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Internship Report on Web development

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Abstract

This report details a summer internship at **GEBS** (Global electronic business solutions) based in Morocco. I was beyond grateful to work within this organization where I had the opportunity to develop a website for leave management using several programming languages for both backend and frontend design in order to provide a fluent leave management system to Human resources department and GEB's employees as well. This report will take us through all the process of Website design knowledge and experience gathered during this internship period.

Acknowledgment

A special thanks to Mr. Abrghaaz the president of **Global electronic business solutions** for giving me the opportunity to work within the organization.

I would like to take this opportunity to express my gratitude to Mr. Zakraf as well that has been a source of inspiration and constant guidance as my intern trainer. Without his suggestions, trust, and encouraging support this report would have been nowhere near completion.

To all the interns, who were present during my internship period, with whom I collaborated directly or indirectly I offer to each and every one of you my earnest admiration.

Finally, I owe my deepest gratitude to all my teachers at **INPT** who prepared us for this endeavor. I owe you all my success.

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Introduction

About GEBS:

GEBS is a Moroccan company created in 2010 by engineers who studied in Germany with extensive experience in the NTIC field. GEBS develops excellent management software for the pharmaceutical sector; in addition GEBS is a certified distributor of PRINTRONIX & Tally Genicom matrix printers in Morocco, which replace IBM printers. They market computer products of renowned deferent brands.

Roles and responsibility:

Every company must have a leave management system in place, a software that tracks records of every employee's leaves. In order to ensure smooth operations related to monitoring and managing leave, I was charged to design and develop a website that automates annual leave management processes making it simpler for both employees and employers.

Web design

Software requirements:

During my four weeks internship training, I had the opportunity to use various tools and technologies.

The programming languages used are listed below:

HTML stands for Hyper Text Markup Language. It's the standard markup language for creating Web pages.

Cascading Style Sheets, is a simply designed language intended to simplify the process of making web pages presentable.
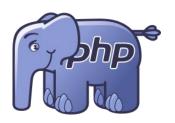
JavaScript is a lightweight, cross-platform and interpreted scripting language. It's well known for the development of web pages.

Web design

Bootstrap is a free front-end framework for faster and easier web development · Bootstrap includes HTML and CSS based design templates for typography, forms, tables

PHP is a server scripting language, and a powerful tool for making dynamic and interactive web pages.
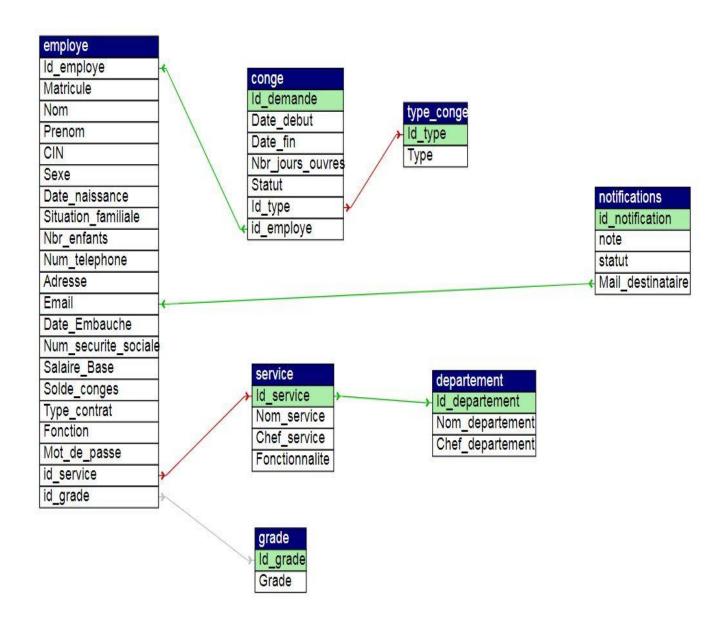
PhpMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web.
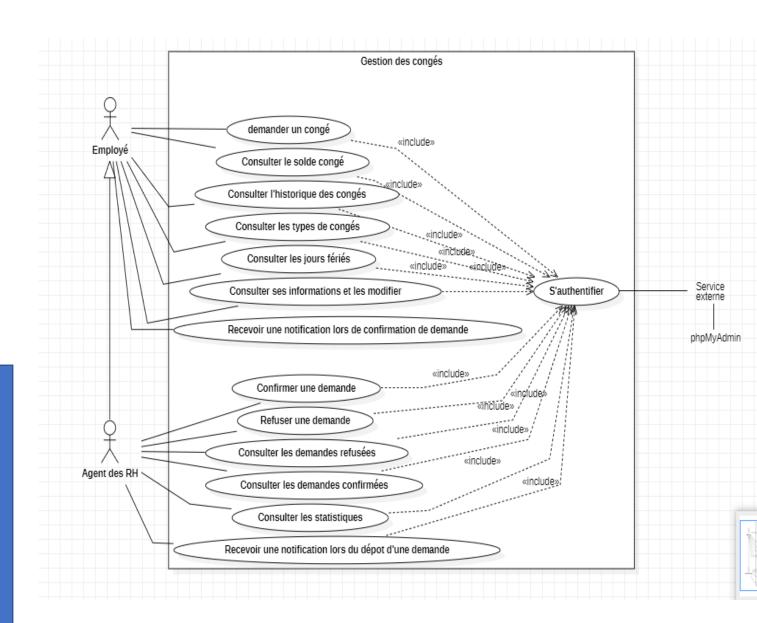
Web design

Database implementation:

- *MCD diagram:*

Web design

- *Use case diagram:*

Web design

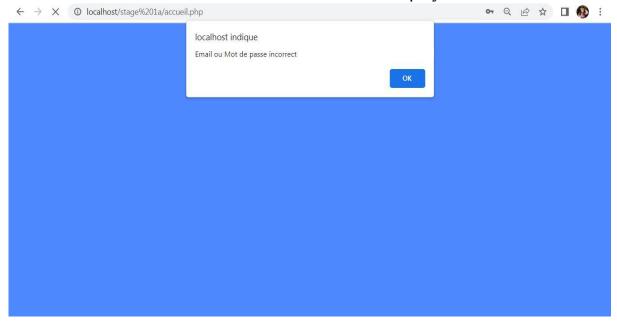## *Website's description:*

- Login page

By clicking on button "connexion" a login popup is generated where the user has to enter his mail address and password:
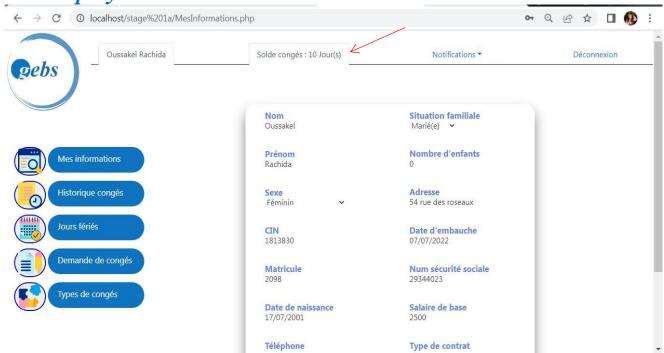
Web design

If the information needed isn't correct an alert box is displayed:

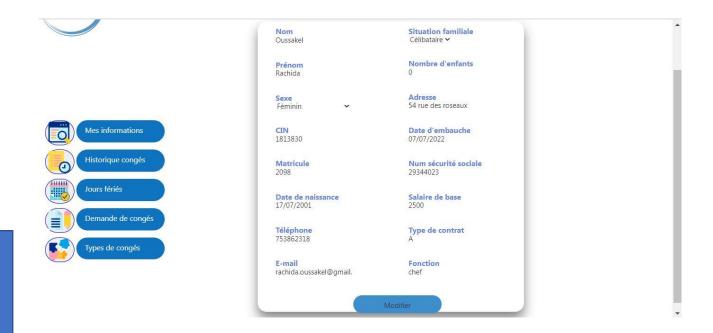Otherwise, the home page is opened:

For employees:

Web design

Home page contains mainly the employee's leave balance and other information which cannot be modified except "Phone number", "Family situation", "children's number", "home address" and "E-Mail".

For instance, modifying my "family situation" from married to single and clicking on the button below "modifier" will automatically modify the employee's data in PhpMyAdmin:
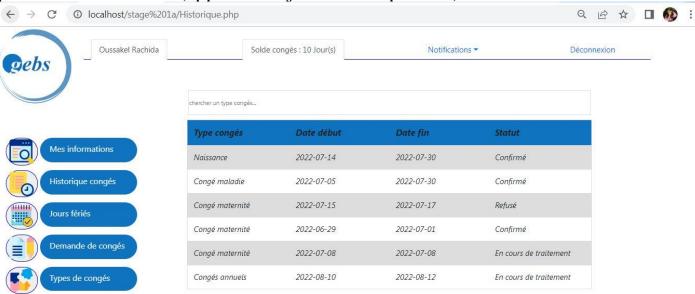

The home page contains also a scrollable menu bar on left which englobe the entire website's features:

Web design

A click on the button "Historique congés" will display a table which contains all employees' requests for leave with their type, the requested period and the status (approved/rejected or in process):
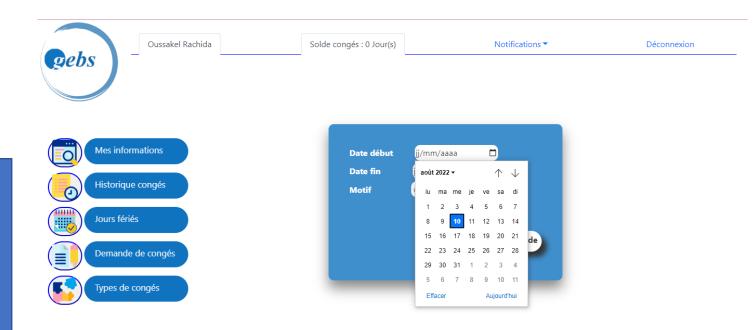

A click on the button "Jours fériés" displays a planning of bank holidays,

Web design

Applying for leaves can include a lot of paper usage which seems to be a tough challenge for most companies where the HR management is based on manual and analog techniques. Here the automation comes handy as the applications are handled online:
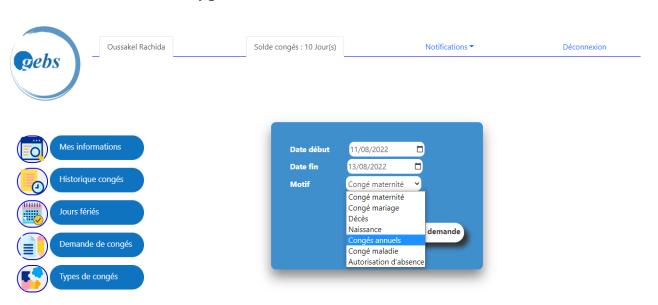
- Click on the button "Demande de congés"
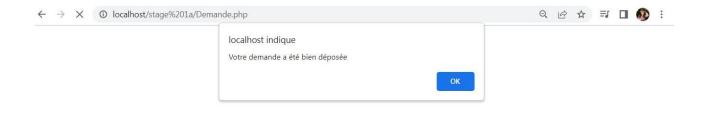- A form will be displayed
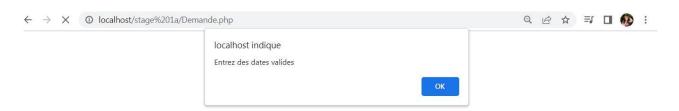- Select the start and final dates

Web design

➕ Select a leave's type:

➕ Click on "Déposer ma demande"

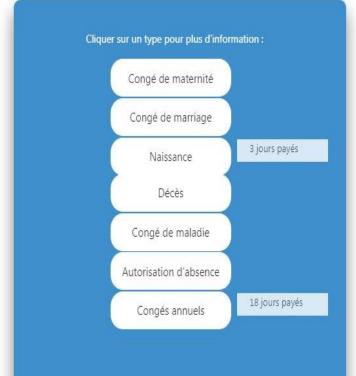! If the selected dates are mismatched an alert is displayed:

Web design

Click on "Types congés":

If you click on a specific type you get information about the leave; if it's either paid or unpaid and how many days you have the right to take off.
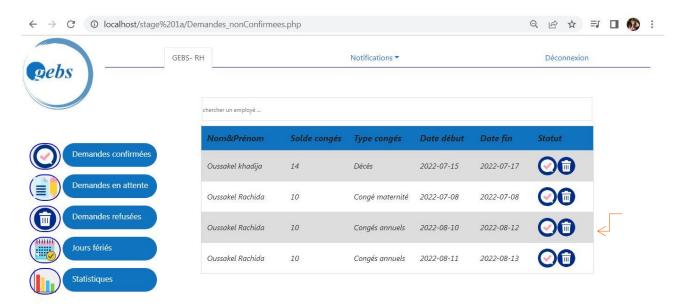
Web design

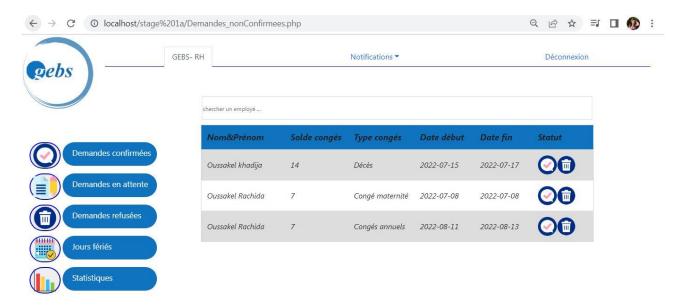## *For GEBS's HR managers:*

After logging, home page will essentially contain the employees'
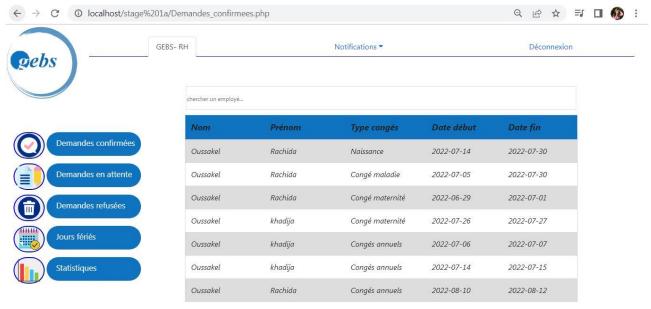applications which aren't yet processed:

Web design

By clicking on one of the buttons on the right, you either approve or reject the employee's request and the leave balance will be automatically updated:
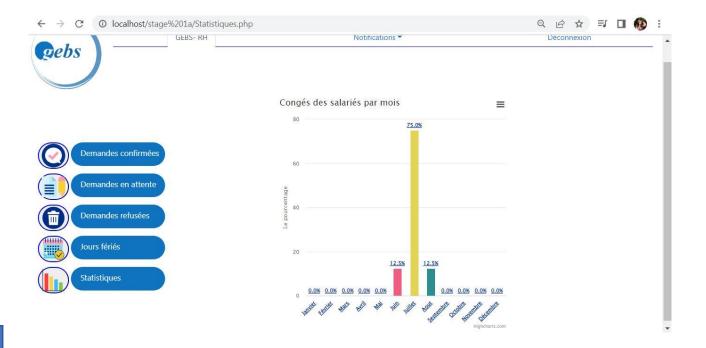

To display the approvals/rejections you have to click on "Demandes confirmées"/ "Demandes refusées":

Web design

Generating comprehensive statistics on employee leave behavior and patterns will certainly play a significant role in effective analysis and therefore enhance the decision-making efficiency.

Based on the collected data, a glance at the graph suggested that July witnesses most approvals comparing to other months.

Conclusion

*I*n conclusion, I can say that the whole internship from completed tasks to work environment was a rewarding and excellent experience.

Thanks to this project, I acquired deeper knowledge concerning web designing; there have been a lot to learn as someone with no prior experience but learning new programming languages was well worth it. Needless to say, the technical aspect of the work done isn't flawless and could certainly be improved provided enough time. For instance, the notifications' system could be managed in real time. Also, generating files filled in with the selected information for each application could be useful for the HR department.