**HTTP- stateless nature**

**Advantage :** The stateless design simplifies the server design because there is no need to dynamically allocate storage to deal with conversations in progress. If a client dies in mid-transaction, no part of the system needs to be responsible for cleaning the present state of the server.

**Disadvantage:** A disadvantage of statelessness is that it may be necessary to include additional information in every request, and this extra information will need to be interpreted by the server

**Examples of stateful protocol:**

- TCP (Transmission Control Protocol)

- IP (Internet Protocol)

- BGP (Border Gateway Protocol)

**HTTP Request Methods**

**GET:** The GET method is used to retrieve information from the given server using a given URI. Requests using GET should only retrieve data and should have no other effect on the data.

**POST:** A POST request is used to send data to the server, for example, customer information, file upload, etc. using HTML forms.

**Examples of Servers :**

**Application server -** A server dedicated to running certain software applications

**Database server –** It provides database services to other computer programs or computers

**File server –** It provides remote access to files

**Print server –** It provides printer services

**Web server –** A server that HTTP clients connect to in order to send commands and receive responses along with data contents Web servers are not always used for serving the World Wide Web. They can also be found embedded in devices such as printers, routers, webcams and serving only a local network. The web server may then be used as a part of a system for

monitoring and/or administering the device in question. This usually means that no additional software has to be installed on the client computer, since only a web browser is required (which now is included with most operating systems).

**Working with WWW:**

Your web browser first needs to know which IP address the website "www.igate.com" resolves to. If it doesn't already have this information stored in it's cache, it requests the information from one or more DNS servers (via the internet). The DNS server tells the browser which IP address the website is located at. Note that the IP address was assigned when the website was first created on the web server. Now that the web browser knows which IP address the website is located at, it can request the full URL from the web server. The web server responds by sending back the requested page. If the page doesn't exist (or another error occurs), it will send back the appropriate error message. Your web browser receives the page and renders it as required.