DEPARTMENT OF COMPUTER SCIENCE <u>DCIT 208 - SOFTWARE ENGINEERING</u> <u>ASSIGNMENT 2 (INDIVIDUAL)</u>



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 and Video Lecture. 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 are always deadlines 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. Suggest why it is essential to distinguish between developing user and system requirements in the requirements engineering process.
- 2. Most agile process models recommend face-to-face communication. Yet today, members of a software team and their customers may be geographically separated from one another. Do you think this implies that geographical separation is something to avoid? Can you think of ways to overcome this problem?
- 3. It has been suggested that one of the problems of having a user closely involved with a software development team is that they 'go native'. That is, they adopt the outlook of the development team and lose sight of the needs of their user colleagues. Suggest three ways how you might avoid this problem and discuss the advantages and disadvantages of each approach.
- 4. A banking system provides users with several services:
 - (a) to check their accounts to see recent transactions and balances;
 - (b) to pay bills online;
 - (c) to buy and sell investments.

All of these services require a secure log-in. If the system crashes or the network connection fails during a transaction, all the financial data must be left in a consistent state.

- a. Draw use case diagrams for these requirements. (Use standard symbols and shapes. MS Office Visio or Figma are optional tools)
- b. Give the use case specification for paying a bill online.