University of Illinois at Urbana-Champaign
Dept. of Electrical and Computer Engineering

ECE 220: Computer Systems & Programming

Review: Good Design

Many Ways to Measure Goodness

What is the metric of goodness for software?
- number of instructions executed?
- amount of memory required?
- time required to finish?
- energy consumed?
- "correct" answers?

Yes.

All of them matter. Sorry.

Welcome to Engineering.

Two Goals Guide Our Choices in Software Design

1. **simpler (or feasible) approach**
   - avoid unnecessary complexity
   - use clear and obvious techniques when possible
   - a simple design that does work is better than a complex design that may work

2. **easy to understand and test**
   - as easy as possible to read (structure, indentation, comments!)
   - organize functionality to enable both separate and system-wide testing

It's That Time Again

Time to help me, I mean.

I need coffee.

But first, I need food.

I have a map.

Help me to find my way
- from my office in CSL
- to Strawberry Fields.