

Internet Multimedia Engineering

EXAM

Internet Programming

Alex Carrega – *alessandro.carrega@unige.it*

13th June 2024

Group A

Implement a series of **REST API** functionalities for a simple task management system. In more details, it is necessary to define:

- an **entity** to represent **tasks**;
- an **entity** to represent the task **categories**;
- a **relationship** to represent the **tags**.

In particular, in each task must be present the following data:

- **status** (completed or not);
- **date of completion** (or *none* if not yet completed);
- **belonging category** (exactly **1**);
- **zero or more tags**.

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. **Creation, update, deletion** of a **task**.

6 Points

2. **Creation, update, deletion** of a **category**.

13 Points

3. **Creation, update, deletion** of a **tag**.

5 Points

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