this question.*)
5. Can a program be correct and still not exhibit good quality? *Explain using or referencing a specific program as an example to support your answer.*
6. Explain why you should explicitly handle all exceptions in a system intended to have a high level of availability.
7. Is it possible to assess software quality if the customer keeps changing what it is supposed to do?