



SNS COLLEGE OF ENGINEERING



Kurumbapalayam (Po), Coimbatore - 641 107

An Autonomous Institution

Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

COURSE NAME: 19CT503 - Internet Programming

III YEAR /V SEMESTER

Unit 1- WEBSITE BASICS

Topic : HTTP request and response message



HTTP

- HTTP stands for **HyperText Transfer Protocol**.
- It is a protocol used to access the data on the World Wide Web (www).
- The HTTP protocol can be used to transfer the data in the form of plain text, hypertext, audio, video, and so on.
- This protocol is known as HyperText Transfer Protocol

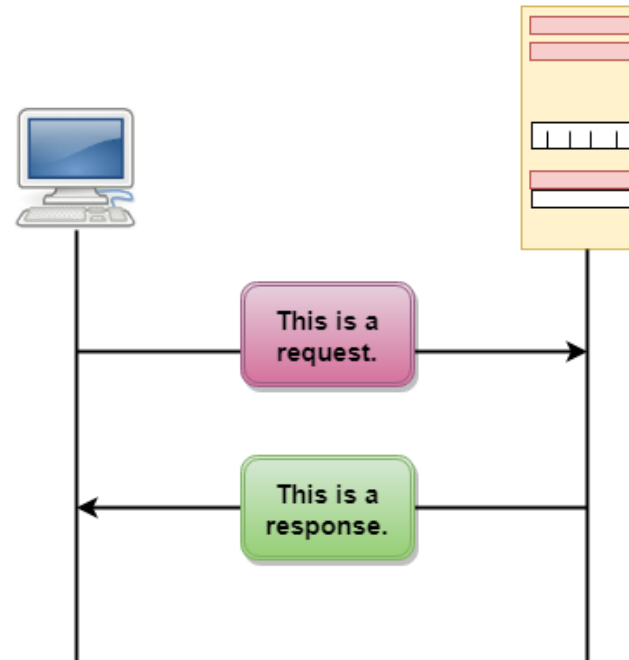


- HTTP is similar to the FTP as it also transfers the files from one host to another host.
- HTTP is used to carry the data in the form of MIME-like format.
- HTTP is similar to SMTP as the data is transferred between client and server.



Features of HTTP

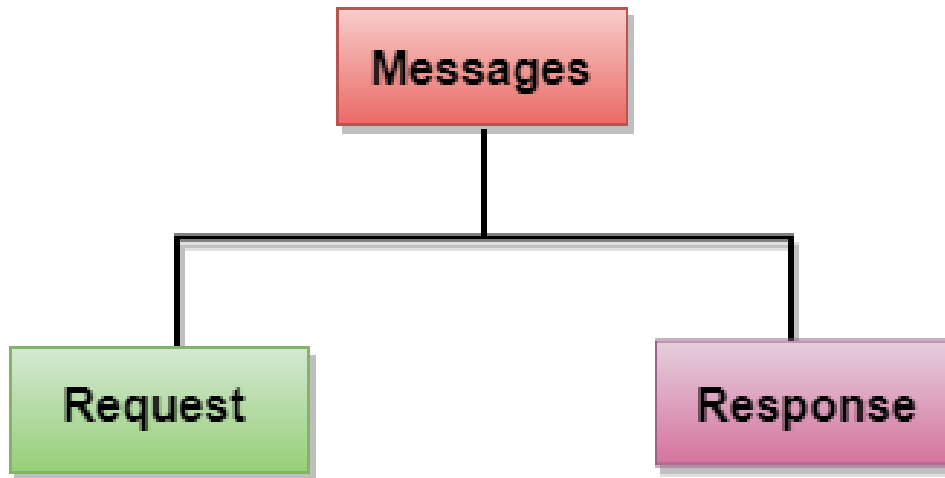
- **Connectionless protocol**
- **Media independent**
- **Stateless**





Messages

- HTTP messages are of two types: request and response. Both the message types follow the same message format.



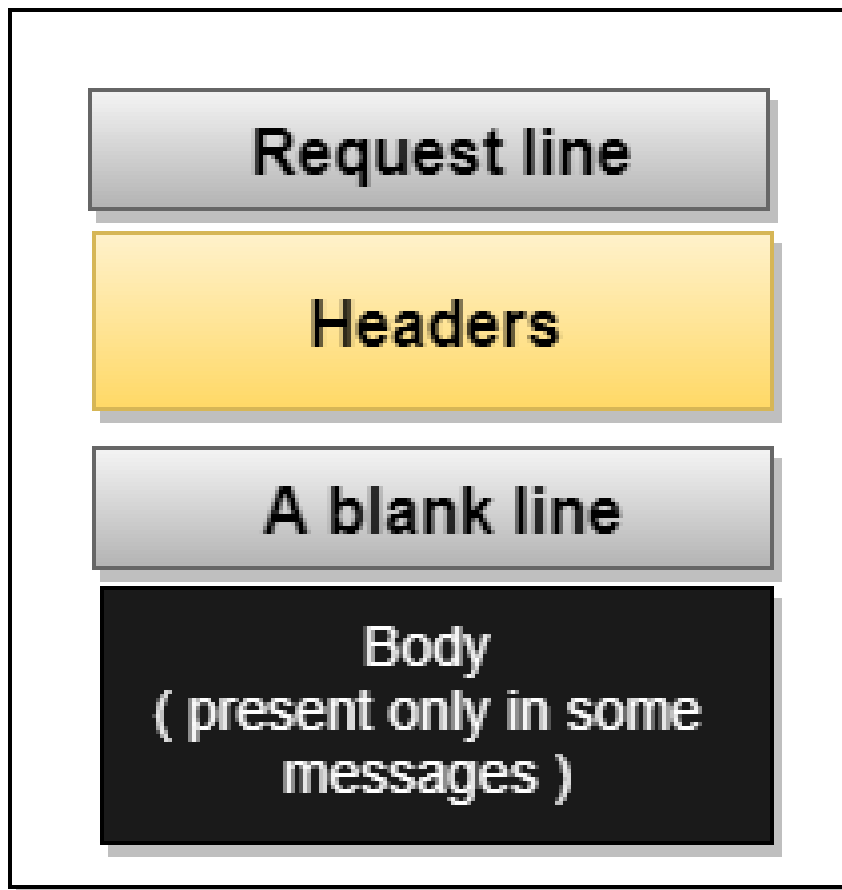


Request Message:

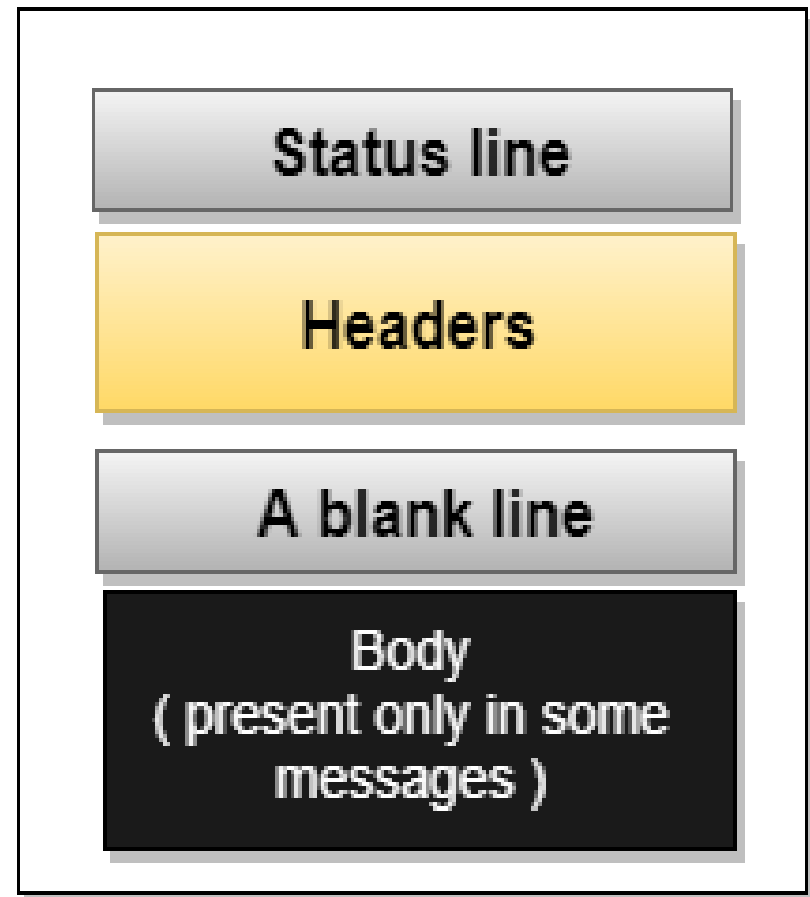
The request message is sent by the client that consists of a request line, headers, and sometimes a body.

Response Message:

The response message is sent by the server to the client that consists of a status line, headers, and sometimes a body.



HTTP Request



HTTP Response



GET /index.html HTTP/1.1

Date: Thu, 20 May 2004 21:12:55 GMT

Connection: close

Host: www.myfavoriteamazingsite.com

From: joeblow@somewebsitesomewhere.com

Accept: text/html, text/plain

User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)

Request Line

General Headers

Request Headers

Entity Headers

Message Body

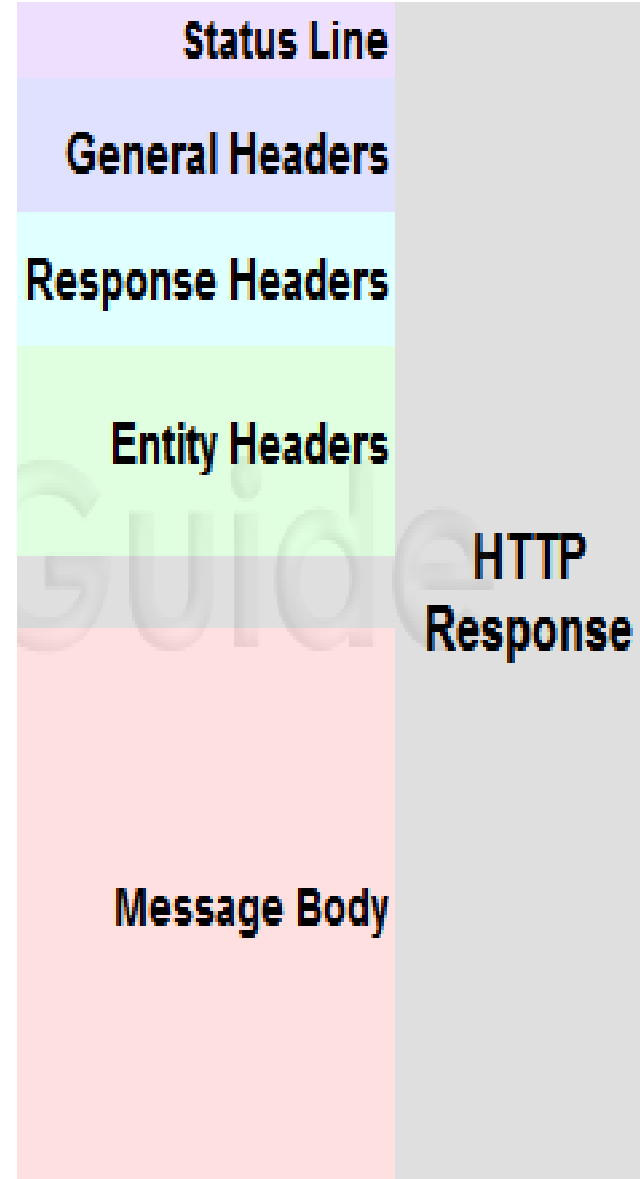
**HTTP
Request**

HTTP Request



```
HTTP/1.1 200 OK
Date: Thu, 20 May 2004 21:12:58 GMT
Connection: close
Server: Apache/1.3.27
Accept-Ranges: bytes
Content-Type: text/html
Content-Length: 170
Last-Modified: Tue, 18 May 2004 10:14:49 GMT
```

```
<html>
<head>
<title>Welcome to the Amazing Site!</title>
</head>
<body>
<p>This site is under construction. Please come
back later. Sorry!</p>
</body>
</html>
```



HTTP Response



Uniform Resource Locator (URL)

- A client that wants to access the document in an internet needs an address and to facilitate the access of documents, the HTTP uses the concept of Uniform Resource Locator (URL).
- The Uniform Resource Locator (URL) is a standard way of specifying any kind of information on the internet.
- The URL defines four parts: method, host computer, port, and path.



Method:

The method is the protocol used to retrieve the document from a server. For example, HTTP.

Host:

The host is the computer where the information is stored, and the computer is given an alias name.



- **Port:**

- The URL can also contain the port number of the server, but it's an optional field.
- If the port number is included, then it must come between the host and path and it should be separated from the host by a colon.

- **Path:**

- Path is the pathname of the file where the information is stored.
- The path itself contain slashes that separate the directories from the subdirectories and files.



THANK YOU