Academic Year 2022-2023 Semester 1

420371 - Programming with Java EE

Assignment B

Requirements

Each team of candidates is required to propose, design, implement and demonstrate a multi-tiered web application based on the Java EE platform and techniques, with certain creativity, reasonable complexity, and well-designed system architecture. Technically, the system implementation must involve client-side user interfaces (such as web pages, mobile apps, and/or desktop applications), server-side web components, client state maintenance, and database connection.

The assessment will be based on (a) the presentation and (b) the submission.

Presentation

Each team is required to present the project within 25 minutes, followed by a Q&A session. The presentation should be delivered in English. Candidates are required to:

- a) Introduce the general idea of the project, and highlight the creativity;
- b) Explicitly state all implemented functionalities and features, and demonstrate the system from the end-user' perspective;
- c) Present the design of the server-side system architecture and components, the design of functionalities and interfaces of major server-side components, the database design, and the design rationales beyond them;
- d) Present the mechanisms, methods and skills of collaboration among team members;
- e) Discuss important issues involved during the design and implementation, as well as the corresponding solutions.

Submission

Each team is required to submit a package consisting of the following materials:

- a) The complete set of source code;
- b) One project report that covers the following contents in the given order:
 - 1) Name of the software system, full names and matriculation numbers of all team

members, contact number, email address, and other particulars if any;

- 2) The complete list of system functionalities implemented;
- 3) A user manual (including sample scenarios with user interface snapshots and descriptions), and descriptions on system deployment and configurations;
- 4) System architecture and component design;
- 5) Database design;
- 6) Other technical details and/or information, if any.

Note: The report should be written in English; file format for submission: PDF.

c) The final presentation slides, with the first slide presenting the name of the software system and the full names and matriculation numbers of all team members.

Note: The slides should be composed in English; file format for submission: PDF.

Please place the source code (a) and the documents (b and c) into different folders, compress them into one ZIP file, and submit it via *Canvas*.

Grading Criteria

Grading Criterion	Weight
Part A: Presentation	
General idea and creativity	10%
System functionalities implemented	30%
Architectural and component design	15%
Database design	5%
Collaboration among team members	5%
Presentation quality	15%
Part B: Submission	
Source code quality	10%
Documentation quality	10%

THE END