

## **TEAM PROJECT PROPOSAL**

**DUE DATE: scheduled on LÉA**

### **OVERVIEW**

This is a team activity. In this deliverable, you will document the design of a REST-based data exchange Web service.

### **SPECIFICATIONS**

The RESTful Web service you are proposing must:

- Be REST-based and support CRUD operations on resources.
- Expose a set of collection resources.
- Support relationships among resources.
- Support filtering and pagination of data.
- Expose at last two composite resources.
- Must use a relational database to manage and store data.
- Produce different representations of resources.
- Offer at least 7 different resources.
- Incorporate client authorization and authentication.

### **REQUIREMENTS FOR THIS DELIVERABLE**

You are required to write a document containing the following sections:

1. List of identified resources that will be exposed by your Web service.
2. A data model design for the database to be later implemented. An ER diagram representing your database entities and their relationships must be included.
3. For each resource you identified, provide:
  - a. A detailed description.
  - b. The operation(s) supported by your service. Define the operations in terms of HTTP methods.
  - c. For each operation, design a URI.
  - d. The kind of representations your service will provide for the resource.
  - e. Filtering and pagination operations (if any).
  - f. Design the URIs for naming/identifying the resource.
4. Define resource URI through relationships.
5. Map HTTP response codes to operations your service will perform on resources.
6. Description of at least two composite resources.
7. Identify and design collection of resources.
8. For each collection, document:
  - a. Filtering operations (options and parameters).
  - b. Pagination operations (options and parameters).

## EVALUATION CRITERIA

		POINTS
<b>Completeness</b>	Compliance of the submitted report with the stated requirements.	40
<b>Correctness</b>	Of the data model.	20
<b>Design</b>	Proper design of RESTful Web service. Appropriate identification of resources and design of URIs. Expressiveness of resource relationships through URIs. Relevance of filtering and pagination operations.	40
<b>Total</b>		<b>100</b>

## WHAT TO SUBMIT

- Submit a PDF document to LÉA.