CS106B Handout #01
Summer 2012 June 26, 2012

CS106B Course Information

Portions of this handout written by Jerry Cain and Chris Piech

Instructor: Name: Aubrey Gress
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Office Hours (Gates 160): Wednesday 3:15 to 4:15
Thursday 3:15 to 4:15

TA: Name: Jonathan Levi
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Office Hours (Gates 160): Tuesday 5:10 to 6:30
Wednesday 5:10 to 6:30

Lectures: MTWTh 4:15 – 5:05 p.m.
Skilling Auditorium

Website: **http://cs106b.stanford.edu/**

Prerequisites: AP Java, CS106A, or equivalent. AP Java and CS106A are all about basic programming practices—expressions, control idioms, decomposition, algorithmic thinking, class design, object orientation, simple inheritance, and basic client use of arrays, lists, and maps. CS106B teaches advanced programming and abstraction techniques, worrying first about C++ language mechanics and eventually focusing on topics such as recursion, C++ lists and maps, and the implementation techniques used to build custom, dynamic data structures.

Sections: In addition to our weekly lectures, you'll also attend a weekly discussion section. The weekly sessions will be led by our CS106 section leaders (clever name, huh?); your section leader will also be responsible for grading your assignments. Section leaders are students who've taken CS106 before and who are awesome at both CS and teaching.

We offer several discussion sections at various times in order to best accommodate everyone's schedule. You can visit **http://cs198.stanford.edu/section/** anytime between Friday, June 28th at 5:00 p.m. and Sunday, July 1st at 8:00 p.m. to state your preferred section times. After sign-up closes Sunday evening, our computers will work their magic and come up with a master section assignment that will hopefully suit everybody.

Readings: The class textbook is the course reader *Programming Abstractions in C++* by Professor Eric Roberts. The course reader should already be available at the Stanford Bookstore, so everyone can go purchase a copy right now.

In addition to the reader, we distribute a good number of handouts. Electronic copies of all the handouts will be available on the CS106B web site.

Software: Programming assignments can be written on either Macintosh or Windows PC computers, using either XCode (on the Macintosh) or Visual Studio C++ (on the PC). More information on these two programming environments will be provided in separate handouts.

Mailing List: All students enrolled in CS106B are automatically subscribed to the **`cs106b-sum1112-students@mailman`** mailing list. The list server is in touch with Axess, so if you're signed up for the course, you're probably on the mailing list. Please make it a point to sign up for the course as soon as possible, since we tend to send a good number of announcements out during the first week or two, and we don't want you to miss out.

Staff Contact: If you have questions about an assignment or section you can visit the Tressider LaIR which will be staffed Sunday through Thursday nights or you can contact your section leader. If you have questions about lectures, exams or course logistics email **`cs106b-sum1112-staff@lists.stanford.edu`**. This address goes to both Aubrey and Jonathan.

Programs: There are five programming assignments. The assignments are non-trivial projects, and they get more and more difficult as we cover the more advanced material. The only way to learn programming is to work at it, and it will require a substantial amount of time and effort on your part to complete them. Assignments can take anywhere from 5 to 15 hours worth of work, and it's in your best interest to start assignments early and to make continuous progress on them throughout the week.

Except for the last assignment, each assignment is graded during an interactive, one-on-one session with your section leader. During the session, your section leader will discuss your assignment both from a functionality aspect and a design/style aspect, highlighting the submission's strengths and areas for improvement. This is a great way to receive feedback on your assignment so that you can continue to hone your skills in this class. Your section leader will work with you to schedule these sessions.

Exams: There will be one 2-hour exam during the quarter and a comprehensive 3-hour exam given during the final exam period. Both are open note, open reader, closed computer exams. The two exam dates are as follows:

Midterm:	Monday, July 23th	7:00 - 9:00 p.m.
Final:	Friday, August 17th	7:00 - 10:00 p.m.

Because the midterm is being administered at night, we're happy to accommodate anyone who can't make it then. If you can't take the midterm when everyone else is, send the instructors an e-mail message by July 15th at 5:00pm, and we'll work with you to schedule a separate time (you should expect to take your midterm sometime earlier in the day).

For a variety of reasons, all students (with the exception of remote SCPD students) are expected to take the final exam at the official time, so there will be no alternate final exam offered. For remote SCPD students, you will be expected to take the exam during a three hour block on that Friday at a time that is convenient for you and for your exam proctor. All remote SCPD students are to have completed the final exam no later than 10:00pm PST on Friday, August 17th.

Grading: Your final grade will be computed as follows:

Assignments	55 %
Exams	40 %
Participation	5 %

Your exam grade is max(.5*midterm + .5*final,final). What this means is if your curved score on the final is greater than your curved score on the midterm, then your midterm score will be dropped.

To receive a passing grade, you must complete satisfactory (passing) work in both the assignments and exams areas.

Assignments are graded on a bucket system, because we want to de-emphasize the grade and have you focus more on the assignment and our feedback. However, in the interest of transparency, here is a rough description of the various buckets we use for grading:

+ Given to an exceptionally strong submission that not only meets the requirements, but exceeds them in some very significant way. In general, we see less than 2% of assignments getting +s. The + is clearly A+ work.

√+ Given to a solid submission that gets the job done and contains at most a very small number of trivial errors. In general, about 40-50% of assignment submissions get the √+, which roughly maps to an A in terms of a letter grade.

√ Given to a good submission that gets most of the job done but contains one or two major errors, or a significant number of minor ones. In general, about 40-50% of assignment submissions get a √, which roughly maps to a B+.

√- Given to a submission that does most of the work, but contains enough problems that a √ isn't warranted. In practice, √-'s are rare. The √- typically maps to a B-.

There are other bucket grades, but they are super-duper rare enough that we don't need to describe them.

Fair Access Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Student Disability Resource Center (SDRC) located within the Office of Accessible Education (OAE). SDRC staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the SDRC as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066).

Late policy: The pace of this course (especially during the summer) makes it difficult for students to catch up once they have fallen behind, so it is imperative to submit all of your assignments on time. However, sometimes life presents us with circumstances that would prevent us from submitting assignments on time. Instead of asking us for extensions, you have the ability to grant yourself extensions in the form of **three (three) late days**. A late day is used in discrete units and allows you to submit an assignment anywhere between 1 second and 24 hours late, and you may choose to use multiple late days on the same assignment. If you exceed your three late days, we will start to reduce the cap on the possible score on the assignment you turn in late by 1 bucket per day starting at a check plus. For example, if you exceed your late days by 1, then on that assignment the best score you can get is a check. If you exceed your late days by 2, then on that assignment the best score you can get is a check-minus. Assignments received later than four calendar days following the due date will not be graded, but no late days will be counted against your allotment.

Although late days are not intended to cover poor planning or procrastination, we won't ask for justification and will assume you will use your self-granted extensions fairly and wisely in situations the course staff would deem it worthy of an extension. Late days are valuable, and it pays to keep some around just in case you really need them later in the quarter. Further extensions can only be granted by Aubrey and Jonathan. If you need a futher extension please contact Aubrey and Jonathan at least 24 hours prior to an assignment deadline.

Because we don't want you to have to choose between coming to class and finishing the assignment on time, if you come to class the day an assignment is due, then you will get a free extension until 11:59:59pm of that day.