

CS 320

α Release

Due: **Thursday, March 28, 2024, 12:00 PM noon EDT** via [Moodle](#). For this assignment, you must work in your project group. Submit only one assignment per group.

Overview

CSRocks Inc. wants to make sure you are off to a running start with your product development. This assignment proves to CSRocks Inc. that you have the development infrastructure in place for a successful delivery.

Deliverables

The α release (also called zero feature release, here in CS 320)¹ is a skeletal implementation of your product. This initial implementation must be able to be installed and run, but running it does not have to do anything except display an initial client (user interface) and show it is integrated with the backend server (database). Essentially, you'll want to show a successful round trip operation through your client-server architecture. For the assignment we also ask for you to show us a set of your good software development practices.

Part 1: Featureless Live Product Website

Provide us with a URL to reach a front page for your product.

If your project is a web app, this URL would be the front page of your actual web app. The front page does not have to have any features working except something to demonstrate a round trip operation.

If your project is a mobile app, this URL would be the address of a web page where we can download the app to install or run it (on the simulator or on a real device). You may alternatively specify how to find your app in a mobile app store.

Part of completing your α release is creating your database. Therefore, your alpha release must, in some way, connect to this source of data, fetch at least one piece of data from it, and display the data in some way on the screen or web page.

Part 2: Usage and Development Material

Provide us with documents describing the implementation practices of your team. You may consider the [Joel Test](#) and his advice as you put processes in place for your developers. Part of your grade for this assignment will be based on the simplicity of these processes, and how accurately your directions match what the user must actually do.

¹In the industry, the α release is typically a more substantial release, with some features.

Please put the following material in a location that the staff can access (website, google code, bitbucket, github, etc.) to test the processes described in the document promptly after your submission. If the project location is private (e.g., on bitbucket or github), make sure to give the CSRocks Inc. executives access. You may want to arrange a *dry run* with your partner group beforehand:

1. Source control and build process instructions:

- Your project's build process is the set of tools and commands to compile and build your system. Turn in a set of directions to find your build system, check out its source files, and build them. In grading, we will follow these directions.
- Your team should have a version control repository set up. Again, make sure CSRocks Inc. executives have access to this repository. Your instructions should explain how to access this repository.
- Make sure the directions are written in sufficient detail that a typical developer can follow them. If the system(s) require login information to access them, you should provide this information.
- Part of your grade for this item relates to the number and complexity of commands the developer must use. Ideally your system will have a single command that does a *one-step build*, that checks out all source code from your repository, builds all necessary binaries, packages them, and places them in a known location.

2. Bug tracking system instructions:

- Describe the set of tools used to document existing bugs, issues, and missing features in your system's code. Turn in a set of directions describing briefly how we can find your bug-tracking system, examine the list of current bugs, and file a bug. In grading, we will follow these directions and examine whether the bug tracking system exists and is usable. The directions should be written so that an intelligent developer can follow them. Please also turn these directions to your customer group, so that they may also use them to track and contribute to your project.
- Your bug tracking system does not need to contain a comprehensive list of bugs or missing features. But for full credit, it should have at least one issue filed for each developer in your group. If possible, the bugs should list priority, status, and a timeline to fix them.

3. Database access instructions

- Since your product must have a server-side data component, your α release should contain a set of instructions about where this data is stored and how to access it. Turn in a set of directions that tells the staff how to find your data, and how to briefly perform a trivial access of this data. For example, if your data is in a database, inform us how to connect to this data and perform one very simple query against it. In grading, we will follow these directions.

Submission and Grading

Remember that your product must be live on the URL you give us when we grade it. You may want to move your development work to use a separate port (in the case of a web app) so that it does not interfere with our testing of this release.

Your data access instructions should be comprehensive and should list all steps necessary for us to find and access your data. For full credit, these directions must match the actual steps we need to perform to find and retrieve the resources.

Your build process instructions should be complete and correct. We should be able to successfully build and run your app on the first attempt. The build process should not be overly complicated; streamline the build process so that a reasonably intelligent developer can follow it.

Your issue-tracking system should exist when we go to examine it, and we should be able to log in and access it successfully on the first attempt. One issue must be listed per developer with suitable details such as to whom the bug is assigned and its priority.

A small part of your grade comes from the looks or aesthetics of your documents. They do not need to be beautiful or excessively formatted, but developers and your customers need to be able to read them and extract information from them. This means they should be clearly written, with proper spelling and grammar, clear wording, and formatted with enough organization to present your ideas clearly to the reader.

Your α release does not need to reflect customer interaction, but **you should meet with the customer** to try testing out various aspects of your site before you officially submit your assignment. If you make your request a reasonable amount of time before the due date, CSRocks Inc. will try to accommodate such requests in a timely manner and give you feedback about the results. You may also want to take the opportunity to tell CSRocks Inc. about any changes to your feature set that you are considering, and get feedback.

One of your team members should turn in all the deliverable material together so that there is one coordinated input for the team. Put the team name in the filename of all components submitted.

Turn in:

- URL of the front page of your product (Part 1)
- Source control and build process instructions (Part 2-1)
- Bug tracking system instructions (Part 2-2)
- Database access instructions (Part 2-3)