

## **TECNOLOGIE DEL WEB 2022/2023 (VER 1.0)**

Prof. Alfonso Pierantonio

### **1. Project Requirements**

The project consists in designing and implementing a Web application according to the methodology and the technologies illustrated and developed during the course. This document describe cross-cutting requirements the application must satisfy.

The application must be realized with a combination of the following technologies:

- PHP
- MySQL
- HTML/CSS
- JavaScript, jQuery, etc
- templating

The requirements are

### **2. Project size**

The application must have at least

- 18 SQL tables

The number of SQL tables refers to the overall number of tables (including relation normalizations).

### **3. Methodology**

The application must be realized by adopting

- separation of logics,
- session management, and finally
- generic user management (authentication/permissions).

Missing one of the above might correspond to a non sufficient score for the project. More in details:

#### **3.1 Separation of Logics**

The separation of logics has to be realized by using

- `template2.inc.php` illustrated and distributed during the course

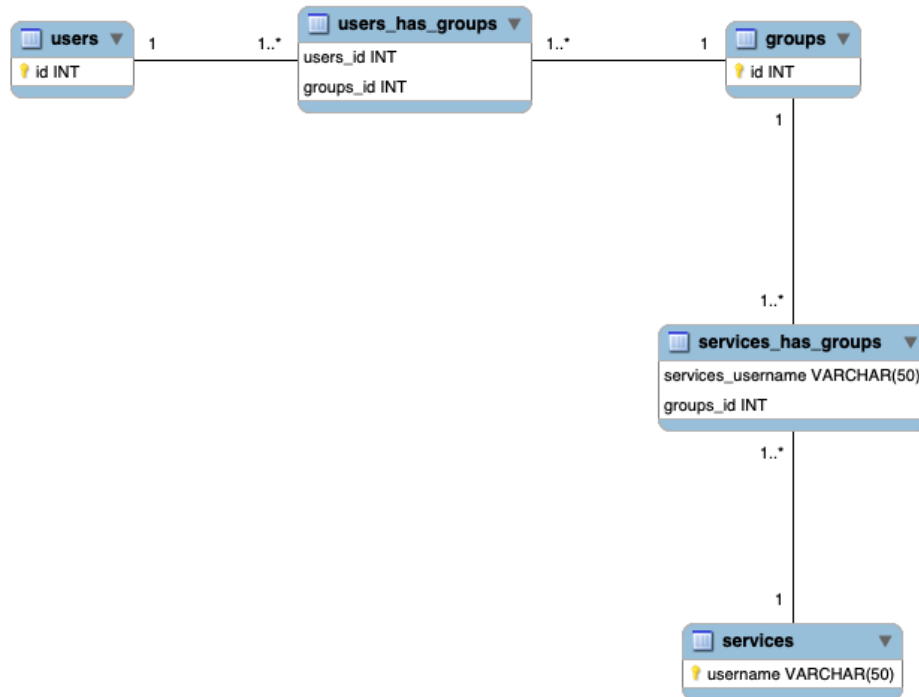
Important: other template engines must be agreed with the lecturer.

#### **3.2 Session Management**

The application must use session management for realizing session persistent abstractions, e.g., e-commerce cart, authentication, preference management, etc.

### 3.3 Generic User Management

The application must have an advanced user management, which relies on the classical model users-groups-services as outlined in the following diagram:



Please consider that the above diagram is a *simplified* version, i.e., it only contains the relevant information (e.g., primary and foreign keys).

Important: not fulfilling this requirement corresponds to a rejection of the project.

### 4. Graphic Layout

It is not requested that the HTML/CSS graphic layout is realized on your own. The candidate is prescribed to adopt one layout chosen from template repositories or even from existing website. The evaluation of this aspect corresponds in assessing whether the chosen layout is appropriate for the proposed web application, i.e., the layout evaluation will contribute to the overall evaluation.

Please note how the evaluation will be on the chosen layout regardless whether it has been downloaded from an existing layout or it is realized from scratch by the student.

### 5. Backend

Depending on the kind of application, the backend (see next Section) can have a different layout. In this case, the following factors will be evaluated:

- coverage: the application must provide all the CRUD operation that are needed to manage any dynamic aspect
- usability: the application must be usable and provide a comfortable environment
- functionality: the application must be well-thought and organized to maximize productivity

## 6. Material to be submitted for the examination

The application must be freely accessible by the lecturer:

- the application can be deployed online
- the application can be installed on a laptop

The developed PHP code must be printed (please omit standard libraries, like smarty or template), in case relevant JavaScript code is developed it can be included. Finally, the entity/relationship diagram must be printed on a A3 sheet.

Please note that the lecturer might not want to evaluate projects not fulfilling the above requirements.

## 6. Project team

The project must be realized in teams consisting of two or three students. Teams with just one person are not allowed, in exceptional cases they can be discussed and agreed with the lecturer.

## 7. Project revisions

The candidate can request a project review before the examination during the the student hours, possible reviews are related to the following aspects:

- discussing the kind of application: *you can send an email to the lecturer describing the kind of application and the applicative domain (no more than 4-5 lines text)*
- discussing the chosen graphic layout: *you can send an email to the lecturer with the url of one or more graphic template making sure to describe the kind of application*
- discussing the database schema: *only by an appointment*
- discussing general aspects: *only by an appointment*

## 8. How to contact the lecturer

Contacting the lecturer via email ([alfonso.pierantonio@univaq.it](mailto:alfonso.pierantonio@univaq.it)) to request an appointment is possible. Please do not pose technical questions and issues by email, they won't be answered (the candidate is invited to contact the lecturer for an appointment). Appointments can be requested directly from the homepage of the lecturer (<https://disim.univaq.it/AlfonsoPierantonio>).