

## Project 2 : EMS internals (?)

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# Overview

According to Wikipedia,

- Education management information systems (EMIS) aim to collect, integrate, process, maintain and disseminate data and information.
- It must support decision-making, policy-analysis and formulation, planning, monitoring and management at all levels of an education system.
- It is a system of people, technology, models, methods, processes, procedures, rules, and regulations that function together.
- It provides education leaders, decision-makers and managers at all levels with a comprehensive, integrated set of relevant, reliable, unambiguous and timely data and information to support them in completion of their responsibilities.

# Salient points

- An EMS must model the interaction between a set of students (in the mathematical sense) and a set of teachers.
- Each set must be able to exchange information in specific formats (e.g. Assignments, Recordings, Grading), on specific forums.
- It must also allow for mutability of the aforementioned sets, and must acquire data effectively for new-joiners.
- A username-password database is also necessary.
- The scholastic structure, with Faculty and Students organised into multiple schools and multiple branches per school, is optional. It may simply complicate matters.
- Courses are classified by field, subfield, then complexity. Each Course has member Sessions, Assignments, and Tests.

# Use Cases

## Faculty

- Uploads video session.
- Uploads assignment question.
- Uploads test question paper and answer paper (separately).
- Evaluate both Tests and Assignments.

## Student

- Watch video session.
- Uploads answer to assignment.
- Take tests.
- Ask doubts.

# Forums

For this project, a forum is a platform that facilitates a specific type of interaction between Faculty and Student. Each corresponding pair of Use-cases will also correspond to a specific forum.

Thus, there will be a single forum for the submission and evaluation of assignments, and a separate one for taking tests. There will also be a forum for doubts/clarifications, with various parameters serving to categorize them for effective handling.

A user can log in to a forum, and access/modify specific fields (grading, etc.) and can also upload/download data.

# Possible Classes

- class Faculty
- class Student
- class Course
- class Forum : Various forums will be subclasses.
- class Assignment, class Test, class Session, etc. : Tentative.