

MIS 307 SYSTEM ANALYSIS AND DESIGN COURSE

PROJECT GUIDELINES

The project is an information system analysis and design project (ISAD-P) designed to allow students to apply the knowledge and skills acquired during the course. Since it is a reasonably large project which will take several months to complete. Students will form teams and each team will work on a systems analysis and design project.

This project is an integral part of the course since it allows students to apply the concepts, methodologies, and tools in the context of a real-world application.

During the semester, each student will be required to complete a project in collaboration with a group of peers. **The optimal group size is comprised of either 5 or 6 students.**

The key personnel must be readily available. Each team must identify the principal users within the target organization, as these individuals will serve as the primary source of information necessary for the team to successfully perform a systems analysis. Therefore, it is crucial to consider the user's level of commitment and involvement with the project.

It is essential to consider the accessibility of information and the user in this context. The size and scope of the application/system must be manageable to ensure the timely completion of the project work by the end of the semester.

All groups are required to prepare a project document in either .doc or pdf format that provides comprehensive coverage of the details outlined on the second page.

This document must be uploaded to the AYBUZEM system by December 27, 2024, at 23:00 (11:00 pm).

Late submissions will not be accepted.

TASK: Develop an information system that would support three or more business processes. There should be at least 5 processes or modules in the DFD.

1. Discuss the analysis strategy you will employ in the project (BPA, BPI, BPR)
2. Prepare the system request form for the system.
3. Conduct a cost-benefit analysis of your system and show the results in a template you can find online, or get creative with your group and build your way of presenting it.
4. Provide a detailed discussion on the project initiation step of the project planning phase
5. Provide a detailed discussion on the project management step of the project-planning phase (a work plan, a staffing plan, a project charter). To estimate the time required to implement the system, take an estimate of how long the planning phase would take and use the industry standards to estimate the timing for the remaining phases of the project. You need to compare this time estimate to the actual time spent on the project.
6. Gather Requirements and explain how you collect these requirements. Prepare “Requirements Definitions Form” and requirements statements.
7. Create and build “Use Cases” (fully dressed use cases for each business process (for example if your system performs 10 business processes, 10 use cases have to be prepared).
8. Develop the “Context Diagram” of the system and level 1 DFD (data flow diagram) and develop the level 2 DFDs for at least three business processes that are performed by your information system.
9. Develop the level 1 physical DFD and think of possible entities in the case. Draw a table that shows each entity along with its corresponding attributes.
10. Develop the entity-relationship data model (ER Diagram) and explain the relationships between the entities of the diagram (business rules).
11. Convert the logical data model created in Step 10 into a physical data model to reflect the implementation decisions. Ensure that DFDs and ERDs balance.
12. Develop and explain the architecture design of the system. The network infrastructure of the new information system should be included as well.
13. Describe the software and hardware specifications of the proposed information system, and make sure these specifications are currently used hardware device specifications.
14. Develop the user interfaces of the system (graphical user interfaces). GUI’s screenshots must be added. It is not mandatory to provide the code in the project document. Groups can decide this themselves.
15. Develop the structure chart of the system and develop the program specification of each module in the structure chart
16. Describe how you would implement the system. Why? Explain with reasonable reasons. Explain your migration plan for the new IS.

17. Describe how you would support the system in detail.

18. Summarize the key learnings or experiences of the group during this process, specifically about the project.

What aspects will you pay attention to in future projects?

What lessons did the group learn during this process?

Please provide a brief overview.