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.
    2. 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