University of Maryland University College

IFSM 461: Systems Analysis and Design
Stage 01: Requirements Document Instructions

Introduction

Before you begin this assignment, be sure you have read the Udo, Marian, & Uduak Corporation (UMUC) Case Study. Also, you should review your Stages 2 – 5 individual assignments to get an understanding of the future projects that build on this initial stage.

Purpose of this Assignment

This assignment gives you the opportunity to apply the course concepts to document system requirements. This assignment specifically addresses the following course outcomes to enable you to:

- Achieve successful systems design, development, and implementation by effectively applying the role of systems engineering and integrating with project management
- Effectively communicate with stakeholders to determine, manage, and document business requirements throughout the SDLC
- Perform modeling to assist with analysis and decision making
- Translate business requirements into systems by applying appropriate SDLC methodologies and incorporating industry best practices

The Deliverable

Using the Udo, Marian, & Uduak Corporation (UMUC) Case Study, develop and deliver a Requirements Document for a new billing and payment system. The document will include a high-level description of the current information system that handles some of the company's administrative and financial tasks and identify the requirements for the new system (as is/to be). It will also provide a high-level functional decomposition diagram (FDD) of the new system. And, it will include a systems requirements checklist for the new billing and payment system that includes five (5) key parameters for output, input, process, performance, and control.

The Requirements Document must include the following:

- The paper should be 2 – 4 pages in length, plus diagrams and a checklist, responding to the bulleted items below. The diagrams and checklist are not included in the page count.

- Cover and a Works Cited page are also required. These are not included in the page count.

- The Cover page must include an appropriate title and your name.

- Use the Works Cited page to correctly cite and reference any sources you use with APA format.

- Use the Grading Rubric to be sure you have covered everything.

- Submit your paper via your Assignment Folder as a Microsoft Word document with your last name included in the filename.

- "As-Is" Process
  - "As-Is" refers to the current system as described in the case study that does not meet the company's administrative needs
  - This should include a brief commentary describing the existing information system and its shortcomings.
  - This should include a process diagram. (See example in Helpful Resources, below)

- "To-Be" process
  - "To-Be" refers to the new billing and payment system that meets the company's administrative needs as described in the case study
  - This should include a brief commentary describing the proposed billing and payment system.
  - This should include a process diagram.

- Functional Decomposition Diagram (FDD) of the new billing and payment system
  - The FDD should be broken down to three levels as shown in the following link": http://it.toolbox.com/blogs/enterprise-solutions/levels-of-detail-for-functional-decomposition-14626

- System Requirements Checklist for the new billing and payment system
  - You should have a complete statement for each requirement in each of the following categories of the new system:
    - Process
    - Output
    - Input
    - Performance
    - Control
  - Each requirement should be individually numbered within the category.

Helpful Resources

- "As-Is" and "To-Be" Business Process Modeling
  http://www.businessballs.com/business-process-modelling.htm

- Functional Decomposition Diagram (FDD)
  http://academic.regis.edu/ladams/Diagramming%20101.html

- Textbook "Systems Analysis and Design," Chapter 4, Requirements Modeling

Tools that can assist you in developing the graphics for this project:

- The file "Graphics That Can be Used for Drawing Diagrams" in the Course Content section of WebTycho has symbols you may be able to copy and paste

- "As-Is" and "To-Be" graphics
  - Microsoft Visio

- Functional Decomposition Diagram (FDD)
  - Microsoft Visio
  - The file "Graphics That Can be Used for Drawing Diagrams" in the Course Content section of WebTycho has symbols you may be able to copy and paste

- Systems Requirements Checklist
  - Microsoft Excel
  - Microsoft Word

Stage 1: Requirements Document Rubric

Criteria	Superior to Outstanding	Substandard to Good	Inadequate	Points
"As-Is" Process	The "As-Is" or current information system is described in a high-level detail. Process diagram is included and accurately reflects the current process. Sufficient detail is provided to demonstrate difference from "to-be" process.	The "As-Is" or current information system is not described in sufficient detail or may be unclear; and/or may be lacking process diagram.	The "As-Is" or current information system is not described.	2
"To-Be" Process	The "To-Be" or proposed new billing and payment system is described in a high-level of detail. Process diagram is included and accurately reflects the new process. Sufficient detail is provided to demonstrate difference from "as-is" process.	The "To-Be" or proposed new billing and payment system is not described in a high-level detail or may be unclear, and/or may be lacking process diagram.	The "To-Be" or proposed system is not described.	2
FDD of the New System	The high-level functional decomposition diagram (FDD) of the new billing and payment system covers all required system functions and is accurately decomposed to three levels.	The high-level functional decomposition diagram (FDD) of the new billing and payment system does not contain all required system - functions and/or may not be (correctly) decomposed to three levels.	FDD not included	2.5

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Criteria	Superior to Outstanding	Substandard to Good	Inadequate	Points
Systems Requirements Checklist	The systems requirements checklist for the new system - is complete and includes requirements for output, input, process, performance, and control, with each requirement numbered. Requirements are appropriate to the UMUC Case Study.	The systems requirements checklist for the new system does not contain a complete list of requirements and/ does not include requirements for output, input, process, performance, control and/or each requirement is not numbered. Requirements may not be appropriate to UMUC Case Study.	The systems requirements checklist is not included.	2.5
Report and Diagram Format	Report and diagrams reflect effective organization; correct sentence structure, grammar, and spelling; presented in a professional format; any references used are appropriately incorporated and cited using APA style.	Report and Diagrams are not well organized, and/or contains grammar and/or spelling errors; and/or do not follow APA style for any references used and citations.	Report and Diagrams are extremely poorly constructed and do not convey the information.	1
			Total Points:	**10**