

## Design and Implementation of IS - Semester A 2025

### Assignment 3: the Cheers system

#### Important Note:

For this assignment, you need to work with our GitHub classroom using the URL <https://classroom.github.com/a/b9SCDy0C>, where your group name should be the same as in the LLM parts. Please note that this link differs from the one provided for Homework 2; therefore, you must register again.

#### Task:

Design the generation of a wine recommendation report via class and sequence diagrams and implement it in Java using Jasper.

#### Requested Artefacts:

- 3.1. A docx file in the format of ex3\_solution\_2025\_format.docx (replace the word “format” with the group name), including:
  - 3.1.a A UML class diagram that specified the design of the generation of a wine recommendation report. The diagram should adhere to the Entity-Control-Boundary pattern and include all needed classes, attributes, relations, and operations.
  - 3.1.b. A sequence diagram illustrating the generation of a wine recommendation report. The scenario starts with selecting a set of food items and/or a set of occasions and/or a wine type. Only if food items/occasions/wine type are selected, wines irrelevant to the food items/occasions/wine type will be filtered out. If the output includes no wine, the sales person tries again with different parameters.  
The diagram should be aligned with the class diagram (artefact 3.1.a). Assume the boundary and control elements have already been created.
  - 3.1.c. A link to a GitHub repository containing the implementation of designed artefacts in Java. Pay attention to include, besides the source code and documentation, (1) the Microsoft Access file with the database (both schema and some instances), (2) an executable JAR file (that correctly runs on double-click).

**Submission Date: 23th January, 2025**

**Please note that the assessment of this assignment will consider the correctness of the models, the consistency of the implementation with the models, the executability of the implementation, and the use of GitHub.**

### **General Instructions:**

1. The assignment should be submitted in groups of two students. Submissions in larger groups will not be approved.
2. For this exercise, you must work with our [GitHub classroom using this link](#).
3. All exercises must be submitted using Moodle exclusively. Ensure that all artefacts reach their destination by the submission deadline at 23:50. It is your responsibility to confirm the quality of all required artefacts and verify their successful delivery. Re-evaluation of artefacts due to submission errors will not be possible. Avoid double submissions; ensure that the artefacts are sent from a single account of ONE of the group members.
4. For creating the models, it is recommended to use CASE tools, such as Visual Paradigm. Avoid using drawing tools; submission of hand-made drawings is not allowed. Regardless of the tool used, integrate the models into the Word file at appropriate locations.
5. **Parts of work that are not readable will not be checked and receive a zero.**
6. To prevent inconvenience, remember to back up your work.
7. It is crucial to uphold academic integrity and adhere to the guidelines outlined for this assignment. Any instances of plagiarism or unauthorized collaboration will be rigorously addressed in accordance with the department's cheating policies.
8. Contact the course staff with any questions during reception hours or by emails.

9. Additional instructions, comments, and clarifications will be published on the course website during the assignment period. It is your responsibility to follow these messages.

Good luck!