

Interactive Web Applications

Project requirements

1. Technology:
 - a) database – PostgreSQL
 - b) back-end – SpringBoot (REST API)
 - c) front-end – Angular
2. Topic of the project:
 - a) web application that deals with the University topic: students, teachers, subjects and grades. Student can list only his subjects and check the grades assigned to chosen subjects. Teacher (system administrator) can add new subjects and grade subjects for particular students. Application is secured with JWT mechanism. Depending on the role the application provides two distinct views.
 - b) web application with topic that could be extended later as your BSc thesis project
3. Requirements for front-end part:
 - a) modular design based on components
 - b) all of REST functionalities based on services (dependency injection mechanism)
 - c) obligatory functions: search, sort, five chosen events
 - d) form validation
 - e) routing mechanism
 - f) an intuitive user interface (CSS)
4. Requirements for back-end part:
 - a) data stored in database (PostgreSQL)
 - b) domain model should be based on at least 4 classes
 - c) endpoints secured with Spring Security (with the use of JWT)
 - d) endpoints organised in controllers related to functionality (i.e., administrator related methods in AdminController.java class)
 - e) @RestController used to generate JSON data for all endpoints
5. Security mechanism implemented with the use of JWT (JSON Web Tokens) – both back- and frontend side of the application.
6. Systematic code versioning: <https://gitsr.dmcs.pl>

