cis3.2 — electronic commerce — 26 jan 2006 — lecture # 1

today

topics:

- course objectives and structure
- readings, assignments and assessments
- brief introduction to e-commerce
- identification of main technologies used in e-commerce
- identification of key issues with using them

course information

- *instructor:*
  Prof Elizabeth Sklar
  `http://www.sci.brooklyn.cuny.edu/ sklar`
  email: *sklar@sci.brooklyn.cuny.edu*
  office: 1417 Ingersoll
  phone: 718 951 5000 x1502
  office hours: Mondays 11.00am to 12noon

- *course web page:*
  `http://www.sci.brooklyn.cuny.edu/~sklar/cis3.2/`

- *lectures:*
  Mondays and Thursdays, 9.25am-10.40am, in room 232 NE

- *computer access:*
  You need to have access to a computer and the Internet for this class.

- *OPTIONAL textbook:*
  Developing Distributed and E-Commerce Applications (2nd edition)
  by Darrel Ince
  publisher: Addison Wesley (2004)
  ISBN: 0-321-15422-3

- *course description:*
  This course covers how the Internet can be used to conduct business. Topics covered include: Internet hardware and software, tools and technologies for creating an interactive Web site, characteristics of successful Web sites, new technologies, the future of the Internet, Web communication strategies, security issues, legal and ethical issues, Internet information services, data mining, global E-commerce. Case studies of successful E-commerce businesses will be examined. This course is the same as Business 31.5.

- *prerequisites:*
  Core Studies 5 or 5.1 or Computer and Information Science (CIS) 1.5.

topics

- Introduction to e-commerce and distributed applications
- How the Internet works
- Introduction to Clients and Servers
- Database servers
- Introduction to web programming (HTML, Javascript)
- Interaction mechanisms (auctions and negotiation protocols)
- Case studies
- Content Management Systems
- Internet Security
- Agents and Bots

assessment

Your course grade will be made up of the following components, out of 100 points:

30	points	=	5 homework assignments (6 pts each)
30	points	=	project / case study: oral presentation (5 pts), web program (15 pts), written report (10 pts)
40	points	=	2 exams (20 pts each)
100	points		

course objectives

This is introduction to e-commerce, to the main technologies which support it, and to some of the issues surrounding their use. The major areas of focus of the course are:

- basic concepts of e-commerce
- computer software technologies to support e-commerce
- e-market interaction mechanisms
- security

Additionally, you'll get some hands-on experience with building a web site for an e-commerce application.

desired learning outcomes

- understand the main technologies behind e-commerce systems and how they interact
- gain an appreciation of the complexity and challenges involved in implementing and using them
- gain an understanding of how secure transactions can be ensured
- gain an appreciation of auction protocols and interaction mechanisms

how to learn

- attend class and TAKE NOTES!!!
- do the assigned reading, if possible before the corresponding lecture. take notes. jot down your questions.
- make a 1-page summary of your notes, at the end of each week.
- search the web to see what else there is there on these topics!
- do the homeworks and project well ahead of time.
- if you don't understand something, ask!!
- if you have trouble, come see me in my office hours.

introduction to e-commerce

- what is commerce?
- what is e-commerce?
- what are the key decisions?
- what are the problems and issues around e-commerce?

what is commerce?

We take a very broad view:

- commerce involves transactions between two or more individuals and/or companies in which each party hopes to gain a benefit by exchanging something with the other party (or parties)
- what is exchanged?
  we'll focus on money for products (goods or services)
- some common abbreviations:
  - B2B = business to business
  - B2C = business to consumer
  - C2C = consumer to consumer or company to company (context dependent)

what models are used for e-commerce?

- *auctions* — site acts as a mediator between buyers and sellers; site earns a commission on sales; most famous auction site is `http://www.ebay.com`
- *affiliate sites* — two symbiotic sites contain links to each other; or a non-retail site contains a link to a retail site; affiliate site earns a commission when users click to the retail site
- *banner advertisements* — one site hosts ads for a company (which may or may not have a web site); site earns commission when users click on the ad
- *bulk-buying* — users join together to buy goods in bulk and site acts as a mediator and match-maker, connecting users with the same interests and matching the group with a supplier; site earns a commission on the bulk sale

- *shopping malls* — site hosts web sites for multiple companies; site earns "rent"
- *portals* — site contains a lot of material on one (narrow) topic; often a "pyramid" scheme is used where some material is provided for free, some is available at a small fee, and increasing amounts of material are accessible for larger fees
- *digital publishing* — site contains electronically published journals or magazines; site earns money through subscriptions
- *licensing* — site allows users to download software for a fee
- *community sites* — like portals, but with chatrooms added so that users with similar interests can interact with each other directly
- *name-your-price sites* — like an auction site, but the pricing scheme and negotiation between buyers and sellers is different; most famous site is `http://www.priceline.com`
- *email providers* — users pay a fee to have their email hosted by a site
- *archiving sites* — users pay a fee to have their files archived (backed up) on a site

about us...

- about me: I'm a graduate of Barnard College (BA in Computer Science) and Brandeis University (MS and PhD in Computer Science). I worked for 10 years in industry, mostly doing scientific programming, but also writing software for a small business. This is my 6th year teaching. My research is in the area of interaction in multiagent systems and technologies for learning. I work with robots, robotic soccer and using robots to teach kids about science and technology.
- about you: please answer the following questions —
  1. your name
  2. your email address
  3. your year and major
  4. what computer science courses and/or experience have you had?
  5. why are you taking this class and what do you hope to get out of it?
  6. tell me something wonderful that you did over the summer

for next time

- check out the class web page