

# Internet Multimedia Engineering

## EXAM

### Internet Programming

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## Group A

Implement a series of functions necessary to catalog library books via **REST API**. In more details, it is necessary to define:

- an **entity** to represent **books**;
- an **entity** to represent the various library **customers** (*readers*);
- a **relationship** to represent the **loan of a book to a reader**.

For **each question** the following **bonus** are applied:

0.50 **points** if the **code** is **correctly indented**;

1.00 **points** if the **variable names** are **related to the context** (it is more **simple** the **understanding** of the **code**):

#### Examples

- If I have to **refer to the book entity model**, the **correct name** can be **book**, **books**, etc. and **not** **entity\_1**, **entity\_a**, or **entityA**;
- If I have to **refer to the book - customer relationship model**, the **correct name** can be **BookCustomer**, **book\_customer**, etc. and **not** **relationship\_1**, **relationship\_a**, or **relationshipA**;

0.50 **points** if the **variable** and **function names** are written in **english** (de-facto standard in the **programming**);

0.75 **points** if the **code** is well **commented** in **english** (improves the **understanding** of the **code**).

**6 Points** 1. **Registration, update, deletion** of a **new book**.

**6 Points** 2. **Registration, update, deletion** of a **new customer**.

**13 Points** 3. **Registration, update, deletion** of a **loan**.

**5 Points** 4. Add a **standard authorization mechanism** to all the functions defined in the **REST APIs**.