Topic Overview: Server-Side Programming but not DBI

Computer Science 3172

25 March 2005 (1a)

1 Goals

Review from CS3171

- HTTP transaction
- HTTP error codes
- HTTP cookies
- basic state definition

Introduce

- detail of statefullness
- CGI in depth
- cost vs. accessibility tradeoff
- communication in, and above, the application layer between client and server
- session

2 Major Topics

State

- What is it
- How is it
- Methods to maintain

Subtle ways to maintain state

- forms
- session password
- URL rewriting

Overt state maintenance

- cookies
- servlet

Redirection as a key enabling technology for Web programming

Basic CGI

- 2-way traffic

Basic SSI, JSP, ASP, etc.

- power of server-side programming
- syntax for macro-based replacement and if-processing

Servlets as multi-modal state maintainers

- encapsulation

3 Related Readings

- Examples at website
- Apache documentation

- *HTTP: The Definitive Guide* (esp. Ch. 1, 3, 4, 5, 11, 12, 17, 20, B, C)