New concepts tend to force a person to re-visit the meaning of older, more established concepts. It’s amazing how in Computer Engineering many terms are used without real definition. Computer Engineers seem to learn how to use terminology without definition by simply mimicing the way others use it and inferring the meaning. But this can also create confusion and lead to a lack of real understanding.

So, with this little warm-up exercise, you’ll re-visit some terminology you’ve used on many occasions and discover some new terminology as well. You may be surprised how many different definitions there are for the same thing, and how those definitions can lead to a real lack of understanding and communications about the types of problems being worked on.

For each of the terms in the list at the end of this assignment:
1. Find two definitions in sources you can cite. Sources include books, papers, magazine articles (journal, trade or even those outside the profession) and the great unwashed mass of websites. At least one of the two definitions must come from a publication of some kind OTHER than a website. Articles published both on websites as well as more archival places are acceptable. You may use definitions that are not explicit, as in the form: “computer: a device that becomes obsolete within 2 years so that Computer Engineers can make money designing new ones.” Terminology can often be used in articles, surrounded by text that would a seem to orient the reader as to what the author implies by a term. Include the actual text you found, and the definition you inferred from the text.
2. Form your own definition of the term. Point out why yours is better than the ones you found. If you believe one of the definitions you found is perfect and can not be improved, you can use that. But you must say why you believe it is the perfect definition.

Turn the list of terms and definitions in as a plain text file to brettmeyer@cmu.edu by 9AM on Wednesday, September 8. Please use “18-767 homework 1” as the subject line of the email. We realize the due date says September 7 but the actual time is 9AM the next morning. We know how you work.

These terms will be compiled and discussed in class on Thursday, September 9. Be prepared to discuss them!

Here’s the list of terms. Where some terminology can apply to areas other than computing, stick to the context of computing!
1. Real-time
2. Embedded System
3. Processor
4. Program
5. Network
6. Function
7. Architecture
8. Scheduler
9. System-on-a-Chip
10. Multi-Processor