CS 121

Our Digital World

March 29, 2011

Prof. Chadd Williams

202 Strain Office Hours

chadd@pacificu.edu Tues 10-11 am 1-2 pm

Thur 2-3 pm

Fri 1-2 am

& by appointment

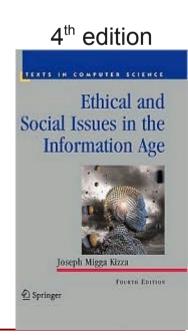
Overview

- This is a discussion based class!
 - Come to class prepared
 - Do the readings
 - Research the topics
 - Participate
- I'll provide topics and questions to guide discussions
- Each class will be part lecture/discussion/activity
 - Research/small group discussion/find & present

Syllabus

http://zeus.cs.pacificu.edu/chadd/cs121s11

- Most classes will have a small homework assignment
 - Find an article on the next topic
 - Post on web site brief explaination/commentary
 - Wikipedia



Success!

- Show up on time for every class
 - Only 12 lectures after today!
- Take notes
 - Get a binder or folder
 - Stay organized
 - How to manage electronic resources?



- Don't web surf during lecture.
 - Or, web surf on-topic!
 - Turn off your cell phone.
- Participate in class discussions
 - Ask questions

http://static.eway.com/catalog/1/ce05_127973_pfd.jpg

How to send an effective email

To: chadd@pacificu.edu

From: hall4242@pacificu.edu

Subject: CS121: research topics

Hi Chadd, I've found three articles on using your cellphone to automatically wash your dog. Does that sound like a good topic for Thursday's discussion?

Thanks, Lesley

Goals

What are you interested in?

- Understand the nature of digital information
- How does the Internet work (history)?
- Perform quality research using electronic information resources
- Form and defend opinions about the impacts of Internet on culture and society
- Appreciate the ethical concerns raised by the Internet
- Predict the ways in which the Internet will evolve in the coming years

Class Survey

- Let's get down to something practical
- Open up a web browser
- Go to

http://zeus.cs.pacificu.edu/chadd/cs121s11

- Complete the survey and submit!
 - Your name is optional
 - We'll review the answers in 10 minutes.

Why Our Digital World?

- We interact with computers all the time
 - Why?
 - How?
- What do you use computers for?

Internet Users

- How many people are using the Internet today?
 - What has the growth been like since 1993?
 - Mosaic launch first public, wide spread web browser
 - Can you define web browser?
 - Search online for an answer (5-10 minutes)

– How did you find this information?

Internet Revolution

- Many people claim the Internet revolution is not about technology but about allowing more people to create content.
 - What does this mean?
 - Is it true?
 - Are you a creator of content?
 - Where do you create content?

Web 2.0 Discussion

- Web 2.0
 - Definition?
 - 5-10 minutes of searching

- How is this different than Web 1.0?
 - No one ever said web 1.0

Computer Basics

Hardware

Software

Operating System

- Network
 - The "Cloud"

Digital Information

- How is non-digital information stored?
 - What is non-digital information?
 - Examples?

- How is digital information stored?
 - What is digital information?
 - Examples?

Bit Byte Megabyte Gigabyte

Digital Formats

- Plain Text versus Binary
 - Examples?
- Formats
 - Open
 - Closed
 - Proprietary
 - Vendor lock-in
 - Find 2 video formats
 - Find 2 image formats
 - Advantages/disadvantages of each?

How big....*

- Is a 10 page Word document?
 - < 1 MB
- Is a 10 megapixel photo?
 - 3 MB
- Is a 3 minute song from iTunes?
 - 4 MB
- Is a 60 minute pod-cast?
 - 40 MB
- Is a 2 hour HD movie?
 - 50 GB (Blu-ray Disc)

*The answer depends on the quality at which the data is stored.

Question of the Day

- How does digital vs non-digital storage change things (Digital Revolution)?
 - Content generation
 - Content distribution
 - ???
 - Find a few (at least 2) articles on this topic and:
 - Write a short summary of each article
 - What is one question the articles raise that you want answered?
 - Email all of the above to yourself and to me: chadd@pacificu.edu
 Subject: CS121: Question of the Day 3/29/2011