FIRST TERM PROJECT, SERVER-SIDE DEVELOPMENT: **MESSAGING APPLICATION**

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Introduction

This web application consists of a GMail based functionality. It consists of several screens where you can select users which exist on the app database to send them mails. Creating groups, changing profile data or resetting passwords are some other possible functionalities.

Extensions table

ENLARGEMENT	MADE (Y / N)
A1	Y (but not working properly)
A2	Y (but not working properly)
A3	Y
A4	Y
A5	Y
A6	Y
A7	N
A8	Y
A9	Y
A10	N
A11	N
A12	N
A13	Y
A14	Y
A15	N
A16	N

E/R Scheme (ideal)

The ideal E/R Scheme was something similar to what we can see below. However, relations itself were not created during the development of the webapp (even though it works properly), and together with the new entities that Symfony creates itself, the scheme turns into a different one. We can see it in the section "Logical Model" just below.
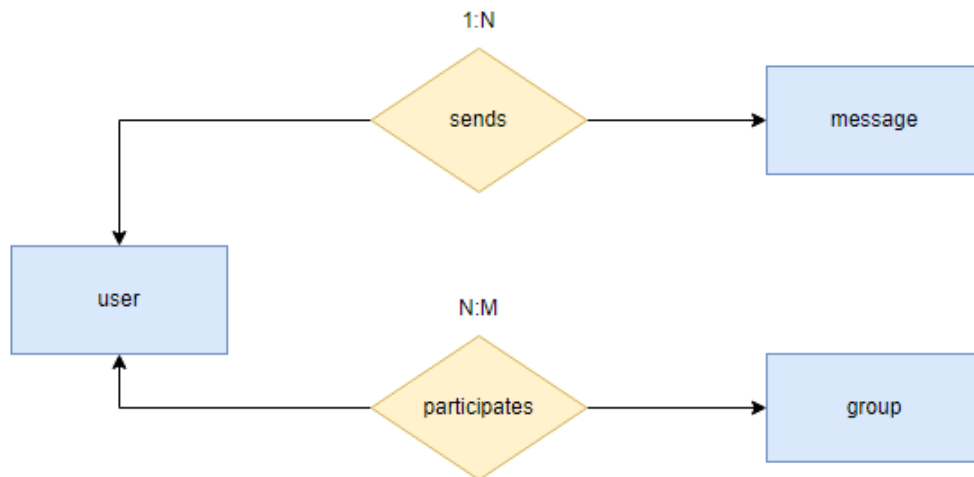
Logical model
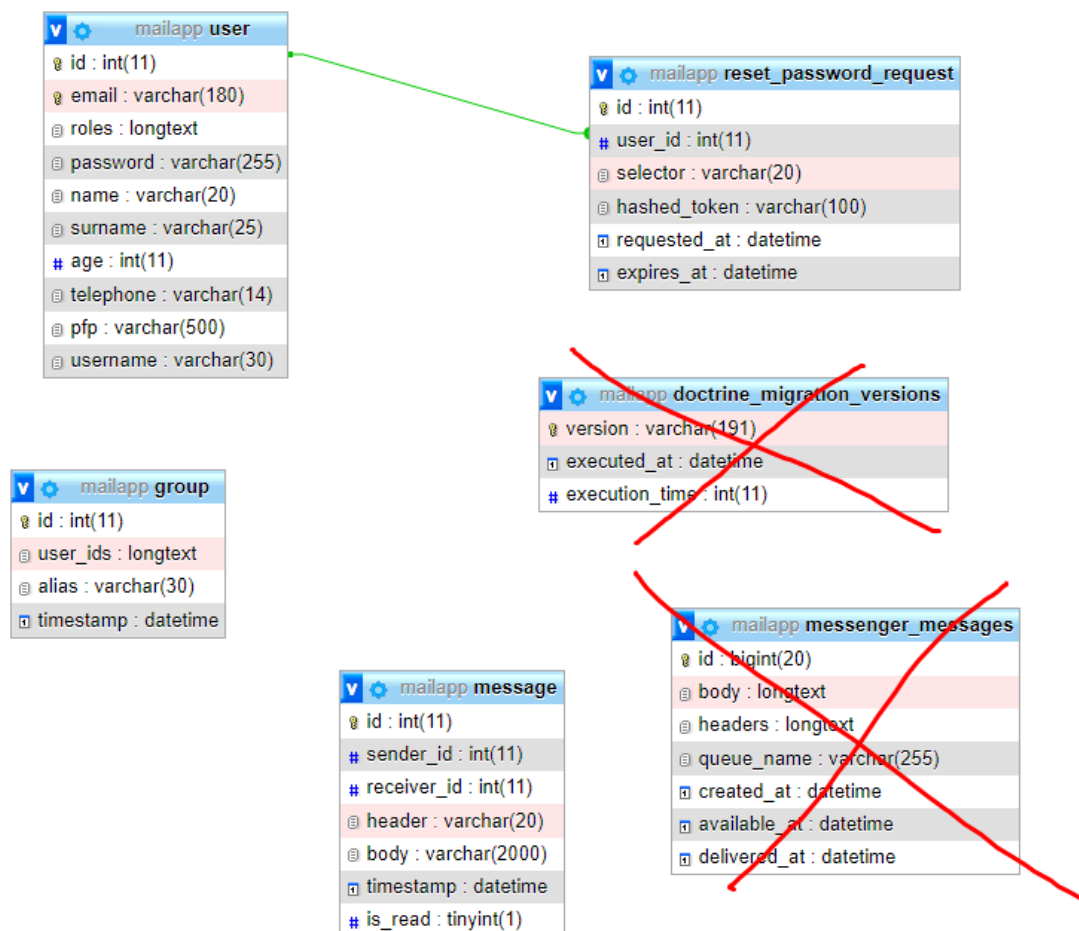
The tables crossed out are tables created by Doctrine.
There are no relations at all, but working with IDs makes the functionality possible, so there will not be any further problems.

User manual

Previous indications

- The interface is not very well done. It contains Bootstrap, some inline CSS in HTML tags,etc. There are even pages without any CSS, but all this is just to be able to differentiate between the different sections of the application, and it is not going to be graded.

- Emails will be sent by "talesdemiletoxd@gmail.com", a personal email address used to test things like this. This email will send verification and password recovery messages.

- AJAX is not implemented, so to check the new emails inside your inbox or outbox you may need to refresh the current page (or pressing F5.

Requirements

- PHP >= 7.1
- Symfony 6
- Composer
- Doctrine
- yarn
- MySQL
- XAMPP

Usage

Installation

WARNING: I recommend executing every command in the windows CMD. Some of this may fail if you try to execute them, for example, in the Visual Studio Code terminal, or similar ones.

After downloading / cloning the project, you will need to install all the dependencies and extensions added to it. This is simple, yo will just need to run the following commands:

- **$ composer install**
- **$ yarn install**

If you do not have yarn, you will need to install it first:

- **$ npm install --global yarn**

The extensions added with yarn can also be added with npm, but I recommend you to use yarn, just in case it leads to any problem.

> this first command should not be necessary, but here it is, just in case

- **$ yarn add --dev @symfony/webpack-encore**

> this one must be run

- **$ yarn encore dev**

Because of Bootstrap, you may also need to run the command below, but the terminal itself will tell you how to solve any of these problems:

- **$ yarn add sass-loader@^12.0.0 sass --dev**

Database

OPTION 1: <u>Empty data</u>

WARNING: If you do this, you will need to add the root user from scratch, directly from PHPMyAdmin.

In order to create the database, you will need to create the database and migrate the last version found in the project. To do this, you will have to run the following commands:

- **$ php bin/console doctrine:database:create**

> (a migration will be found inside the project, so you should not need the following command)

- **$ php bin/console make:migration**

Now you can choose one of these commands. The second one is quite direct and insecure in some terms, but it should work perfectly if the migration fails:
- **$ php bin/console doctrine:migrations:migrate**
- **$ php bin/console doctrine:schema:update --force**

OPTION 2: Database creation + Initial Data (RECOMMENDED)

In the file assets/documentation you will be able to find a .sql file with the database and some initial data for it. You can use this file and import it in PHPMyAdmin. You just need to create a new database called **mailapp** and import in it the file mentioned before so that you can have your example data ready!

Initial Data

There are already some users, messages and groups created.
For every user, the password is: 123456
Some users to try:
- pepe@gmail.com
- alfredo@gmail.com
- luis@gmail.com
- mauro@gmail.com

Root user (login)
- Email: root
- password: 123456

Full Usage

Before using the app, we will need to start our Symfony server by typing the next command:
- **$ symfony server:start**

You can also use the following to have the server running in the background:
- **$ symfony server:start -d**

Once this is done, together with the Apache and MySQL from XAMPP started, you can fully use the application!

First of all, you will see a landing page where you can even Login or Register.

MailApp
Tell your friends!
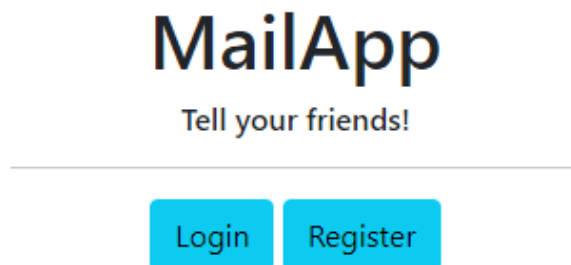
[Login] [Register]

Clicking to your login page will send you to a simple form where you can enter into your account.

MailApp

Email:

We'll never share your email with anyone else.

Password:

Login

Reset your password!

Or register if you don't have an account!

In case we need to reset our password, we can click on the yellow button, which will send us to another simple form where you can insert your email to receive a message with another link, in which you can reset your password (but it is not working properly).

Reset your password

Email

Enter your email address and we will send you a link to reset your password.

Send password reset email   Go to landing page

In other cases, you may want to create a new account for the webapp, so you can click register and enter another simple form to register.
Indications:
- Email: well formatted (xxx@xxx.xxx).
- Password: 6 characters min.
- You need to agree terms.

Register

Name:

Surname:

Username:

Age:

Email:

Password:

Telephone:

Profile Picture: [Seleccionar archivo] Ningún archivo seleccionado

Agree terms ☐

[Register]

After registering you should also receive a new message to your official email manager to get an activation link for your account, but once again, automatic emails are not working.

In case you logged in and you are able to enter the app, the first screen you will see is the Home page, where you have a simple navbar with all the options and your Inbox (basically, the homepage is the inbox).

MailApp   Home Outbox Send Message Groups Profile Logout

Inbox :: alfreeznx

	luis@gmail.com	**Help** Hey, do you need help w... 2022-03-02 09:54:05	
	root	**rerererrere** asdasddsadsaasdasddsa... 2022-02-28 22:54:42	☑
	cordero@gmail.com	**0la chicos** 0la 2022-02-28 21:33:54	☑

As we can see, the full content of the message is not shown, and there are 2 messages with a small symbol on the right. That is a seen indicator. Whenever you open a message to see it, that symbol will appear.

You can see full messages by clicking on them.
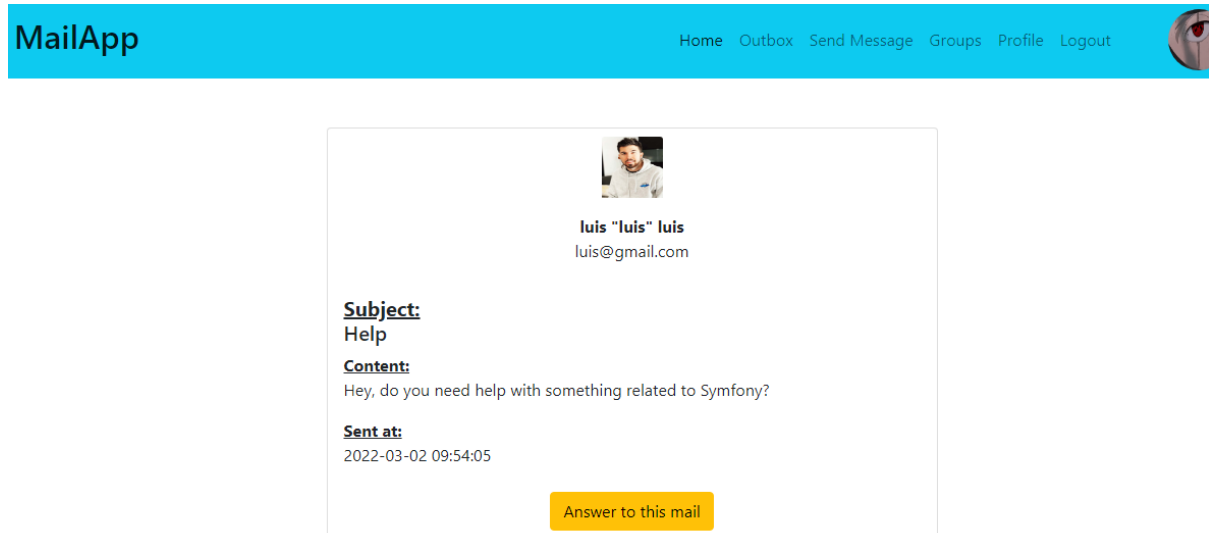
You can see the full name with the username between quotes (""), the subject of the email, its content and when it was sent. You can also see a yellow button to answer, but first, let's check the seen indicator.

And as we said, once you see the message, the seen indicator appears (but this is only possible for the inbox messages).

Going back to our received messages, once you click the yellow button, you will be sent to the usual Send Message form.

The default Send Message form is this one:

Send Message

From: apgalle03@gmail.com
To:
Head:
Body:

Send Email   Delete

Or you can send a message to several contacts

But in this case, the form will be this one:

Send Message

From: apgalle03@gmail.com
To: luis@gmail.com
Head: Re: Help
Body:

Send Email   Delete

The "To" slot will be automatically filled with the other user's email and the head will be filled with "Re:" together with the initial head of the message.

Once we send the message, we will be redirected to our Home, and we can check if we sent it correctly by entering the Outbox.

Outbox :: alfreeznx

	luis@gmail.com	**Re: Help** I've just finished! Thank ... 2022-03-02 10:03:42
	cordero@gmail.com	**[amen]** **alfreeznx:** a<sxasdasdsda 2022-03-01 23:54:25
		[amen]

As we can see, the message was sent correctly.

Now, let's check the part left in the Send Message section!

Head:

Body:

Send Email   Delete

Or you can send a message to several contacts

Once we click that button, the form changes into a new one with a select instead of a text input.

Send Message (Various)

From: apgalle03@gmail.com

root
pepe@gmail.com
mauro@gmail.com
To: vir@vir.com

Head:

Body:

Send Email　**Delete**

In it, you can select any of the users inside the database anad, by pressing CTRL + click, you can choose various and send them a message.

Send Message (Various)

From: apgalle03@gmail.com

root
pepe@gmail.com
mauro@gmail.com
To: vir@vir.com

Head: multiple message text

Body:

Hey! This is just a test!

Send Email　**Delete**

If we go to our outbox:

		multiple message tex
	root	Hey! This is just a test!
		2022-03-02 10:09:06
pfp	pepe@gmail.com	multiple message tex
		Hey! This is just a test!
		2022-03-02 10:09:06
	mauro@gmail.com	multiple message tex
		Hey! This is just a test!
		2022-03-02 10:09:06

All of them have received the message!

We have seen that we can send messages to multiple recipients, but we can algo send messages to groups! We just need to go to the Groups section and click on them to send a message! If you do not have any group, you can create it on the form that appears over your group container.

New Group

Alias:

Participants:
```
root
pepe@gmail.com
mauro@gmail.com
vir@vir.com
```

[Create group] [Delete]

Groups :: alfreeznx

	amen	alfreeznx	Created: 2022-03-01 22:08:43
		pepe	
		mauro	
		zeinix	
		luis	
		cordero	

We are going to create a new group with pepe and mauro and try to send a message.
The process to create it is the same as the one to send messages to multiple recipients, CTRL + click on the people you want, add an alias and click "Create group".

Groups :: alfreeznx

		alfreeznx	Created: 2022-03-02 10:15:44
friends		pepe	
		mauro	
amen		alfreeznx	Created: 2022-03-01 22:08:43

If we click on the group, we will be able to send them a message, as the receivers will be directly selected and the head will contain the alias between brackets and the username of the sender.

Send Message

From: apgalle03@gmail.com

pepe@gmail.com
mauro@gmail.com

To:

Head: [friends] alfreeznx:

Body:

Send Email   Delete

**Due to the software architecture (and the time left for the deadline), groups haven't been optimized, so here is the explanation of the functionality. Groups are basically a set of user IDs, so this form takes all those IDs and sends them an email with a header that indicates that the message comes from a group. It cannot be printed as a full grupo due to the code. The slots of the messages from groups are displayed as a message to the first participant of the group with the alias of the group on the header.

mauro@gmail.com

[friends] alfreeznx:

Group message!

2022-03-02 10:21:19

And when received and opened, it is displayed like this:

Alfredo "alfreeznx" Puerta

apgalle03@gmail.com

Subject:
[friends] alfreeznx:

Content:
How are you?

Sent at:
2022-03-02 10:21:48

Answer to this mail

In this MailApp, we can also change some of our profile information. We just need to click on "Profile" and we will be redirected into this small form.

Customize Profile :: alfreeznx

Username: alfreeznx

Telephone:

Profile Picture: Seleccionar archivo Ningún archivo seleccionado

Save Changes   Reset

In this case, we can change the username, the telephone and the profile picture, and when we change them, it will automatically update the profile and the database:

Customize Profile :: alfreeznx

Username: alfreeznx_test
Telephone: 000000000
Profile Picture: Seleccionar archivo kakashi.jpg

Save Changes Reset

Home Outbox Send Message Groups **Profile** Logout
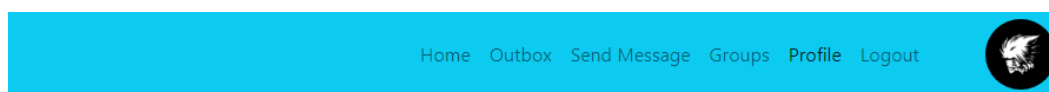
Customize Profile :: alfreeznx_test

Username: alfreeznx_test
Telephone: 000000000
Profile Picture: Seleccionar archivo Ningún archivo seleccionado

Save Changes Reset

name	surname	age	telephone	pfp	username
root	root	99	NULL	pfp_default.jpg	root
Alfredo	Puerta	19	000000000	kakashi-621f46453a607.jpg	alfreeznx_test

Finally, we have the "Logout" section, which we can just click on it and we will log out and be redirected to the landing page of the WebApp.

Extra:

For users with admin roles, there is also an **Admin Zone**.
In case you are "admin", you will be able to see this on your navbar.
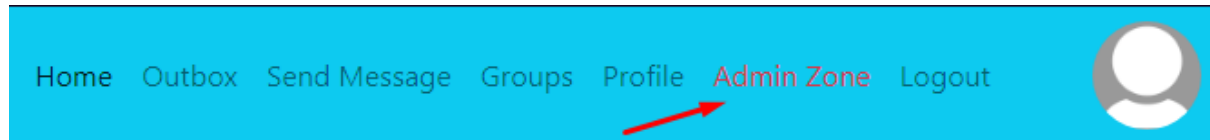
Once in there, a table will be displayed with some of the data of the users.

Now we will have two options. We can either display a user's information by clicking "Show":

User

Id	14
Email	pepe@gmail.com
Roles	["ROLE_USER"]
Password	$2y$13$iAErc5VgERmWM9JvHzJGROSAQ3HgQejDQ7iyQqzWTj7/v0q0uGizi
Name	pepe
Surname	pepe
Age	23
Telephone	
Pfp	
Username	pepe

Back to list

Delete

Or we can delete it either on the Admin Zone screen or on the display of the user itself.
Wherever we are, an alert will be displayed after we delete a user:
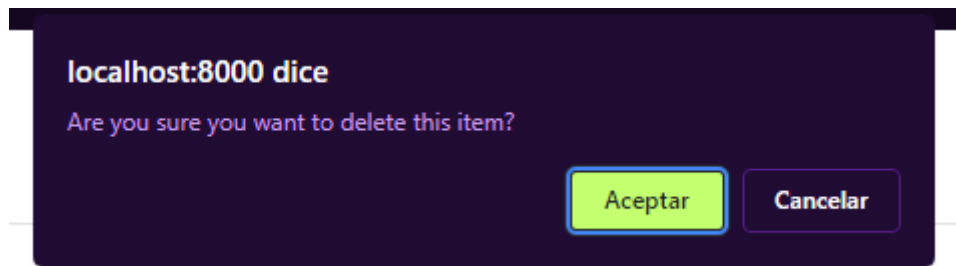
And with this, all the webapp is covered.
Hope you like it!

Controllers

- AdminController
- GroupController
- HomeController (inbox)
- LoginController
- MessageController
- OutboxController
- ProfileController
- RegistrationController
- ResetPasswordController
- SecurityController

Extensions

A1. SELF REGISTRATION (not working properly)

Done with a function that sends an email with a link. By clicking this link, the user is redirected to a page to complete its activation, but the Symfony mailer is not working properly so couldn't be completed.

A2. PASSWORD RECOVERY (not working properly)

Done with a function and a controller that sends another email with another link. This time it redirects to another page where you can reset your password, and the functionality of the emails expires in 1h. However, once again, it couldn't be possible because of the Symfony mailer.

A3. MESSAGES TO MULTIPLE RECIPIENTS

Messages to multiple recipients by a specific form with a select.

A4. ENCRYPTED USER PASSWORD

Done using the default password hashing that Symfony offers with its RegistrationController.

A5. USER AVATAR

Done with a function that stores files in a directory inside the project and returns the path to it, which is what is stored in the database.Updates are possible.
There are also default avatars in case the user does not upload any and even for groups.

A6. USER PROFILE

The profile can be updated on the same page where we can change the user profile picture. The username, profile picture and the telephone number can be updated. Other users will be able to see some of the information (admin users will be able to see everything in the admin zone).

A8. GROUPS

Groups are done with another controller and an entity. In this case, a group is just a set of user IDs, which are selected if a user wants to send a message to the group.

A9. ADMINISTRATION ZONE

Admin Zone made with CRUD (Symfony). It displays a table with all the users and their info. The admin can display a user's info or even delete it from the webapp and the database.

A13. OUTBOX

Outbox where you can see some data about the messages sent and the people who received them.

A14. PRESENTATION

Presentation of the project at class.

ALFREDO PUERTA GALLEGO DW2E