

How to Develop a New SRS Based on the Initial Cold-Call-Assist SRS

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This document explains what to submit as an SRS for your Project 1. Your task is to start with the initial Cold-Call-Assist SRS handout, and create a new SRS that follows the SRS Template. Part of your task is to avoid rewriting or copying large swaths of text from the Cold-Call-Assist SRS handout.

Resolving Two Documents

For Project 1, you are provided with two documents that you need to somehow combine:

1. *SRS for a Classroom Cold-Call Assist Software Program* (currently dated 02-10-2020)
2. *<Project Name> SRS [Template]* (currently dated 05-31-2019)

The first document (which will be called the *Initial Cold Call SRS, or ICC SRS*) contains a lot ideas and information about how such a system could work. It is a good initial SRS for such a project (and it is also incomplete).

The second document (which will be called the *SRS Template*) condenses SRS templates provided by the IEEE (Institute of Electrical and Electronics Engineers) into what might be considered the essence of, or the essential components of, a complete SRS.

The ICC SRS describes a system that you could build. However, you are not required to build exactly that system.¹ Along the way to building such a system, you will need to make additional requirements-related decisions.

Overall Goals

Your overall goals in generating a new SRS (which in this document will be called the *New SRS*) are thus as follows:

1. Create a document that describes what the system will do.
2. Create an SRS that builds on but does not duplicate information in the ICC SRS.
2. Organize the document using the SRS Template.
3. Create a document that is readable and usable by all stakeholders.

¹ You should, however, follow the build-related constraints of the ICC SRS (which appear in Section 8 of the ICC SRS) unless you have written permission from the instructor to deviate from them.

To be useable by all stakeholders, the New SRS should:

1. Be understandable to someone has read and understands, but did not memorize, the ICC SRS. To this end, the New SRS should refer to the ICC SRS something like this:

Students will be re-inserted into the queue as described in the ICC SRS 5.1. "The Ordering of Students in the Queue", but with the n parameter (the front percent of the queue that will be skipped) set in a user preferences dialog box rather than the source code.

And not like the following:

Section 5.1 of the ICC SRS will be implemented as described. n will be set in a user preferences dialog box.

Because the second of these two would require that the stakeholders either (a) memorized section numbers and detailed content of the ICC SRS or (b) has to continually flip through the ICC SRS while reading the New SRS.

2. Clarify how the New SRS both follows and deviates from the ICC SRS.
3. Be easy to update.
4. Be a standalone document, organized in paragraphs and lists such as described under "Good Writing" in the Syllabus.

Specific Sections of the SRS Template

Here is some guidance on specific sections in the SRS Template.

1. SRS Revision History

The entries in the template itself should be removed, and it and replaced with the revision history for the creation of the document that uses the template (though the template itself should be cited somewhere in the document).

2. The ConOps

If the concept of operations is directly derived from the ICC SRS, each section and subsection here can be summarized in a few sentences, with references to the ICC SRS. Each can be brief but should be a standalone description. If your project is going in a different direction, such as building a system that is different from what is described in the ICC SRS, that should be clarified here.

Section 2.6 on Use Cases should list the use-cases that will be supported in the design of the system but, if these are basically the use-cases in the ICC SRS, each can be described in just a few sentences. If some details are different, such as the keystrokes used for controlling the system, this should be described later in the document, not in the use-case.

3. Specific Requirements

This section should be organized as described in the SRS Template, such as with a useful hierarchy. The hierarchy can include the one provided in the SRS Template (Sections 3.1 through 3.5), as well as other useful hierarchies that you develop.

Again, information in the ICC SRS can be referenced, but should be summarized in a standalone mode. Such as:

3.2.3. Functions for In-Class Instructor Usage

3.2.3.1. The in-class instructor usage will follow Use Case 3A in the ICC SRS (in which four names are visible in a display viewed by everyone, and the instructor removes names with keypresses) with the following details.

- a. The window in which the names appear will initially be sized, when the program opens, to be 90% of the width of the computer's display and 10% of the height.
- b. The window will [or "will not", depending on your requirements] always "float" in front of all other applications. For example, even if PowerPoint is in slide-view, the cold-call system window will appear in front of the slide-view.
- c. The "Arrow Key Input" described in ICC SRS section 4.1.A will be implemented. This means that another application such as PowerPoint can be the front application, but the arrow keys will not work in these other programs.
- d. ...