

6.170 Laboratory in Software Engineering

Hints on Succeeding on 6.170 Problem Sets

- **Start early.** Even if you cannot start a problem set as soon as it is released, you should read it over right away to try to gauge how much time you will need to complete it. Remember:

*Everything will take twice as long as you think
even if you know that it will take twice as long as you think.*

Don't deceive yourself into believing that you can put off your problem sets until the last minute: that's heading for disaster. If you start early, you're likely to enjoy it more and spend less time and effort completing. You'll be able to ask for help from the staff, and collaborate more with other students. And you may be surprised to discover how much you'll benefit simply from the elapsed time. Many researchers find that they can overcome obstacles that seem insurmountable just by taking some time off.

- **Don't rush.** It's a big mistake to think that the coding is the real work, so you should hurry the early parts of the problem set and get to the coding as soon as you can. The result of this will be that you spend a lot more time coding, because you haven't understood things properly, and then you're likely to find yourself debugging too. Think it through and get it right the first time, and you'll be done sooner.
- **Don't work in front of a monitor.** It's not easy to work well sitting in a cluster staring at a screen. You'll have more fun, you'll have better ideas, and you'll complete your problem sets sooner if you spend the first few hours with pencil and paper (or laptop if you must) in a quiet and calm place. Don't become a geek who lives underground in darkened rooms; find your favorite places to work -- cafes, libraries, parks, whatever -- and give yourself some variety.
- **If you get stuck, take a break.** If you can't solve a problem, don't struggle. Take a break, especially one that involves physical exercise. I often get stuck on a research problem, struggle for a long time, then finally leave work, only to find that as soon as I'm out the door and driving or biking home, the solution pops into my mind.