CS 172 Guide to Doing Homework

by Amy Gale, who has been in school approximately forever

General Advice
Homework Approach
Read homework assignments carefully on the day you get them.
- If there are parts you can do, do them straight away. That way, they don't get messed up or forgotten when you are hurrying to finish at the last minute.
- If there are parts you aren't sure of, read them over. Then they can turn over in the back of your mind while you go about your other work,
- If there are bits you have no idea about at all, it might just be because you haven't covered that in class yet. You can usually tell when this is the case (but the instructor can confirm, if you ask). Otherwise, go to office hours (we have lots!) for help, reread your notes, or do whatever you need to do.

Homework Strategy
You're probably sick of being told to read the question, but it's important. A lot of people lost points on the first homework by not answering the question asked, or not answering all of it. It's difficult at first to get used to the kinds of questions you can be asked in CS courses, where the questions seem to be buried in a huge pile of other information.
- It can be helpful to highlight the parts in the question statement where you are asked to do or say something.
- When you write up, make sure your answer covers everything you highlighted.

It's not a great idea to write ridiculous amounts just for the sake of it – this can overwhelm graders and lead to longer grading times and other unpleasant side effects. However:
- It's a good idea to write enough that you can see easily that you've fully answered the question. For example, most of the people that scored well on question 1 answered by enumerating the properties necessary for well-definedness and validity and analyzing the definition with respect to each in turn.
- When you lay out your reasoning, you can still get partial points for bits that are good even if the process has some errors. If you just give the erroneous conclusion, you may not get any points at all.
- Homeworks with clear, full answers are good study aids for later in the course. Something you have written is almost always easier to work from than something somebody else has written.

After Grading
Homework assignments are primarily for learning, not assessment. Ideally you will have learned something by doing them, but you can also expect to learn plenty from the grader's comments. So make sure you read them! Don't let a low-seeming grade discourage you – read the comments and try to understand the weaknesses in the approach you used. If you're not sure, go to office hours or send the grader email. It's been my experience that getting questions wrong in homework (or even in tests) can be a far more powerful way of eventually learning the underlying concepts forever than getting them right could ever have been.
If you are worried that your grade is low, talk to the instructor. They will be able to tell you if you are really headed for trouble, or if it was just a particularly difficult homework. They will also be able to help you form a strategy to improve your grade on the next homework.