CSC316: Introduction to Systems Analysis and Design

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1. Introduction

Every student registered in CSC316 is required to apply the skills and techniques learnt from this course on a real-life mini project. A written report on the project and a brief oral presentation summarizing the same is expected at the end of the semester.

You are expected to form a team of Systems Analysts (consisting of a maximum of four (4) members each) on the project. This project is designed to test your knowledge of concepts taught, your creativity and attempts at finding solutions in the analysis and design of business information systems.

Each team should have a group name and a project topic approved by the course lecturer. The team is expected to study the existing system of their client, analyze, specify requirements and design a new business information system using the System Development Life Cycle (SDLC) based on the waterfall model.

The deliverables of the phases of the SDLC should be written up in the form of a technical report as described in the guidelines below. Please exercise great care to avoid **plagiarism**. Plagiarism is the deliberate use of someone else's language, ideas, data, code, or other original material that is not common knowledge without properly acknowledging the source.

You should also acquaint yourself with appropriate ways to acknowledge the contributions of others and to cite all your sources. Plagiarism is a serious offence that will be penalized.

Collaboration within a team is expected and encouraged. Each team member is expected to contribute to all aspects of the project.

2. Term Project

a. Each group or individual is expected to submit a case study for approval.
b. Each group should meet regularly and minutes of meetings taken and submitted as an appendix in the report.
c. Responsibilities should be shared equally among members. Any member who does not participate may not be included in the list of authors.
d. The composition of each group should be:
    i. Senior Systems Analysts/ Project Leader
    ii. Systems Analysts (Secretary)
    iii. Systems Analysts (Software Designer)
    iv. Systems Analysts (Logistics)

3. Instruction and Guidelines for Preparing The Project Report

a. Every individual or group is expected to prepare his/their project report as follows:

TITLE PAGE: This page should contain:

1. Course Code and Course Title
2. Title of the case study
3. Matriculation numbers and Names of student

4. Session

1.0 **Introduction**

- 1.1 Background of the Study
- 1.2 Statement of Problem
- 1.3 Objectives
- 1.4 Project's Scope and Constraints
- 1.5 Alternative Solutions
- 1.6 System Description
- 1.7 Feasibility Assessment
  - 1.7.1 Economic Analysis
  - 1.7.2 Technical Analysis
  - 1.7.3 Schedules, Timeline and Resource Analysis
- 1.8 Recommendation

2.0 Analysis of the Existing System

- 2.1 Process Description of the System (using context and DFDs)
  - 2.1.1 Current Physical Data Flow Diagram (CPDFD)
  - 2.1.2 Current Logical Data Flow Diagram
- 2.2 Data Dictionary
- 2.3 Data Description of the System (using ERDs)
- 2.4 Problem Areas

3.0 Design of the Proposed System

- 3.1 System Overview
- 3.2 Process Specification
  - 3.2.1 Required Logical Data Flow Diagram
  - 3.2.2 Data Dictionary
  - 3.2.3 Decision Tables
- 3.3 Data Specification
  - 3.3.1 Entity Relationship Diagram (ERD)
  - 3.3.2 Database Design (Tables from ERDs)
- 3.4 Screen Layout/Specification
- 3.5 Report/Form Specifications
- 3.6 Program/Module Specifications
- 3.7 Test Plans

4.0 Conclusion

APPENDICES: Sample codes if any, reports, results, inputs and outputs, etc.

Each report should be prepared using the following format:

1. Font type should be Times New Roman.
2. Report title should be font size 22pt.
3. Heading 1 font size should be 16pt.
4. Heading2 font size should be 14pt.
5. Body of text font size should be 12pt.
6. The paragraphs should have double line spacing.