Knowledge Check

Case Study – ABC Library Management System

Subject Code and Title	SEP401 Software Engineering Principles
Module Number	Module 4

Problem Statement:

The case study titled ABC Library Management System is library management software for the purpose of monitoring and controlling the transactions in a library. The library management system provides information about the library and the daily transactions that occur in a Library. Librarians should maintain the record of books and retrieve the details of books available in the library. The system should provide basic operations in a library like adding new members, new books, and look up new information, searching books and members and facility to borrow and return books. It features a familiar and well thought-out, attractive user interface, combined with strong searching, insertion and reporting capabilities. The report generation facility of the library system helps to get a good idea of the books borrowed by the members, and makes it possible for users to generate report's hard copy.

The following are the brief descriptions on the functions achieved through this case study:

End-Users:
•Librarian: To maintain and update the records and also to cater the needs of the users.
•Reader: Needs books to read and also places various requests to the librarian.
•Vendor: To provide and meet the requirements of the prescribed books.

Instruction:
1. Model the requirements for this case study using use case, activity diagram, class diagram, state diagram and sequence diagram.
2. If you need more details, make an assumption and base it on your experience of using a library system.