An Example HTTP Request Message

Request line specifies the operation, the URL, and the HTTP version

GET /~cs586/announcements.html HTTP/1.1\<CRLF>
Host: www.cs.iastate.edu\<CRLF>
User-Agent: Mozilla/4.0\<CRLF>
Connection: close \<CRLF>
Accept-Language: fr \<CRLF>
\<CRLF> (extra carriage-return + line-feed)
Message_Body

A blank line

Typically empty for request messages

An Example HTTP Response Message

Status line specifies protocol, status code, and status phrase

HTTP/1.1 200 OK\<CRLF>
Connection: close\<CRLF>
Date: Mon, 27 Aug 2012 13:00:15 GMT\<CRLF>
Server: Apache/1.3.0 (Unix) \<CRLF>
Last-Modified: Mon, 13 Aug 2012 14:50:24 GMT\<CRLF>
Content-Length: 6821\<CRLF>
Content-Type: text/html\<CRLF>
\<CRLF>
Message_Body

Data (e.g., requested page)
HTTP Request Operations

- GET: Retrieve the document identified in URL
- HEAD: Identical to GET except that the server must not return any Message Body in the response
- POST: Give information to server (e.g., posting a message to a bulletin board, submitting a form)

HTTP Response Status Codes

Some sample codes:

200 OK
- request succeeded, requested object included in this message

301 Moved Permanently
- requested object moved, new location specified in Location header

400 Bad Request
- request message not understood by server

404 Not Found
- requested document not found on this server

503 Service Unavailable
- the server is currently unable to handle the request due to a temporary overloading or maintenance of the server

505 HTTP Version Not Supported
Conditional GET

Client

HTTP request
If-Modified-Since: Fri, 01 Apr 2007 05:00:01 GMT

HTTP response
HTTP/1.1 304 Not Modified

Server

HTTP request
If-Modified-Since: Fri, 01 Apr 2007 05:00:01 GMT

HTTP response
HTTP/1.1 200 OK
<data>

object not modified

object modified