

## **SOFTWARE ENGINEERING (503074)**

(WEEK 04)

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## **EXCERCISE 1**

- **1.1** Look carefully at how messages and mailboxes are represented in the email system that you use. Model the object classes that might be used in the system implementation to represent a mailbox and an e-mail message.
- 1.2 The organization offers a variety of courses in a variety of areas such as learning management techniques and understanding different software languages and technologies. Each course is made up of a set of topics. Tutors in the organization are assigned courses to teach according to the area that they specialize in and their availability. The organization publishes and maintains a calendar of the different courses and the assigned tutors every year. There is a group of course administrators in the organization who manage the courses including course content, assign courses to tutors, and define the course schedule. The training organization aims to use the Courseware Management System to get a better control and visibility to the management of courses as also to streamline the process of generating and managing the schedule of the different courses.
- → Model the object classes that might be used in the system implementation to represent a Courseware Management System.

## **EXCERCISE 2**

Develop a sequence diagram showing the interactions involved when a student registers for a course in a university. Courses may have limited enrolment, so the registration process must include checks that places are available. Assume that the student accesses an electronic course catalog to find out about available courses.



## **EXCERCISE 3**

Based on your experience with a bank ATM, draw an activity diagram that models the data processing involved when a customer withdraws cash from the machine.