

CPSC 430 Writing Assignment #1 Software Requirements Document

This is a very difficult assignment; do not procrastinate!

Assignment

You will develop a 9-12page software requirements document. The goal of the document is to define and organize the requirements for your project. You will work in your assigned group to produce the document, however each person **MUST WRITE A MINIMUM OF 2.5 PAGES**.

You are not required to do any programming of this system before you complete your requirements document; in fact you should not be programming at all just yet.

Goals for a Requirements Document

The requirements document should be written for the stakeholders of the system. Specifics about the software design should not be discussed, but rather should be covered in the system design document (that you will be creating in writing assignment #3).

You should provide an overview of the document and your system. You should list your requirements in an organized format. Each requirement must have a unique number (so that you can refer to it easily). An example template (produced by IEEE) is posted on Canvas. Additional information about the contents of each section appears below:

TEMPLATE

Title Page with Index

Introduction

Purpose

Explain the purpose of your requirements document.
Make sure that you identify the intended audience for the document

Scope

Answer questions like:
Where did these requirements come from?
What subsystems are involved?

References

If you reference specific papers and/or standards while preparing the requirements, list your reference here

Overview of the remainder of the document

Explain how your document is organized

Overall Description

This section should discuss background information about your system including a system overview, definition of client/s, definition of users, and general constraints. This information should be broken into subsections. One example breakdown is shown below. You may organize this section differently. Use an organization scheme that makes sense for your project.

Product functions

Client characteristics

User characteristics

General constraints

Requirements

Functional, non-functional, and interface requirements all go in this section. The requirements should be grouped in some logical fashion. For example you might choose to separate the requirements by subsystem.

For each subsection, include an Overview of the requirements described in this subsection. Follow this with appropriate requirements for this subsection. You should consider all of the following types of requirements:

- General Requirements**
- Subsystem interface requirements**
- Capacity requirements**
- User interface requirements**
- Network requirements**
- Error handling requirements**
- Security requirements**
- Input requirements**
- Processing requirements**
- Output requirements**

Not all of these types of requirements will be appropriate for every project.

Remember that requirements must be clearly stated, verifiable, and stated as a single sentence. Each requirement must be uniquely numbered so that it can be referred to easily.

EX:

REQ 1: The system must produce output as a Microsoft Word document.

Non-requirements

In this section you should explicitly list things that the system will NOT include. The format will be similar to the requirements section.

EX:

NR 1: The system must not be required to maintain a revision history for elements as their values are changed in the database.

Assumptions

List all of the assumptions made about the system. This should be a bulleted list.

Appendices (Must include a **Glossary** and may include additional information, for example, a table of acceptable forms of identification.)

You must include an appendix where each group member identifies his/her contributions to the document.

Requirements Document Grade Sheet

- _____Form (10 Points)
 - No typos, neat, no spelling errors
 - Follow template
 - Use standard format
- _____Grammar (10 Points)
 - Does poor grammar make it difficult to read and understand?
- _____Introduction (5 Points)
 - Purpose: Is the purpose of the document clear? Is the intended audience identified?
 - Scope: Are the subsystems described? Are the sources of the requirements identified?
 - References: Where did you get the requirements?
 - Overview of Document: Is there a clear overview of the remaining sections of the document?
- _____General Description (10 Points)
 - Background: Is there appropriate background information about your project including a system overview, definition of the client/s, definition of the users, and description of general constraints?
 - Organization: Is this section organized in a coherent and easily understood manner?
- _____Requirements & Non-requirements (30 Points)
 - Are all requirements/non-requirements included?
 - Are the requirements/non-requirements clearly stated in an unambiguous manner?
 - Are the requirements/non-requirements verifiable?
 - Are the requirements/non-requirements organized in a coherent and easily understood manner?
 - Are the requirements/non-requirements uniquely numbered?
- _____Assumptions (10 points)
 - Are all assumptions stated in easily understood language?
- _____Appendix (5 Points)
 - Dictionary: Are all terms that are unique to project theme or computer jargon defined?
 - Is additional information included as appropriate?
- _____Level of Client Satisfaction (10 points)
 - Does the client feel that the requirements listed closely match the vision of the system?
- _____Overall Form, Style and Content (10 Points)