

# Chapter 5. Handling the Client Request: HTTP Request Headers

## Topics in This Chapter

- Reading HTTP request headers
- Building a table of all the request headers
- Understanding the various request headers
- Reducing download times by compressing pages
- Differentiating among types of browsers
- Customizing pages according to how users got there
- Accessing the standard CGI variables

One of the keys to creating effective servlets is understanding how to manipulate the HyperText Transfer Protocol (HTTP). Thoroughly understanding this protocol is not an esoteric, theoretical concept, but rather a practical issue that can have an immediate impact on the performance and usability of your servlets. This section discusses the HTTP information that is sent from the browser to the server in the form of request headers. It explains the most important HTTP 1.1 request headers, summarizing how and why they would be used in a servlet. As we see later, request headers are read and applied the same way in JSP pages as they are in servlets.

Note that HTTP request headers are distinct from the form (query) data discussed in the previous chapter. Form data results directly from user input and is sent as part of the URL for **GET** requests and on a separate line for **POST** requests. Request headers, on the other hand, are indirectly set by the browser and are sent immediately following the initial **GET** or **POST** request line. For instance, the following example shows an HTTP request that might result from a user submitting a book-search request to a servlet at

<http://www.somebookstore.com/servlet/Search>. The request includes the headers **Accept**, **Accept-Encoding**, **Connection**, **Cookie**, **Host**, **Referer**, and **User-Agent**, all of which might be important to the operation of the servlet, but none of which can be derived from the form data or deduced automatically: the servlet needs to explicitly read the request headers to make use of this information.

```
GET /servlet/Search?keywords=servlets+jsp HTTP/1.1
Accept: image/gif, image/jpeg, */*
Accept-Encoding: gzip
Connection: Keep-Alive
Cookie: userID=id456578
Host: www.somebookstore.com
Referer: http://www.somebookstore.com/findbooks.html
User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)
```