LaunchCode Liftoff Final Project

Jose Urdaneta

- Overview and project goals

- Project Features

- Technologies used

- Code metrics

- Live demo

- Conclusions

AGENDA

- 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.

Overview and project goals

- 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.

Project features

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

Technologies used

- (6) packages

- (48) classes

- (1666) lines of Java code and about (500) lines of JavaScript

- (4) Web and (1) Rest controller classes.

- Using the CODEMR plugin for IntelliJ

Code metrics

Analysis of gradeit

General Information

Total lines of code: 1666
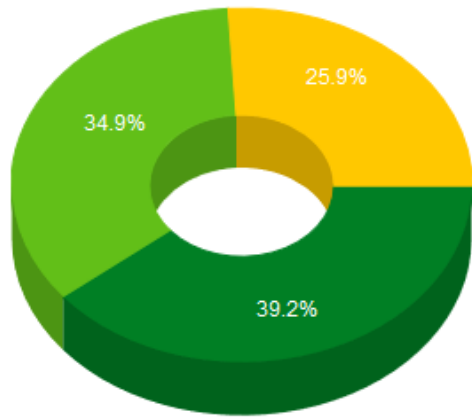
Number of classes: 48

Number of packages: 6

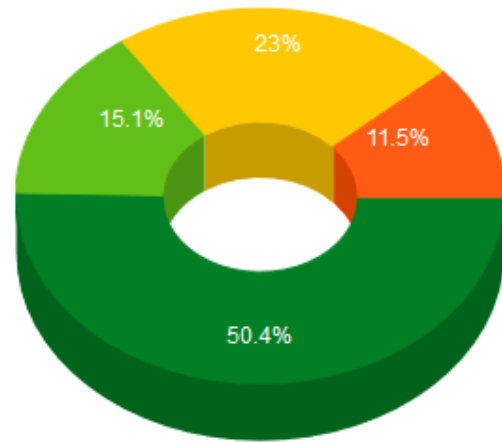**Number of external packages: 14**

Number of external classes: 38

Number of problematic classes: 1
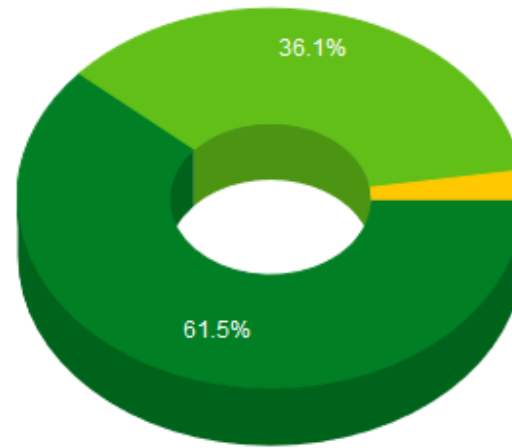
Number of highly problematic classes: 0

Coupling

- Very High
- High
- Medium-high
- Low-medium
- Low

Lack of Cohesion

- Very High
- High
- Medium-high
- Low-medium
- Low

Complexity

- Very High
- High
- Medium-high
- Low-medium
- Low

CODEMR metrics

- This project took about 120 hours of development, of which probably 80% of the time was dedicated to conceptualization and learning. The rest of time was spent for coding, testing and debugging.

- From the prospective of learning, I ended with a better understanding of the Spring Framework, JPA and Thymeleaf; I learned a new language (JavaScript) and I got my hands dirty with things like DOM, RESTful API development.

- I'm very pleased to say that the main goal was fully accomplished and I finished more confident about what I would be able to achieve in the future.

Conclusions