CSC 302 - Week 2

Only 9 more weeks :-}
Administrivia

• Hand in homework
• Hand back quizzes
• You’ve looked over the IEEE/ACM Software Engineering Code of Ethics
• You’ve read Chapter 1 and [2] of Baase
  – chapter 2 may be finished by Wednesday
• You’ve read Chapter 1 of Petroski’s text (10 pages of riveting prose?)
Go over Quiz

• Note style and content
  – just like for textbooks, figure out your Professor and what s/he is driving at
    • in fact, I recommend you do some research about your Professors in general
      – where did they go to school?
      – what did they research?
      – what drives them - what do they have to teach you?

• I want to know you’ve done the readings
• I want to know you can do some analysis independent of the text and class discussion
IEEE/ACM Software Engineering Code of Ethics

• Put up webpage (it is in back of Baase too)
  – what do you think?
  – what are the main features?
    • how about IP enforcement?
    • is it ever mandatory to violate the law?
  – refer to this when you need some general principles
Baase Text as a Text

• Why did she write the book?
• Where does she work (check her webpage?)
• What is in Preface? Epilogue?
• Does she have a glossary?
• Does she cite your Professor?
• Note the Chapter structure
Baase Chapter 1, anything of interest?

• “Issues”
  – Unemployment
  – Alienation and customer service
  – Crime
  – Loss of Privacy
  – Errors
For Week 3

• Read Chapters 2 and 3 in Petroski’s book
• Begin Chapter 4 Baase (look at it now :-)
• Discuss individual topic presentations (look at syllabus)
• Anticipate group formation next week
• Assignment: Baase 2.7 and 2.27 (think about 2.43) due Monday
Baase, Chapter 1

• “Themes”
  – Old problems in a new context*
  – Adapting to new technology
  – Global reach of the “net”
  – Tradeoffs and controversy*
  – Distinguish personal choice, business policy and law
  – negative and positive rights*
Baase, Chapter 1

• “Benefits”
  – the www in general: communication
  – autos and trucks
  – education and training
  – crime fighting
  – health and medicine
    • medical devices *
    • patient records
    • diagnoses
    • telemedicine
Baase, Chapter 1

• Tools for Disabled (ADA stuff?)
• Automation in manufacturing
• Identification, sensors and tracking
• Reducing paper and trash
Petroski

• What about the text?
• Chapter 1 “Being Human”
  – consider Engineering spirituality vis a vis the Creation Stories
  – “Science” studies the natural world
    • Engineers live in the “given” world
    • Simon “Design Science” ideas are new
Petroski

• Risks of engineering
  – new technology implies new risks
  – risk-utility analysis
    • requirements
      – cost
      – personal taste
      – inconstant
      – incorrect
      – code of Hammurabi
Petroski

• Things could be Engineered “10 times as strong”
  – for a price
    • time, money, effort

• Is this true for software and computing?