Getting on the same page

- Readings make sure you keep up
- General Ethical concepts
 - do a little research, read Johnson chapter
- SE Code of Ethics reading (pop quiz)
- Paper proposal coming up!
 - What is the format?

New Class Feature

- Current Events presentation
 - 1 or 2 minutes
 - you choose the topic in general computing
 - what is new, interesting or controversial?
 - where is there further information?
- This is part of the class participation grade

Basic CSC 300 Issue List

- Hacking black and white hat
- Downloading copyrighted files
- Pornography
- Replacement of human judgment by deterministic machines
- Safety of computer controlled systems
- E-voting
- Privacy
- Video game violence

Topics, top level

- Broad ideas can be explored:
 - EIR model for software development
 - Ethical distance "increased" by computing
 - Software systems as "agents" of humans
 - vis a vis moral / ethical responsibility
 - Copyright as applied to object is unethical
 - hides the "innovative ideas" contrary to US Const
 - patent applied to software is better (exposes ideas)

Other Possible General Paper Topics

- •Intellectual Property in software
 - •Open Source, GPL?
- Online gaming addiction
 - •"addiction" to software?
- •Military use of software for smart bombs
 - •software as decision maker?
 - •Expert Systems and personal responsibility
- Database / Network privacy
 - •Spyware and the "free market"?
- •Software Engineering Cal Poly's B.S. program?
- •Wardriving as a "service"?

Topic Thoughts

- My Passions:
 - The "Requirements" problem
 - "Design" considerations
 - "Licensing" and "Liability" issues
 - Abstraction as Reification
- What is YOUR passion?
 - the lens with which you can view the entire course?

Ethical parameters at Issue Here?

- Private property
 - theft and morality: IP, downloading, cheating
 - trespass: hacking, spam
- Anonymity
 - privacy, pornography, marketing, spam
- Privacy
 - "right to be left alone"
 - data mining, spam

• Others?

- dependence (backup systems?)
 - could we survive without all the chips functioning?
- distribution of control / centralized control
- right to know (connected, secret databases)
 - accuracy, ownership / control of "information?
- responsibility ("many hands")
- cause ("traceability")

What is "new" about computing?

- Are these computing ethics issues special?
 - why can't you take a GE in "Ethics" and be done with it?
- Fred Brooks "Mythical Man-Month" says
 - complexity
 - conformity
 - changeability
 - invisibility

Computing Uniqueness

- Johnson sees differences
 - new entities
 - scale of activities
 - new kinds of activities heretofore impossible?
 - inherent unreliability
 - reliability is always an issue (can't have statistical reliability models?)
 - power and pervasiveness

Johnson goes Deeper

- "Instrumentation of human action"
 - what is this?
- Johnson has a problem with analogical reasoning in computing activities

Philosophical Ethics

- Critical examination of beliefs for
 - consistency?
 - rationality?
 - logic?
 - what sort of meaning do we look for?
- What is the method she recommends?
 - Dialectic to "find" the underlying principle

Utilitarianism

- Utilitarianism
 - act-utilitarians
 - rule-utilitarians
 - egoists
- Pros and Cons of Utilitarianism

Deontology

- the principle inherent in the action is decisive
 - do consequences count?
- Kant's "categorical imperative" says
 - "never treat another human being merely as a means ..." (compare Buber's "I-thou"?)

Rights

- Positive rights
- Negative rights

Claims about the World

- Normative
- Descriptive

Parnas view on What We Do

- What is a "Rational" design process
 - and why is it called "Rational" Corp? :-)
- What is the reality?
- Does Parnas advocate dishonesty?
 - what is the difference between the rational process and his process?
 - why?

Highest level CSC 300 concerns

- Our subject is [pure] ABSTRACTION
 - what is that?
 - how does it work?
 - how good is it, how can we tell it is "good"
 - or "better" than another one?
- What are the basic issues in abstraction of reality?
- Anyone know about the Sapir-Whorf-Korzybski hypothesis in the field of general semantics?
 - what might it mean for CSC/SE/CPE and ….. does it infect everyone to such an extent?