Welcome to CSSE 304. There are about 2 weeks before the course begins, and we are very much looking forward to working with you.

Every term a few students ask, "Can I do anything during the break to make the course easier during the term?" First of all for most students it is not necessary to do anything major. But the first couple of weeks of the course are very fast-paced, and a few students like to spread out the intensity a little bit by working ahead. Most students do not do this, and most of those students do fine in the course. If you did very well on the programming assignments in CSSE230 and if that experience is fairly recent, you probably only need to work on the course in advance if you really want to or if you are bored during the break.   If you did not find the programming in 230 to be straightforward or if it was a long time ago, perhaps you do want to try to read/work ahead a little bit.

We suggest that you read this brief email right away, so you will know what to expect in the course. And you may want to read the (much longer) syllabus before the course starts. We will send another update (only one if you're lucky!) a few days before the course begins.

Jason Hemann and Claude Anderson

Two things to do before the course starts:
1. Install Petite *Chez* Scheme 8.4. See the Assignment 0 document (also linked from the schedule page). If you have a Mac, the notes at the bottom of this message may be helpful.
2. Go to the CSSE 304 Piazza course (https://piazza.com/rose-hulman/fall2017/csse304) and set your email preferences. I suggest "real-time" and "follow all". We can't predict what will happen this term, but typically there are 10-20 messages per week in the 304 Piazza course.

Some other things to know about the course:

Course schedule page: **http://www.rose-hulman.edu/class/csse/csse304**
Summer online classes are still going on this week, so at this point the schedule page is merely an import of last spring's schedule. It will be updated during the next couple of weeks. While the dates for things will get rearranged, Most or all of the early homework problems will be the same as last spring. **If you want to work ahead,** work on the early reading assignments and homework assignments.

Syllabus: **http://www.rose-hulman.edu/class/cs/csse304/201810/syllabus.html**
Has been updated for the new term; there may be minor changes, especially if students find errors in what we wrote.

Exam dates:
(a) Tuesday, Sept 19, 7:00-9:30 PM
(b) Wednesday, Oct 18, 7:00-9:30 PM
(c) Everyone must take the final exam at whatever time the Registrar schedules it. Before the exam schedule is announced, you should not buy plane tickets that would prevent you from taking a Thursday afternoon exam, just in case it is scheduled for then.

Course Startup:
The first 2.5 weeks of the course (a.k.a. *Scheme-a-thon*) will concentrate on getting you up to speed on the course's "laboratory tools": the Scheme programming language, and also a little bit of exploring programming language concepts. During that time there will be an assignment due every day (except Saturdays and Sundays). A typical daily assignment will ask you to write and debug 6-12 small Scheme procedures. Scheme-a-thon will be intense, but when you get through it, Scheme should be a springboard not an impediment to further learning in the course.

The rest of the course will concentrate on concepts, with Scheme as the main tool for exploring and implementing those concepts. We will also continue to explore additional Scheme features that support those concepts. Eventually you will write an interpreter for a substantial subset of Scheme

Textbooks:
Main text: *Essentials of Programming Languages, 3rd edition* by Friedman and Wand. Its title is often abbreviated EoPL.   You will not need this book during the first 1.5 weeks of the course, so that gives you time enough to look for a good price on-line or on-campus.

That book (but not CSSE 304) assumes that its readers already know Scheme well. Thus in the first part of the course (and beyond), we will use two other books, mainly for getting up to speed on Scheme. Both are available online.
Other books (online and free)

1. *The Scheme Programming Language 4th edition by R. Kent Dybvig.*   You can buy the hardcopy book if you wish, http://www.amazon.com/Scheme-Programming-Language-Kent-Dybvig/dp/026251298X **But you may not have to buy this book at all.** The entire book is available free online at http://scheme.com/tspl4/ . You can also download the Petite *Chez* Scheme interpreter from scheme.com.

2. (EoPL-1) Brief excerpt from *Essentials of Programming languages,* 1st edition. In this earlier edition, the authors did not assume that the readers already knew Scheme. It will be available on Moodle, it is attached to this email, and I will hand out printed copies on the first day of class.
   If you want to do some reading before the course starts, this is probably the best place to begin.

Attendance is expected:

I have allowed 7 extra students to take the course, and there are more students on the waitlists. If you don't plan to come to class almost every day, you should let one of those students have your slot.

Installing Petite *Chez* Scheme 8.4 on a Mac (if the info in the Assignment 0 document are not sufficient for you). Read both of these before you begin

Adam Gastineau

It's actually rather easy to install and get working on OS X 10.11. The process is as follows:

1. Download pcsv8.4-a6osx-1.pkg.tar.gz from the Petite Chez Scheme website (or by clicking the provided link)
2. Disable rootless by booting into your Recovery partition and running "csrutil disable". Rootless is a security feature added in El Capitan that write protects /System, /bin, /sbin, and /usr, even when running programs from root. As a developer though, there isn't much point in leaving it enabled, as developers often modify those directories (in fact, most of the Apple employees I know disabled it as soon as they could).
3. Reboot normally, and install the downloaded package.
4. Run "petite" to verify your Scheme installation, and type "(exit)" to terminate the program.
5. (Optional) Reenable rootless by booting into your Recovery partition and running "csrutil enable". Again, if you are going to do any significant development work on your Mac, I would highly suggest leaving rootless disabled.

Xiangqing Zhang 2 months ago

If you are unfamiliar to the new rootless mode in El Captain, here's a quick workaround approach that even doesn't require rebooting OS X:

1. Download the tar.gz nonthreaded version of Petite Chez Scheme for Mac OS X
2. Unzip the tar.gz somewhere
3. Open your terminal
4. **cd** into the unzipped "csv8.4" folder
5. Type `**cd custom**` (only the bold text, no quotes included)
6. Type `**./configure --installprefix=/usr/local**` (You can also choose another installation path; I prefer /usr/local here)
7. Type `**sudo make install**` (note the **sudo** is possibly needed)
8. Now you have successfully installed Petite Chez Scheme! Try to run `**petite**` in the terminal and see if it opens scheme. Once you finish playing with it, type `**(exit)**` to exit.

If you have further questions, please email me (zhangx2@rose) or talk to me in the next week's lab assistant hours.

Thanks,
Jackie