ITM900 – Capstone Project - Project Guidelines

Learning Objectives

1. Demonstrate the capability to use and integrate information technology knowledge and tools to develop information system (IS) solutions to real-world operations and management problems.
2. Develop feasible IT-based solutions that meet the objectives of partner organizations while taking in consideration their capabilities and potential constraints.
3. Demonstrate excellent written and verbal communication skills

Issue Identification

Students are expected to perform business analysis to identify and prioritize the management needs of the organization and the issues it faces. Students are expected to select the issue(s) to be addressed and to set the objectives of the project in collaboration and with the partner organization.

Requirement Gathering, Specification and Analysis

Students are expected to elicit and gather requirements about potential solutions to the identified needs of the partner organizations. An analysis of the requirements must be completed in order to better understand the needs of the partner organization and to develop a requirements model, using a standard language such as UML. The requirement model will serve as a point of interaction, for the purpose of reviews and feedback, between the students and stakeholders. The requirement model may be documented using various artifacts depending on the nature of the project. However, it must include a use case diagram with short descriptions of the involved use cases, one or more BPMN process diagrams and an entity-relationship diagram (ERD.) The faculty project supervisor (course instructor) may provide further details about the deliverables on a project-by-project basis.

Solution Specification and Development

Students are expected to develop an IS solution that meets the specified requirements and project objectives developed in collaboration with the client organization. The students' developed IS solutions are expected to be diverse in nature and may range from the development of a partial database management system or a web portal to an improved business process or the development of software modules that address the management needs of the partner organization. However, these solutions must be specified and documented using a standard set of artifacts. These may include but are not limited to UML class diagrams, UML sequence diagrams, database SQL schemas, and BPMN process diagrams. The faculty project supervisor may provide further details about the deliverables on a project-by-project basis.

Implementation and Risk Analysis

Students are expected to develop a plan for the implementation of the solution. The plan must be actionable within the capabilities and constraints of the partner organization. The plan must include an analysis of the risks associated with the deployment of the solution and must demonstrate an understanding of the expected impact of the solution on the mission of the partner organization.

Conclusion

Student teams must provide an executive summary of their solutions and succinctly explain how these solutions meet the identified management and/or operations needs of the corresponding client organizations as well as explain the overall benefits that help the partner organizations achieve their missions.