DEPARTMENT OF COMPUTER SCIENCE <u>DCIT 208 - SOFTWARE ENGINEERING</u> <u>ASSIGNMENT 1 (INDIVIDUAL)</u>



20 MARKS

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 Lecture as well as your experience in your project so far. You must also construct good, correct sentences 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 <u>PLAGIARISM AND AI CHATBOT CHECKING</u>. Therefore, students are advised to desist from any such act that will attract severe consequences.

- Consider that you are assigned as a software engineer in a project to develop a mobile application for an e-commerce business. Describe in detail the process you would undertake to elicit requirements from stakeholders. Discuss the methods you would employ to ensure a comprehensive understanding of system requirements, as well as how you would handle conflicting requirements.
- 2. Describe and compare at least three techniques for gathering software requirements, such as interviews, surveys, and observations. Discuss their strengths and weaknesses. Give examples of when you might choose one technique over another, depending on the context of the project.
- 3. Explain the importance of a Requirement Specification Document. What are the key components that should be included in it? Create a mock-up Requirement Specification Document for a simple library management system.
- 4. Effective communication is critical in the process of requirements engineering. Discuss the importance of communication at each stage of the requirements engineering process and describe strategies to improve communication among the stakeholders (like users, developers, managers, etc.) during these stages.
- 5. Requirements often change throughout the course of a software development project due to various reasons (changing market conditions, new business strategies, user feedback, etc.). Discuss how you would manage these changing requirements while minimizing disruption to the project's timeline and budget. What strategies would you employ to maintain effective communication with stakeholders during these changes?