

# CSE 403, Project Phase 4a: V1 (60 points)

## Feature-Complete "Version 1.0" Implementation

For your Version 1.0 ("v1") product release, you must produce a working initial version of your project, reflecting many of the features your group originally documented in your SRS. Generally speaking the expectations of this phase are to finish the rest of the features of your app and post its binary while continuing to use your repo, bug tracker, code reviews, wiki, and other resources. Get 'er done. You should provide the following items:

### Wiki Page for V1:

Please create a **wiki page** on your GitHub that contains a direct link to your V1 site or APK binary, any necessary instructions about how to run and test it, and a list of features that are/aren't implemented, along with any other information required by the grader. Make sure to provide information about how to log in or access any authenticated resources related to your project as appropriate.



### Binary Distribution:

The binary distribution contains the resources necessary to run and use your system. If your system is a mobile app, your source repository's wiki should contain a complete set of instructions to download and run your app. (This is distinct from the instructions for building your app from its source code.) If your system is web-based, its binary distribution consists of the site being up and running by the due date.



In the Beta phase you outlined a set of functionality to your customer TA that would be divided between the beta (roughly 2/3) and the V1 (roughly 1/3). Generally speaking your V1 binary should contain this final 1/3 of the functionality that was described at that time, subject to any alterations agreed upon by your group and your customer TA. Part of your grade for this phase will be based on your completion of a sufficient number and quality of features.

Part of your grade will be based on whether your app has a solid and polished **user experience**. This is somewhat subjective, but we will base our decision on general ease of use and our own ability to understand and use your app.

Keep in mind that your product also needs to meet the general requirements specified by "HuskySoft" at the beginning of this project. You may want to **re-read the initial project spec** and/or SRS spec to make sure that you remember what these requirements are and to make sure that you have met them. For example, your V1 must contain a mature implementation of your **client/server functionality**; that is, a significant feature(s) should exist in your app that access and/or save data to a remote data source such as a database, remote API, web service, or file server.

Your product is generally expected not to demonstrate **bugs** or errors during execution. Almost every software product does have bugs, but we expect that by this point in the project, between your work and testing and iterations on your code, that very few bugs remain and that bugs will not typically reveal themselves during usage. As in previous phases, any known unfixed bugs should be documented in your bug tracker. You might decide that it is better not to list any bugs in the tracker, because this is an admission of problems that could lead to point deductions. But if the customer TAs find bugs during testing that are not listed in the tracker, the penalty will be greater than the penalty for a bug that is found in the tracker. Your system should be robust so that any errors occur gracefully as much as possible and give good error messages to the user.

Your binary should be able to be downloaded and run properly, independent of the availability of the project source code. In other words, if the project is in a compiled language, the customer/grader shouldn't need to also get the source code in order to run the compiled binary, and the presence of the source code shouldn't break the ability of the binary to run.

Your team will still work on your project after turning in V1, but you should leave the V1 version available so the customer TA can test it. One way of achieving this is to put the V1 at a **separate V1 URL** or separate APK binary from any previous or future versions, so that one does not overwrite the other. When the customer TA goes to your V1 location, the binary or site there should be in V1 form and not in the form of any earlier or later version of the code that you have completed since the V1. Groups that fail to follow this separation may receive a substantial deduction.

## Source Distribution:

Your project's source code, along with any other resources necessary to build and run your product, must be checked into your version control system by the due date of this phase. We will access your work through your version control system to grade your code, so this must be set up and reachable by your customers at any time. We expect you to be using your version control system properly, making small but coherent check-ins properly labeled with commit comments to indicate what has changed.



Assume that this item is being prepared for one or more developers who would pick up development where you left off.

Your source code will be graded on whether it demonstrates work and effort, is well-designed according to the object-oriented design heuristics learned in class, makes use of design patterns as appropriate, follows proper coding idioms for its platform(s) and language(s), is otherwise elegantly and robustly designed, is documented using comments on each file and significant method or code section as appropriate, and demonstrates general cleanliness and elegance.

Since the code is to be submitted in a state suitable for being turned over to other developers, you should document it sufficiently so that they could read and understand it. This includes summary descriptions of each file along with comments on methods and complex sections of code as appropriate.

The customer/grader must be able to check out your source code from your version control system successfully. We will check your version control system logs to make sure that your group has demonstrated significant progress each week of the project, rather than a large amount checked in at the last minute. You should also be making checkins of modest size and not hundreds/thousands of changed lines per checkin unless absolutely necessary.

We will compare the code to your Beta release to see how gracefully you were able to handle additions, refactoring, debugging, and maintenance. We don't want heavily hacked code for the sake of adding new features or fixing bugs.

Along with your source distribution, include information in your repo **wiki** that briefly summarizes the major features that are now complete in V1 of your project, particularly focusing on what has changed since the Beta.

## Code Reviews and Coding Standards:

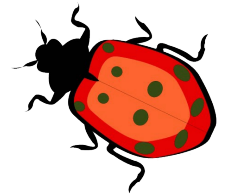
Your group must continue to perform substantive **code reviews** over all non-trivial code check-ins for the project. Follow the same code review requirements and guidelines as outlined in the Alpha spec.

In the Alpha/SDS phase, you described your group's coding standards and how they will be enforced. We expect that your V1 code will follow these coding standards and that your code reviews will address violations of these standards.

## Bugs and Bug Tracking:

We expect that your group is continuing to update your bug/issue-tracking system for each phase. Our expectations for the format and content of each issue/bug report are the same as in past phases.

We will look at your bug tracker to see that you have been filling out bugs and tracking issues at a reasonable rate throughout this phase and the project. We also want to see that the state of issues in the bug tracker is current; that is, whether you have set all actually fixed issues as "closed" bugs and so on.



If we encounter bugs during our testing that are not in the tracker, you lose more points than if such issues were in it.

## Demo / presentation:

During the final week of the school quarter, each group will give a presentation demonstrating its project. This presentation should be roughly 10-15 minutes long. You do not need to submit slides for the presentation but may do so if you like. The bulk of your presentation should cover a live demonstration of the usage of the project itself. For full credit, at least three (3) of your group members must actively participate (speak) in the presentation. **Every member of your group should attend the demos.** A group member who does not attend the presentation and stand with the group during the presentation will not receive credit for this item.

If there are any bugs or problems in the V1 version of the code that you submit, or if you just wanted to add something, it is okay to do your demo on a modified or updated version of your product. But keep the V1 version available at the same URL and/or binary file as when you submitted V1 so the grader can access your work in the state it was submitted.

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