

Mock examination of Web Systems I

Duration: One hour, 30 minutes

Learning outcomes that are assessed in this examination:

- R1. Understanding of the life cycle and methodologies of Internet applications.
- R2. Acquisition of the necessary knowledge to make decisions on the methodology to be followed and the possible problems when designing an Internet application.
- R3. Be able to analyse and argue the benefits and disadvantages of different application architectures for a given problem.
- R4. Be able to communicate and explain a proposal for an Internet application.

Problem (6 points; R1, R2, R3, R4)

The shop folder contains a web application that starts a shop, although there are still many tasks to be done before it is complete.

Paragraph 1.

Change the code necessary for the application to start by executing the following instruction:

```
npm start
```

Paragraph 2.

Currently no new users can be registered in our application. The following tasks are requested to fix this:

- Add a registration page in the /registration path that has a form that allows the user to enter their username, password and another field where they have to repeat the password. Create this page as a template following the structure of the other pages.
- Add a link to the registration page in the navigation menu that is only visible if the user is not logged in.
- Perform the following validations on the client side: check that the two password fields match and that the password is at least 8 characters long. If any of the above fails, display a message to the user. Only if everything is correct, send the data to the server.
- Re-validate the data on the server and check that the user does not exist. If there are any problems, redirect him/her to the registration page informing him/her of the problem. If everything is correct, save the user information by encrypting the password. Also, log the user in and redirect to the /restricted path. Check that if the user who has just registered logs out, he can log in again later.