

## Online teaching material

A common and ever expanding need in university teaching is the provisioning of teaching material (slides, screencasts, exercises, solutions) to the students.

For this purpose we have to define the requirements for a system that allows managing and publishing the materials used during the lectures.

1. Identify the stakeholders and their main interests

**Students:** access the materials to study and exercise

**Teachers:** prepare the materials, teach effectively

**University:** improve service to students

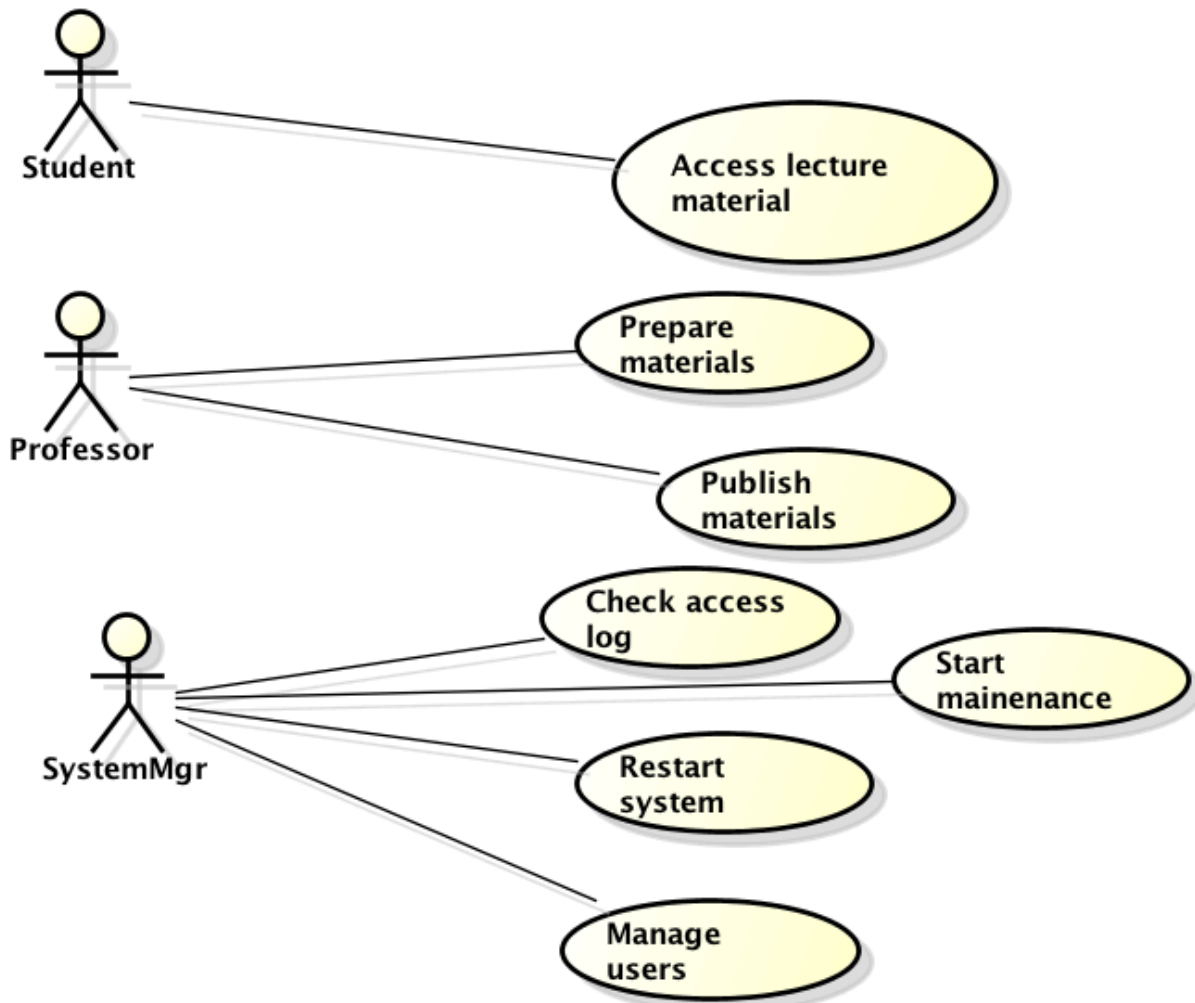
**System manager:** keep the system up and running, solve problems

**External learners:** ?????

2. Identify the scope of the system

|                             | IN | OUT |
|-----------------------------|----|-----|
| Web server                  |    | X   |
| Web application             | X  |     |
| Slides preparation software |    | X   |
| Video recording             |    | X   |
| Video post processing       | X  |     |

3. Identify the actors and their relative goals



4. Write the use-cases

**Use case:** use the system

**Scope:** online material manager

**Level:** summary

**Intention in context:** provide the students with access to professors' materials

**Primary actor:** -

Stakeholders' interests:

Preconditions:

**Main success scenario:**

1. the professor [prepare the materials](#)
2. the professor publishes the materials
3. the student [access the materials](#)

The steps are repeated until the end of the course.

Extensions:

**Use case:** prepare materials

**Scope:** online materials manager

**Level:** user-goal

**Intention in context:** the professor wants to upload and prepare materials

**Primary actor:** Professor

**Stakeholders' interests:**

**Preconditions:**

- the professor authenticated himself with the system
- ~~the lecture the materials refer to has been given~~ (*difficult to be detected by the system*)

**Main success scenario:**

1. professor asks the system to insert a new lecture and provides the basic information
2. system validates the information and ask to upload the materials
3. professor uploads a file
4. system validates the file  
*Steps 3 and 4 are repeated until all files have been uploaded*
5. professor terminates uploads
6. system provides a summary of the materials
7. professor confirms
8. system stores permanently all the materials.

**Extensions:**

7a. professor does not confirm: the use case continues with step 1.

3a. The professor terminates the uploads without having uploaded any file:

3a.1. systems notify error (at least one file must be uploaded)

3a.2.. The use case continue with step 3 OR

3a.2. The use case terminates with a failure.

~~3b. Time out during upload~~

3,5.a. Time out during upload or at upload termination:

5a.1. the system erases all the file uploaded up to now

5a.2 the use case terminates with a failure

7a. Time out at final confirmation:

7a.1: the system stores the files permanently, but the lecture is stored in a temporary state.

1a. there is at least one lecture in temporary state:

1a.1. Temporary lecture confirmation (sub-function use case)

2a. Validation fails because of missing or invalid data: go back to step 1

~~2b. Validation fails because of invalid data~~

4a. Validation fails because of invalid file format (see NFR ?) or excessive file size:

4a.1. system shows error message

4a.2 continue with step 3

~~4b. Validation of file fails because size of file is too large~~

\*a. The system is under maintenance:

\*a.1. system show a static "under maintenance" page

\*a.2. the use case end with a failure

4b. Out of storage memory:

4b.1. The system shows an error message

4b.2. The use case ends with a failure

**Use case:** publish materials

**Scope:** online materials manager

**Level:** user-goal

**Intention in context:** the professor wants to make the materials public

**Primary actor:** Professor

**Stakeholders' interests:**

**Preconditions:**

**Main success scenario:**

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**Extensions:**

**Use case:** access materials

**Scope:** online materials manager

**Level:** user-goal

**Intention in context:** the student access published course materials

**Primary actor:** Student

**Stakeholders' interests:**

**Preconditions:**

**Main success scenario:**

...

**Extensions:**