GradeIt

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Description

●Overview:

○ Web site for small to medium schools for the administration and control of evaluation plans and student grading.

○ This web application allows teachers to entry, save, modify and review the evaluation schedules for their assigned subjects and to grade the students according to the evaluation plans.

○ Students are able to see their grades using this web app.

○ A special user, the registrar, is able to entry data about hired teachers and to make the enrollment of students.

●Goals:

○ The main goal for the development of this web application was to gain new knowledge about several technologies and plunge deeper in the Spring Boot framework.

Features

- There are (3) different kinds of users: students, teachers and registrars.

- There is a user registration to the web site (except for registrars who are registered by the web app administrator).

- Data visualization for students.

- Data entry and visualization for teachers and registrars.

- It’s a basic CRUD web application with a thin layer of business rules hard coded in the app itself.

Planning - User Stories

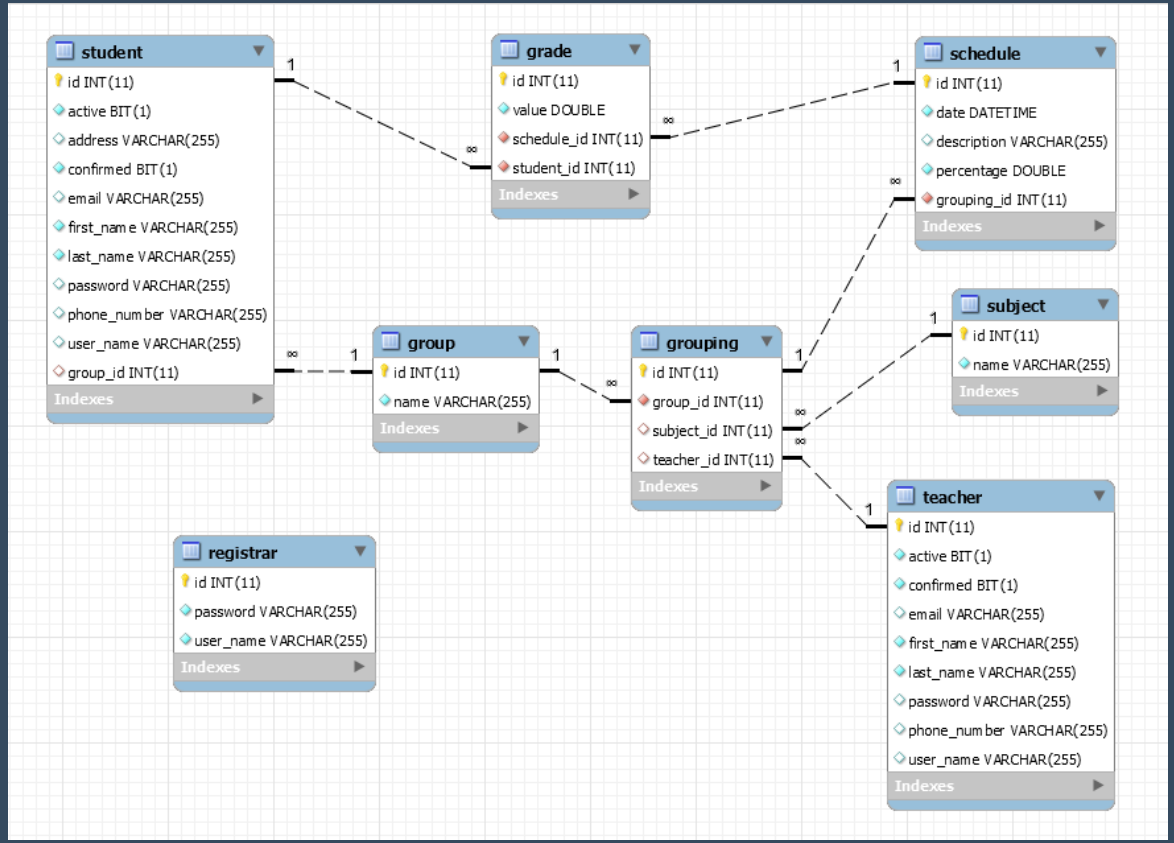
- When a user logs into the web app and depending on the type of user (his role: student, teacher or registrar) the site will display different pages.

- A student logs in and is able to see his grades for the subjects being attending.

- A teacher logs in and can enter the evaluation schedule for each of the subject he teaches.

- A registrar logs in and is able to hire the teachers, enroll the students, pair the teachers with the subjects and create the groups

Planning - Database



Technology Stack

- Java
- Spring Boot
- Thymeleaf
- MySQL
- JavaScript
- HTML, CSS
- MySQL Workbench, IntelliJ, VSCode
- Git, GitHub, Stack Overflow, W3Schools, Baeldung and 100 more…

Demo

What I Learned

- I got a deeper understanding of the Spring Boot framework, JPA and Thymeleaf.
- I learned vanilla JavaScript and the DOM.
- How to write REST API and how to call them from the client side using JavaScript and JSON

What's Next

- Replace the actual pure Java HttpServletRequest and HttpSession objects to manage sessions with Spring Security.
- Add email validation by sending an email with keys and tokens to the user.
- Reduce the JavaScript boilerplate by using JQuery or maybe React frameworks