Assignment – CA – groups of 3 students

60 Marks (your CA grade will be divided into two).

Students and employees will be required to provide a number of documents in 2023 as a result of the collaboration and accreditation requirements the university is undertaking. Both full-time and part-time lecturers are kindly asked to submit their supporting documentation. Lack of an information management system for the papers will make it more difficult to retrieve them quickly. Information from this document should be saved and matched to the actual, physical document. In other words, this is a project to create a mini-archive that can organize and accept different types of papers for easier access.

The goal is to create software that can handle many types of documents, save them, and provide easy access to them for tasks like editing, printing, and reading, to mention a few. The documents ought to be organized by faculty, department, instructor and other criteria.

Each question answered correctly will earn three points.

The completion of each question is 4 marks

1. Gather the necessary requirements from the stakeholders
2. Design the use case diagram of the project
3. For each use case, write the use case description
4. Design the application flow chart
5. Design the class diagram of the application to be developed
6. Do object structuring and refine the class diagram with design principles
7. Refine the class diagram with the use of design patterns
8. Design the sequence diagram for the use cases
9. Convert the sequence diagram into collaboration diagram
10. Chose three objects from object structuring and design the state transition diagram

Develop the software using Java programming language. 20mks

NB:
- The models must be strictly translated into code, and documentation must be included.
- Presentation date: Monday 18 December 2023