# Commentary: Week 7

CSE120: Computer Science: Principles

The week begins with a holiday, and so no lecture. Motivated by last week’s discussion of privacy, and the coming lectures of the WWW and security, about 100 pages of the popular *Blown To Bits* is assigned. The material is worthy of an hour-long discussion, but being short of time this year, it is just touched on peripherally.

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| Holiday | Lab 10 | Lecture 17 | Lab 11 | Lecture 18 |
|  | | Assignment 15 … | | |

**Lab 10:** The lab pushes the last assignment from the previous week (Assign 14) to the next level, making it behave like many apps the students have seen. It is a modest programming assignment, but it requires that students think about how image they are displaying is related to the position of the mouse. Most students get it pretty directly.

**Assignment:** Assigned this day is a short survey (included as “gpp…”) asking students questions relevant to pairing them up for the pair programming assignment (and other stuff): Key items, is there someone you would like to work with (or prefer not to work with); when can you be available to work on the assignment (mornings, etc.), how would you rate yourself (0 terrible to 5 star) as a Processing programmer, etc. When pairing students, the goal is to have them be available at the same time and to be roughly of equal ability, (but you cannot rely solely on the survey assessment).

**Lecture 17:** The lecture is on networking. They have vague familiarity with it, of course, but the goal is to get a few protocols across: EtherNet (party protocol), TCP/IP (postcard protocol) and client/server. At the end of the lecture there is a brief discussion of the process and point of pair programming, because they are about to be given an assignment to do that.

**Assignment 15:** This is the pair programming assignment. The students must work together, and so compatibility is an issue – it almost always works out, but there should be attention paid to how students work together in the lab to identify potentially difficult situations. Historically, students choose to do a game, and I think this is a good choice; the constraints only ask for an “app,” however, which allows for activities that are not competitive and this is now more frequent. Requiring students to get approval for their plan forces them to create a plan, and allows the instructor a chance to moderate it, either turning it up or down.

**Lab 11:** This is mostly here to give students a chance to try out pair programming, (and to cover nested loops, which is a totally optional subject). At the start of lab, review the ground rules for pair programming. (See end of lecture 17.) Students find this a fun exercise. Emphasize that the point is to get into working together.

**Lecture 18:** This is a lecture that failed for me this year because of computer problems, but I think it is a good lecture. The point is to develop a small app in class in real time as a way of discussing how to go about writing apps, since that is the assignment. The problem solution uses arrays, which they are now quite familiar with, it uses variable colors and other features that the students have been prepared for. So, the point is mostly to just walk through the steps to show that this isn’t monumentally difficult.