CSCE 740 - 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
        i. 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
    - …
    - Requirement 1.m
- User Class 2
- ….
- User Class N

2: Organized by Feature

- Feature 1
    - Requirement 1.1
    - Requirement 1.2
    - …
    - Requirement 1.m
- Feature 2
- ….
- Feature N

3: Organized by Mode

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