Project of the first term of Web Development in Server Environment: 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.

Optionally, an application can be developed with an approach more similar to Telegram or WhatsApp.

The application will be developed using PHP and MySQL / MariaDB.

Basic functionality

- Access: Users access the application with a username and password that are stored in a database.
- Sending: Application users can send messages to other users (the recipient is chosen by name).
- 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.
- 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.
- 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. Each upgrade can earn a maximum grade of one point.

A1. 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.

A2. 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.

A3. Messages to multiple recipients

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

A4. Encrypted user passwordencrypted user

- Store theaccess codes in the database.

TO 5. User avatar

- Users will be able to upload an image to use as an avatar.
- It has to have some consequence in the application. For example, that the avatar appears in the messages that a user sends, or that it can be seen when accessing their profile.
- They can also update it.

A6. User profile

- Users will be able to enter and modify a series of data about themselves, such as age, city of residence, hobbies or their avatar.
- Other users must be able to access this information.

A7. Friendship

- Two users can establish a friendship relationship with each other.
- One of them starts the process by sending a request, which the other has to accept or reject.
- It has to have some consequence in the application. For example, that you can only write to friends or that a user's profile is only visible to their friends.

A8. Groups

- Option 1: Develop a group system similar to Telegram or WhatsApp.
- Option 2: Allow the creation of groups that are collections of user names. When you send a message to one of these groups, it is sent to each of the users.

A9. Administrationadministration

- zone Develop anzone 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.

A10. Attached files

- Allow to attach files to a message.

A11. Images

- Allow to insert images as part of a message.
- For this enlargement to be considered correct, the images must be viewed directly when viewing the message, not as attachments or following a link.

A12. Testing

- Incorporate acceptance testing with Codeception.
- The grade is proportional to the number of sections tested.

A13. Outbox

- The user will be able to see a table with his sent messages, similar to the inbox. Messages will be sorted by date sent, most recent first.
- In the table you must see the recipient of the message. If there are several, it can be indicated by putting “Several”.

- From the table you can access the detail of each message, as in the inbox. In the detail of the message, the complete list of recipients must appear, indicating which of them have read it.
- If the application does not allow sending to more than one user, in this extension only half of the score can be obtained.

A14. Presentation

- Public presentation of the application in the classroom.
- Includes description of the development process and demo.
- The grade is proportional to the number of sections made.

Things to turn in

- Script to create the database. It should contain sample data.
- Complete code of the application.
- A PDF document of maximum 30 pages with:
    - Requirements specification. It must include a table indicating which extensions have been made.
    - E / R scheme.
    - Logical model of the database.
    - Database diagram obtained with SQL Developer.
    - Screens map.
    - Summary table of the controllers that are part of the application.
    - User manual, including a description of the data loaded into the database (users, passwords, groups ...)
    - For each extension, the corresponding section will be included in the documentation.
    - The work is delivered through the virtual classroom.
    - It can be done in pairs. Each member will have to upload the work separately. In addition to the delivery in the virtual classroom, the work must be presented to the teacher in the classroom. The date and time of this presentation will be informed through the virtual classroom.
    - Works uploaded to the virtual classroom that have not been presented in the classroom will not be corrected.
    - The work must be uploaded to the virtual classroom before presentation to the teacher.
    - For the practices carried out in pairs, the qualification will be obtained by multiplying the work grade by 0.8.
    - IMPORTANT: Remember to delete the data from your email account.

Score

Basic functionality (4 points)

- PDF documentation and sample data (excluding parts only relevant to extensions): 30%
- Documentation and code quality: 10%
- Error control: 20%
- Functionality: 40%

Extensions (1 point each a)

- Documentation in PDF and sample data: 20%
- Documentation and code quality: 10%
- Error control: 20%
- Functionality: 50%

Table of enlargements carried out

ENLARGEMENT	MADE (Y / N)
A1	
A2	
A3	
A4	
A5	
A6	
A7	
A8	
A9	
A10	
A11	
A12	
A13	
A14	