Browsing the Web

How the Web Works

URL

HTML

Dynamic Content

- Web search results
- Shopping cart
- ...
- Anything that need to be generated *on the fly* based on user request
Deliver Dynamic Content

- Application server
- Servlet container
- Server-side programming vs. Client-side programming

Server-side Technologies
- CGI
  - C, Perl
- Java
  - Servlet/JSP
- .NET
  - VB, C#
- PHP
- Ruby
- Python

Client-side Technologies
- HTML, CSS
- JavaScript
- Java Applet
- Rich Internet Application (RIA) technologies
  - Adobe Flex and Flash
  - Microsoft Silverlight

Why Web Applications?
- Take traditional businesses to larger audience
  - Amazon, Netflix
- Replace desktop applications
  - Google Docs, MS Office Live
- Open up new opportunities
  - Facebook, Twitter, Youtube

Advantages of Web Applications
- Low publishing and distribution cost
- Potentially large user base
- Centralized administration
  - No client side installation
  - Professional maintenance
  - Easy data backup
  - Easy upgrade
- Available anywhere, anytime
- Piracy proof