

CS 320

Requirements Specification

Due: **Thursday, February 29, 2024, 12:00 PM noon EST** via [Moodle](#). For this assignment, you must work in your project group. Submit only one assignment per group.

Overview

Congratulations! Your team has been funded to produce the software product outlined in your earlier proposal. The customer hiring you to complete the project is CSRocks Inc., which includes Yuriy Brun, Pooja Patel and Ishaan Shetty). They will meet with you periodically to discuss and evaluate your progress.

Now, you need to define the project, as a basis for your later design and implementation. Your first deliverable is a set of requirements documents (sometimes called “Software Requirements Specification” or SRS). These describe the goals of your project and how users will interact with it (the high-level UI design). You will also document your plans for completing the project.

External requirements

CSRocks Inc. likes what you proposed for your product, but that’s only a start. You now have to expand the product, add more features, and make it a serious, 8-person, 10-week project. This will require adding features, subject to the following customer requests:

- The product should be easy to use. It should be usable by people who are not expert computer users.
- The product must be robust against errors that can reasonably be expected to occur, such as invalid user input, lost network connections, etc.
- As before, the product must be a networked (client-server) application.
- The product must be installable by a user, or if the product is a web-based service, the server must have a public URL that others can use to access it. If the product is a stand-alone application, you will be expected to provide a reasonable means for others to install and run it. You can expect that the user will have installed any necessary libraries and tools (such as a Java Virtual Machine, or a Ruby framework runtime, or an emulator for a mobile device), but after that, the user should be able to download and run your system easily.
- The product will ultimately be made open source. As a step towards this, the software (all parts, including client and server) should be buildable from source and installable by others, and well documented to enable new developers to make enhancements. Documentation will include design documents, test cases, and bug reports.
- And, again, the scope of the project must be of good size for the resources assigned.

Beyond these requests, you are largely free to take the next turn of the product development spiral and firm up your product requirements. This requirements document will essentially be a contract with CSRocks Inc. for what you plan to deliver. Consequently, you should talk to your customer as you plan in order to make sure your product meets their needs.

Software Requirements Specification (SRS)

An SRS captures requirements of a product. We provide you with a [template SRS](#) to get you started.

The main product components to capture in the SRS are:

1. A high-level *description of the product*, along with its scope.
2. A set of *use cases*, including at least one use case summary diagram and two formal use cases of the most important scenarios.
3. A *feature list*, including what features you expect to be available for the α and β releases, as well as the release 1.0. You should also specify a set of *stretch* features that could slip to 2.0 if necessary.
4. A *UI prototype*. At least two diagrams containing rough sketches of your product's user interface.

Follow the directions included in the template SRS regarding specific points for each category.

The SRS will be a living document. You will be asked to provide updates to it at periodic points in the development cycle.

Deliverables

Submit a .pdf of:

1. An SRS document:
A requirements document based on both the description in this assignment and the SRS template. While some real-life SRSes are hundreds of pages long, given the semester scope of the project and the iterative development process we are taking, **your SRS should be 4–5 pages** (not including the use case and UI diagrams).
2. Customer discussion artifact:
Records showing that you had at least one discussion with your customer about the product. This discussion will be with your TA. The discussions will be, of course, about the product requirements. Example artifacts include meeting minutes, email threads, and paper prototyping. It should be clear how these discussions shaped your requirements.

Submit your deliverables on [Moodle](#) by the deadline. The preferred names for these files are:

YourProjectNameSRS.pdf and YourProjectNameCustomerArtifacts.pdf.

Grading

Your submission will be graded using a rubric that's intended to capture how useful your work is to a customer for whom you are building your product. While you will not get to see this rubric until after your assignment is graded, you should expect that the grading takes into account the expectations you'll encounter in the real world, when submitting a document to a customer. Clarity, organization, and presentation matter. You should, of course, ensure high quality of the content of the document, but you should also consider presentation aspects. For example, everything should be clearly labeled, with the date and contributors' names listed at the start of the document. Your submission should convey to the customer that you are a competent team who will do a great job on the product they've entrusted you to build.