1 Introduction

Our goal is to help you learn introductory material in computer science. Studies show that students perform better in the long-run when their introductory CS experience is collaborative. Hence, collaboration on most (but not all) assignments is encouraged in CS17.

At the same time, we want to make sure that by the time you leave this course you have internalized the material yourself. Therefore, we have adopted a collaboration policy that generally encourages teamwork, while also establishing boundaries that help to make sure you understand everything you hand in.

To help enforce this policy, we limit the use of laptops while you are waiting in line to speak with a TA during hours. You may use your laptop if you are sitting by yourself, and are not talking to anyone else. If, however, you are sitting with a group of people, all of your laptops must be closed, whether or not you are discussing any CS17 assignments.

If you have any questions about this policy, please raise them with the TAs and/or the professor as soon as possible, and certainly before making any assumptions in your interpretation of the policy. Any and all suspected violations will be duly referred to the Academic Code Committee.
Please keep in mind that this collaboration policy is specific to CS17. Policies vary widely from course to course.

## 2 Course Assignments

### 2.1 Labs

Pair-programming is required in labs. See the pair programming guide for details about how to pair program, and what our expectations are for pair programming.

### 2.2 Homeworks

You are encouraged to discuss homework assignments with other students in the class. You may even work out solutions together. However, you are not allowed to take away any written notes, diagrams, or code from joint work sessions. Emails, IM conversations, and the like all constitute “notes”.

We expect you to fully comprehend everything you hand in. To that end, you must write up your solutions entirely on your own, and you must debug your code entirely on your own. Your ability to independently implement and debug solutions, possibly developed with your classmates, is proof that you understand them.

One more important note: after participating in a joint work session, you must pause before writing up your solutions; a pause long enough to grab a cup of coffee with a friend is sufficient.

### 2.3 Projects

You are required to pair program most projects. That means you will code the project together with a partner. Note that divide-and-conquer (you code this part, I’ll code that part) is not pair programming and is not acceptable. See the Pair Programming handout for further clarification. Do not hand in any code that you and your partner do not both understand fully.

When discussing projects with students other than your partner, you should follow the take-away-no-notes-or-code-from-joint-work-sessions policy that applies to homeworks. Under no conditions should you share any of your code with anyone other than your assigned project partner(s).

The work done on any solo (i.e., non pair-programmed) projects must all be your own. Using any part of any solutions discovered by searching the Internet constitutes non-solo work.

### 2.4 Final Exam

For the final exam, every imaginable form of collaboration (including searching the Internet!) is expressly forbidden. We repeat:

No collaboration whatsoever is allowed on the final exam.

The exam should not come up in conversation, even just to mention how easy/hard/short/long you think it is. This may seem extreme, but even a comment as simple as “Problem 1 was pretty
easy, don’t you think?” can give a student an unfair advantage. A student who came up with a complicated solution for the problem might rethink their approach after hearing you say that.

You must hand in a signed collaboration policy with your final exam, acknowledging that your solutions are entirely your own, that you did not discuss the content of the exam with anyone other than the course instructors, and that you did not consult any sources other than the course materials and any websites linked to from the course website.

3 Online Materials

We want to encourage you to take advantage of the available knowledge pertinent to CS 17/18; but at the same time, our goal is to teach you to solve problems, and you cannot develop this skill if you consistently turn to others for their solutions.

3.1 The Web as a Resource

The CS 17 website includes links to all the course lectures and assignments, as well as various supplementary documents, some of which we have written (e.g., CS 17 Racket style guide), and some of which we have not (e.g., OCaml library reference). You are free to access all materials linked to from the course website.

You are also allowed, with some restrictions, to search the web. Specifically, you can search the web to enhance your understanding of a language construct, a data structure, or an algorithm presented in class. More generally, you can search the web for answers to questions that are independent of any particular assignment.

However, you are not permitted to search the Web for any other information regarding CS 17 assignments. Furthermore, it is never in any way acceptable to copy or adapt solutions from an online source. For example, searching for a solution to a problem in language X, when you were asked for a solution in language Y, is indeed information regarding a CS 17 assignment, and cannot be consulted.

Here are some examples of search queries that abide by the CS 17 course collaboration policy:

- How do you use local to define a nested helper?
- How do to select fields in a Racket struct?
- What does “Warning 8” mean in OCaml?
- What is functional programming?

And here are examples of search queries that do not abide by the CS 17 course collaboration policy:

- Racket quicksort implementation
- Python quicksort implementation
- Code that generates subsets of a list
• Define a data type for the untyped $\lambda$-calculus

If you’re ever in doubt about whether a certain query is acceptable, you can always ask the TAs (or even ask them your question!).

In the event that you inadvertently stumble upon information relevant to a solution to a problem, and use this information to derive your solution, please cite your source. Most probably, you will not receive credit for your solution, but a citation will protect you from being charged with violating the course collaboration policy.

Please be advised: our staff is trained to recognize solutions that are not typical of CS 17 students. If we encounter one, we can easily do the same Web search as the student to uncover the source.

Finally, as already noted, all web searching is forbidden during the exam. While working on the exam, you may only access the course website and websites directly linked to from the course website.

3.2 Online Forum

In CS 17/18, we use an online academic forum called Piazza, where students can convene virtually to further explore the course materials. You should check Piazza regularly, as we will sometimes post clarifications to assignments here that may or may not be sent via email or announced during class. You are responsible for all information posted to Piazza. We use this forum to provide students with an additional avenue for discussion. However, you must take extra care when using this forum not to reveal, even implicitly, the solutions to any assignments. For that reason, you should ask all questions privately, and the TAs will make questions public once we have confirmed that the question does not reveal any information about the solution.

What you can do on Piazza is ask or answer clarification questions about course materials, including assignments, so long as they do not pertain to solutions to any assignments. What you cannot do on Piazza is post anything that is at all revealing about a solution to even a small part of any of the course assignments.

4 Protecting Your Workspace

If another student copies any of your work because you have neglected to set the appropriate file permissions, left your terminal session unlocked, or left loose printouts lying around, you will be held partly responsible. Therefore, it is important to make sure that the parts of your home directory where you keep your code are not readable by anyone else. You should also be sure to lock your terminal session when you are away from it, and keep careful track of all of your printouts.

Under the standard home-directory organization, which you will have set up in lab, all of your course-related work is in your course directory. To make it unreadable by anyone but you, open a terminal in the CS department and enter the following: chmod 700 ~/course.

To lock your screen in Gnome (the default Linux window manager), click on your name in the top right corner of your screen, and then select “Lock Screen” from the menu that pops up. Unlike logging out, locking your screen will save all open programs.
5 Policy Enforcement

The TA staff is trained to look for policy abuses and makes use of software designed to recognize similarities across programs. This software is run on all assignments and is remarkably good at detecting unanticipated use of shared code (i.e. plagiarism).

Because our course design is team-oriented, it is all the more important to understand (and remember!) what the boundaries are. Violating the collaboration policy is a violation of the Academic Code[1] and can result in some or all of the punishments detailed by the university.

Once again, if you have any questions at all about this collaboration policy, ask for clarification! Misunderstanding the policy is not an acceptable excuse for not abiding by it.

6 Contract

I agree to abide by the CS17 collaboration policy, and understand its contents and consequences.

Name: ____________________________

Login: ____________________________

Date: ____________________________

Signature: _________________________

Please let us know if you find any mistakes, inconsistencies, or confusing language in this or any other CS17 document by filling out the anonymous feedback form: http://cs.brown.edu/courses/cs017/feedback.

[1] Visit https://www.brown.edu/academics/college/degree/policies/academic-code