Software Development Project – Architecture Design

Overview

In this activity, students will develop the architecture design for the Learning Management System application. Each team will produce a Software Architecture Design document (SAD). In addition, each team will present their architecture design to the class.

The team will design the overall architecture of the application and all members will contribute to identifying the architecture drivers, making architecture decisions, performing trade-offs, selecting solutions, and documenting all of these items. Multiple architecture views will be used to document the architectural design models, as appropriate.

Each team member will be in charge with one or more components, for which he/she will develop documentation (including responsibilities and interfaces) and will present his/her component(s) in class.

Each team member will describe in diagram(s) how the architectural components interact to realize one functional and one quality scenario, and will present this in class.

The design lead, together with the project manager, are responsible for the coordination and timely completion and submission of the required deliverables for this phase. The effort spent in this activity needs to be recorded and project progress needs to be tracked against the plan. Risk management has to be performed throughout this phase. Project management artifacts will be presented and discussed in class.

Description

The ***Software Architecture Document (SAD)*** must specify the design for the software to be developed. The SAD content and format will follow the example template provided for this class project.

Deliverables and Schedule

The deliverables for this phase are:

- Software Architecture and Detailed Design Document (SAD***)*** (MS Word or pdf file)
- Updated project management documentation: project tracking and risk management (MS Excel file)

These files must be submitted through ELMS (Canvas), by the deadline specified in the syllabus. When you work with large files, please zip them before uploading in ELMS.

Peer review must be performed on the *software design deliverables* by the respectively assigned *Reviewer Team*. The Reviewer team must read the *SAD,* record issues and questions,

and bring them to be asked in the class presentation. For an effective review, use the criteria and checklist presented in class.