

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

Merging and Future **Technologies**

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

Research Issues

- ♦User activity analysis
 - Recommendation systemsCollaborative filtering
 - Web data mining
 - Improve user experience
 - Adaptable web applications