**SWE02 – Project**

The web application must be able to handle the following use cases:

* Log in known users (from a database)
* An error message should be displayed for unknown users and wrong passwords
* Display a simple menu for logged in users. Depending on their role, the users can:
* See results for all courses (student)
* Search for a course and display result (student)
* Search for a course and display students [with results] (teacher)
* Search for student and display courses [with results] (teacher)
* Enter course result for a student and save it to DB (teacher [of this course])
* [Enroll a student in a course and save it to DB (teacher [of this course])]
* Log-out

[Optional] In addition, the application could:

* Save password in an encrypted way (MD5, SHA, ...)
* An admin role can create students, teachers, and courses and save them to the DB
* ...

The application is written with the following technologies:

* JSPs and/or Servlets
* Java Beans and/or Java
* JDBC and/or JPA (or JPA compliant frameworks, e.g., Hibernate)

The application should use design patterns when necessary (MVC, GoF patterns, etc.)

The project files (JPSs, classes, DB model, SQL scripts for bootstrap data, etc.) should be documented properly.

Text documents should:

* Describe the architecture (ISO 42010) and most specifically:
* The technical choices made in the application with a brief analysis of expected advantages and drawbacks
* A discussion of possible improvements or alternatives and what knowledge or resource would be necessary to achieve them
* Describe the implemented functionalities of the application
* Display an overview of the data model with sufficient explanations

These files should be archived (.zip preferred) and sent per email to [baptiste.alcalde@fh-joanneum.at](mailto:baptiste.alcalde@fh-joanneum.at) or transferred (USB, Dropbox, or Git repository usw.) before the 25-Jan-2019, 23:59:59 Graz time.

Have a good time with the project!