CSCE 247 - Requirements Document Structure

Although you should organize your requirements document to fit the needs of your project and organization, the IEEE recommends the following document structure:

You are free to customize these templates for the needs of your project. Do NOT include a section (or a field in a requirement) if it is not necessary (or you do not have the right information to complete it - do not make up values).

1. Introduction

- a. Purpose
 - i. Summarize the project, including a short description of the purpose of the system being built.
- b. Scope
 - i. A clear description of what portions of this project that this document is intended to cover.
- c. Definitions & Acronyms
 - i. Define any terms used in the document that may not be obvious to the reader.
- d. References
 - i. Any documents referred to in the creation of this requirements document.
- e. Overview
 - i. A short description of the rest of the document, detailing what each section covers and where information may be found.

2. Overall Description

- a. Product Perspective
 - An overview of the environment that this system must operate within, including other software and hardware systems that will interface with this system.
- b. Product Functions
 - i. An overview of the features to be provided by the software.
- c. User Characteristics
 - i. Description of the types of users that will interact with this software and assumed properties of those users.
- d. Constraints
 - i. Any constraints that have been placed on the project (that are not, in themselves, requirements)
- e. Assumptions
 - i. Any assumptions that are being made in specifying these requirements.
- 3. Requirements
 - a. External Interface Requirements
 - i. User Interfaces
 - ii. Hardware Interfaces
 - iii. Software Interfaces
 - iv. Communication Interfaces

- b. Functional Requirements
- c. Performance Requirements
- d. Design Constraints
- e. Other Requirements
- 4. Appendices
 - a. Any relevant information that can assist in understanding the requirements.
- 5. Index

Section 3.b., Functional Requirements can be organized in multiple ways, three recommendations are:

1: Organized by User Class

- User Class 1
 - Requirement 1.1
 - Requirement 1.2
 - 0 ...
 - o Requirement 1.m
- User Class 2
-
- User Class N

2: Organized by Feature

- Feature 1
 - o Requirement 1.1
 - Requirement 1.2
 - 0 ...
 - o Requirement 1.m
- Feature 2
- •
- Feature N

3: Organized by Mode

- Mode 1
 - o Requirement 1.1
 - o Requirement 1.2
 - o ..
 - Requirement 1.m
- Mode 2
-
- Mode N