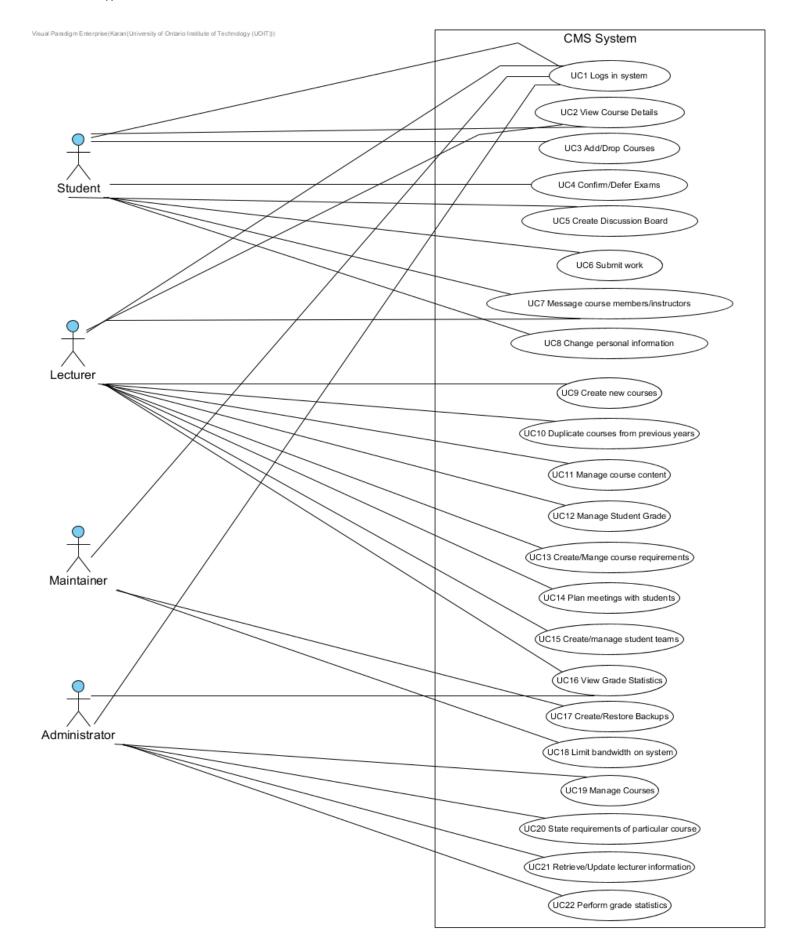


# Faculty of Engineering and Applied Science SOFE 3650U Software Design & Architecture Assignment #2

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### **Students**

- UC1. Logs in the system R28
- UC2. View course details (exams, prof. contact info., grades) R8-R10, R26
- UC3. Add/Drop Courses R11
- UC4. Confirm/Defer Exams R12
- UC5. Create discussion board for group collaboration R13, R17, R18
- UC6. Submit work via textual input, file upload. R14, R15
- UC7. Message any course members, or instructor R16
- UC8. Change user settings like personal info., change/reset password, subscribe/unsubscribe to course notifications, modify privacy policy of the profile via User Control Panel **R21-R23**, **R25**, **R29**

### Lecturers

- UC9. Create new courses R48, R49
- UC10. Duplicate courses from previous years R50, R82
- UC11. Manage and update courses content R51 R53, R59, R68 R71
- UC12. Manage student grade, and mail students their marks **R54 R58**
- UC13. Create and manage class enrollment policy R60 R65
- UC14. Plan meetings with students R67
- UC15. Create and manage student teams R72-R79
- UC16. View grade statistics R80, R81

## Maintainer

- UC17. Create/Restore backups R88 R89
- UC18. Limit bandwidth on the system **R90 R91**

# Administration

- UC19. Manage courses (delete, create, delete, update, appoint lecturers ) R97 R101, R118
- UC20. Declare requirements of taking of a particular course R102 R106
- UC21. Retrieve/Update lecturer information R108 R109
- UC22. Perform grade statistics of students R111 R115

ID	Quality Attribute	Scenario	Associated Use Case
QA-1	Security	When stakeholders login to the system, they should only be able to perform activities which they are assigned to.	All
QA-2	Usability	The CMS system should have user friendly UI - include less than 3 clicks to perform single action	All
QA-3	Performance	User at most clicks 3 times to complete a task.	All
QA-4	Availability	The system cannot have unexpected downtime. It can only have a downtime of 4 hours every month.	All
QA-5	Performance	A message is sent to all the users prior to downtime of the system.	UC19
QA-6	Security	Lecturers can only view personal information of the students who are enrolled in their course.	All
QA-7	Interoperability	Course calendar information is exported out of the system.	UC2
QA-8	Scalability	As more users are added on the system, additional hardware is required to improve the performance of the system.	All
QA-9	Maintainability	Maintainers maintain the system by backing up the data.	UC17

ID	Constraint
CON-1	The CMS system must be executed via a web browser (Mozilla Firefox, Chrome, and Microsoft Edge).
CON-2	A server which is sufficient to handle large amount of data is required for hosting the application.
CON-3	A minimum of 5000 simultaneous users must be supported.
CON-4	Data from past 10 years may be stored on the system.
CON-5	Relational database server must be used to store personal details of the stockholders.