

# A joint Digital Transformation and Software Engineering PROJECT

## INTRODUCTION

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EFREI Paris wants to develop a solution that will help improve the follow-up of internships. It must include the following:

- 1) An electronic document management system to archive all the reports about internships.
- 2) An internship follow-up system for internship tutors.

## FEATURES OF THE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM

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### Existing system

The students send their reports to the tutors by e-mail (academic and enterprise). All the students must also submit intermediate documents (see the Excel screenshot on the last page).

### New system

- 1) Only the final report and the "Cahier des charges" will be saved. Please propose solutions to digitalize the other documents.
- 2) Search engine:
  - It must allow an easy search of documents and make available the access to students.
  - The search could be by keyword(s).
- 3) It allows the students to submit their reports before a deadline.
- 4) The report becomes readable for the students and teachers only after validation of the academic and enterprise tutors.
- 5) The access must be restricted to three (3) profiles: an admin, a tutor, and a student profile. Please come up with propositions and ideas about what each of these profiles can or cannot do.
- 6) All reports will have a level of confidentiality :  
*Normal level* : The document can be downloaded, copied (copy-paste), and printed.  
or  
*Sensitive level*: Read-only online but prohibited to print, copy, and download.

## FEATURES OF THE FOLLOW-UP SYSTEM

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- 1) Management of user input on the login screen
- 2) Each tutor only has access to the interns assigned to them.
- 3) List of all the interns of the current year
- 4) Add or remove an internship.
- 5) Possibility to modify fields; which fields will depend on the profile.

Propose a solution to manage as many columns as possible from the Excel model on the next page.

## UNLEASH YOUR CREATIVITY!

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You may suggest ideas for the layout and design of the pages, but :

- a) Your idea must **comply with the requirements**
- b) It must be :
  - a. **Practical**
  - b. **Simple**
  - c. **User-friendly**
- c) The navigation must be **intuitive**

## MAIN SCREEN

Below is the existing Excel file for doing the same task.  
Please design a Web interface that will at least help manage the same level of information.  
Keep in mind that more actions can be possible in your solution.

VISITE																
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## EXPECTATIONS

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1. Clean code compliant:
  - a. S.O.L.I.D. Principles
  - b. Naming
  - c. Error handling
  - d. Object and Data Structures
2. As easily maintainable as possible (good documentation is a part of that)
3. Scalable
4. Secure
5. Acceptable level of performance
6. UX Design
7. Architecture(s)
8. Pattern(s)
9. Paradigm(s) / Language(s)
10. Technologies
11. Frameworks
12. Delivery methodology
13. Easy setup/deployment/configuration
- 14. Risky and daring choices (including AI or ML in your solution, implementation of design/architectural patterns, elegant architecture, TDD or BDD, etc.)**

*This order is not based on the importance of the above criteria.*

## DELIVERABLES

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1. A **REPORT** containing -at least- the following:
  - a. A link to your remote repositories (GitHub or GitLab or...).
  - b. The URL of your deployed solution (eventually).
  - c. A clear diagram representing the architecture of your solution.
  - d. A dedicated section explaining how you think your team met the expectations (see "Expectations" section above).
  - e. Sets of credentials to test your application.
  - f. A readme section with :
    - i. Detailed instructions on how to setup/initialize/install/launch your application.
    - ii. What features did you not have time for or would like to implement in a potential future release of your solution?
  - g. A link to your video (see below)
2. The SQL script to initialize your database (can be included within your project).
3. A 10 mins max video clip :
  - a. Create this clip using the tool of your choice.
  - b. In it, you will make a convincing presentation of your solution :
  - c. A quick technical presentation: modules, packages, files, overall structure, etc....
  - d. A tour of the features via a demo
  - e. In the video, you must answer the following questions :
    - i. What is unique, original, and creative about your solution?
    - ii. What part was the most difficult to implement? And why?

- iii. What do you think of this type of project that starts with deliverables done in another course by a completely different group of students?
- iv. How did you work together, and how did everyone contribute?
- v. What are the three most important things you got from this project?

YOUR ZIP FILE MUST BE UPLOADED ON MOODLE.

DEADLINE

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**05/02/2024 @ 23:59**