# Second term project of Server-side web development:

# P1. Messaging application

### Introduction

The project consists of creating a web application that allows users to exchange messages. It is similar to the usual internal messaging systems in companies or a webmail system.

# **Basic functionality**

- A1: Access: Users access the application with a username and password that are stored in a database.
- A2: Sending: Application users can send messages to other users (the recipient is chosen by name).
- A3: Inbox: Users will be able to see a list or table with the messages that have been sent to them, differentiating between read and not. In the inbox the complete messages are not read, there is only the subject or the beginning of the message.
- A4: Messages: They will also be able to consult each message individually. Here if the full content is read and there is also the opportunity to respond.
- A5: Outbox: The user will be able to see a table with his sent/her messages. Messages
  will be sorted by date sent, most recent first. In the table you must see the recipient of
  the message. From this table, users must be able to access each message. Users will
  be able to see if the recipient has opened the message or not.
- A6: The connection data to the database and to the mail server must be stored in files.

### **Extensions**

Each student / group will choose from the following which extensions to add to their application. Extensions 1, 2, 3 and 4 can obtain a maximum grade of 0.5 points. The rest can obtain a maximum of 1 point.

# E1. Encrypted user password

• Store the user passwords using an encryption method.

# E2. Self-registration

- Realistic process for users to register on the website.
- To get the full score, you have to include an email with an activation link.

# E3. Password recovery

- Realistic process for users to retrieve their password or generate a new one.
- If the solution is to send a new key (or the current one), without having to perform more operations, only half the score will be obtained.

# E4. Profile image.

- Users will be able to upload (and update) an image to use as a profile image.
- It has to be visible to other users.

# E5. Messages to multiple recipients

Allow to enter more than one recipient in the message submission form.

#### E6. Administration zone

- Develop a zone only visible to some users (depending on their role).
- In this area you have to implement tasks typical of an administrator. For example, block or unblock users.

#### E7. Attached files

Allow to attach files to a message.

# E8. Images

- Allow to insert images as part of a message.
- For this extension to be considered correct, the images must be viewed directly when viewing the message, not as attachments or following a link.
- If the application does not allow sending to more than one user, in this extension only half of the score can be obtained.