# **WS Project**

This activity intends to stimulate the students to develop a prototype called MyExam using Web Services technologies. This system should allow users to remotely manage digital content information (not the content itself) within a web services system. The contents are already uploaded to an RMI server.

## **Basic Functions [5 points]**

- The web service generates a unique key for the new uploaded exam if it does not exist in the global directory (WS).
- Store in the global directory (WS) exams description, date, time and location.
- Modify exam's description.
- Delete exam (if it has no grades).
- Search exam content using the key or search them using textual description (full/partial search).
- Download exams information. By Id or listing all the contents in the system.

#### **Advanced Functions [5 points]**

- Upload grades to an exam.
- Download student's grades.
- Manage student's access (by ID).
- Store and retrieve all of your exams' information in a database in your web services server.
- Use a Data source in order to manage data information.

## **Integration Functions [2 points]**

- Create an exam on the WS after uploading the csv file to your RMI server.
- Students should validate its ID before starting an exam. It receives, in exchange, servers' connection details.
- Store grades on the WS.

You are free to implement new features that you consider convenient as long as you maintain the main features and architecture.

# **Instructions**

Working in pairs or individually and develop the project. There will be a penalization in case of late delivery up to -2 points.

#### Deliveries:

- Prepare a presentation in English language in order to show the project and its execution. The document should include the following contents:
  - 1. Describe the classes implemented and the corresponding UML diagram.
  - Include the endpoints with their operations, resulting codes and representations as in the movie database.
  - 3. Include a screenshot of each case execution. Describe and explain the outcomes.
  - 4. Include the github reference to the code. It is important to produce clean and encapsulated code.
  - 5. You should justify your solution. Remember to include the hours dedicated to this project.
- Execute the main use cases at the end of the presentation in order to show the result of your project.

#### References

The movie database. https://developers.themoviedb.org/3/getting-started/introduction