CET/CSC 490 Design Document Details/Format [1]

Due: Sunday December 11, 2022 11:59pm (Electronic to D2L Dropbox)

Length: At least 30 pages excluding title and evaluation pages, shared among team members
- be sensible about diagrams!

Tips:
- previews & questions are encouraged
- make sure each team member thoroughly checks & verifies all produced artifacts
- CETs must demonstrate that project will apply both hardware and software design

Format:
- single-sided, double-spaced, 1" margin all sides
- Times Roman, 12 point
- figures labeled and referenced
- pages numbered and referenced in table of contents
- include references page as appropriate

Content:

Title Page
Blank page titled "Instructor Comments/Evaluation"
Table of Contents (detailed)
Abstract (1 paragraph brief description of project and role of **this document**)
Description of the Document
    Purpose and Use (of the document)
    Ties to the Specification document
    Intended Audience (who will read the document)
Project Block Diagram with description (Fig 14.3)
Design Details
    System Modules and responsibilities
        Architectural Diagram (Fig 14.5-14.6)
        Module Cohesion (for each)
        Module Coupling (for each)
    Design Analysis (Ch. 14.3 & 14.4)
        Data Flow or Transaction Analysis
    Design Organization (Object Oriented Design)
        Detailed tabular description of Classes/Objects (Appendix G)
            description
            data members / types / constraints
            member function listing / description
        Functional description (Fig. 14.12, 14.16, 14.17)
            input/output/return parameters / types
            modules used
            files accessed
            real-time requirements
            messages
            narrative / PDL
        Decision: Programming language/Reuse/Portability (Ch.14.9)
    Implementation Timeline (i.e., Software Engineering Management Plan)
    Design Testing (Ch. 14.10)
Appendix (optional): Schematic & Bill of Materials (BOM)
Appendix: Team Details
    (workflow leader clearly documented and description of each team members' specific contributions)
Appendix: Writing Center report
Appendix: Workflow Authentication (individual signatures for each design workflow component)
References

[1] Borrowed from Professor Sumey