

## CS520 Web Programming Course Overview

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## Advantages of Web Applications

- ◆ Easy to distribute → easy to attract large number of users
- ◆ Easy to use
  - From anywhere
  - No installation required
- ◆ Easy to administrate
  - Maintenance, troubleshooting, upgrade

◆ *Disadvantages??*

## Success Stories

- ◆ Google
  - Deja News, Blogger, Picasa, Keyhole, YouTube
- ◆ Yahoo
  - Dialpad, blo.gs, Flickr, Del.icio.us
- ◆ Ebay
  - Craigslist, Skype
- ◆ News Corp
  - Myspace.com

## So What's in CS520?

- ◆ Tools, libraries, frameworks, and methodologies for developing *complex* web applications
  - Robust, scalable, and maintainable
- ◆ Emerging and future technologies
- ◆ Research issues

## Web Development Fundamentals

- ◆ MVC architecture, design patterns
- ◆ Frameworks
  - Spring, Hibernate, Acegi
- ◆ Tools and libraries
  - Build, version control
  - File uploading, email
  - Full text search
  - RSS and Atom feeds
  - Task scheduling

## Emerging and Future Technologies

- ◆ Ajax
- ◆ Web services
  - SOAP, WSDL, UDDI
- ◆ Semantic web
  - The semantic web stack
  - RDF

## Research Issues

- ◆ User activity analysis
  - Recommendation systems
    - ◆ Collaborative filtering
  - Web data mining
    - ◆ Improve user experience
    - ◆ Adaptable web applications