SERVLET

HISTORY

- HTML
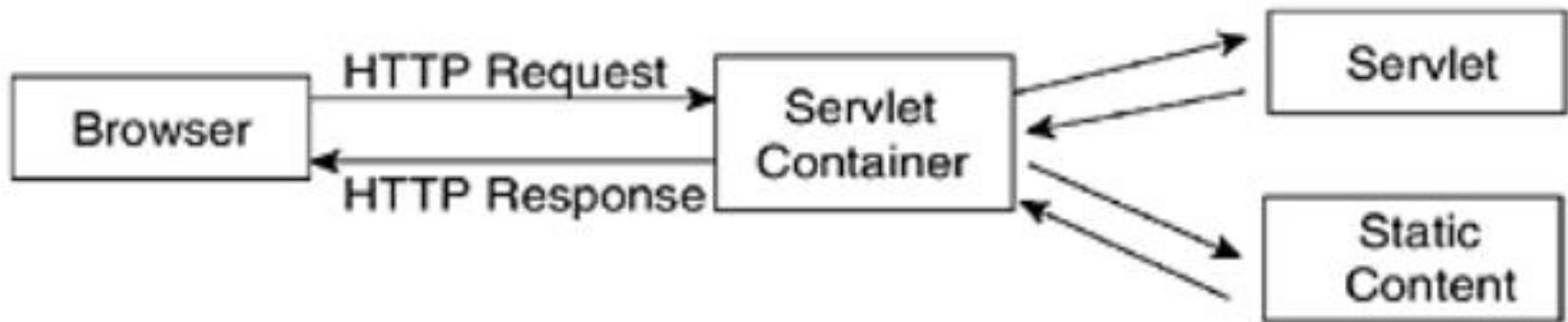- CGI

WEB DEVELOPMENT TECHNOLOGIES

- ColdFusion
- Server-side JavaScript
- PHP
- Servlet
- JavaServer Pages
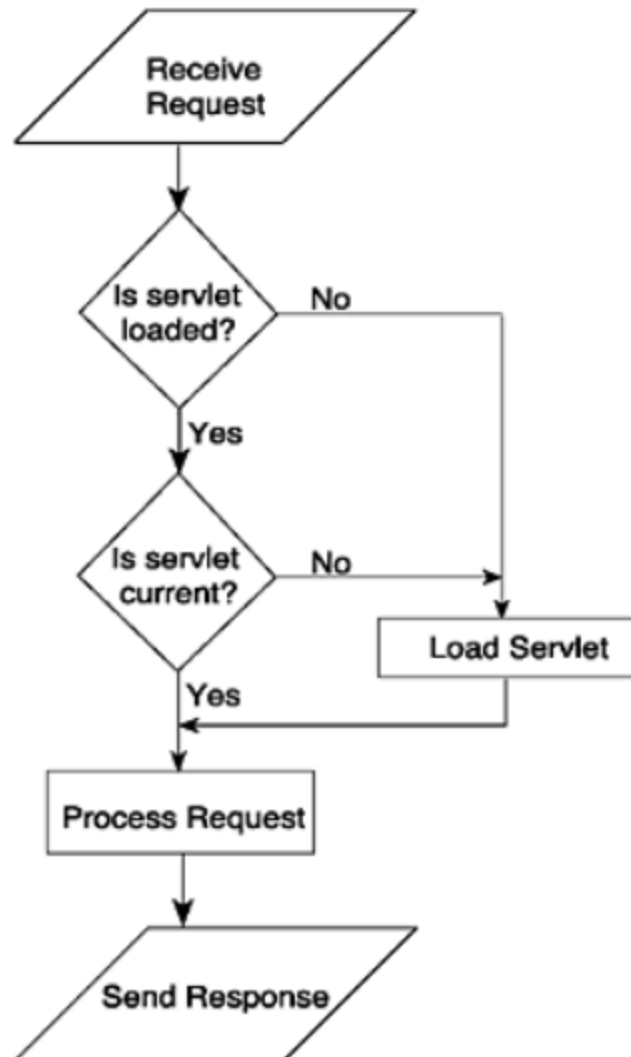- Active Server Pages
- Active Server Pages.NET

SERVLET'S BENEFITS

- Performance
- Portability
- Rapid development cycle
- Robustness
- Widespread acceptance

SERVLET APPLICATION ARCHITECTURE

HOW A SERLET WORK

THE javax.servlet.http PACKAGE

- HttpServlet
- HttpServletRequest
- HttpServletResponse

HttpServlet CLASS

- doPost
- doPut
- doGet
- doDelete
- doOptions
- doTrace

FORM DATA

- getParameter()
- getParameterValues()
- getParameterNames()

HTTP CODES

- 200
- 201
- 202
- 400
- 401
- 403
- 404
- 500
- …

PAGE REDIRECT

- Response
- Request Dispatching

COOKIES

- Cookies are text files stored on the client computer and they are kept for various information tracking purpose. Java Servlets transparently supports HTTP cookies.

SERVLET COOKIES METHODS

- public void setDomain(String pattern)
- public String getDomain()
- public void setMaxAge(int expiry)
- public int getMaxAge()
- public String getName()

SERVLET COOKIES METHODS

- public void setValue(String newValue)
- public String getValue()
- public void setPath(String uri)
- public String getPath()
- public void setSecure(boolean flag)
- public void setComment(String purpose)
- public String getComment()

SET COOKIES

- You call the Cookie constructor with a cookie name and a cookie value, both of which are strings.

- You use setMaxAge to specify how long (in seconds) the cookie should be valid.

- You use response.addCookie to add cookies in the HTTP response header.

READ COOKIES

- To read cookies, you need to create an array of javax.servlet.http.Cookie objects by calling the getCookies( ) method of HttpServletRequest. Then cycle through the array, and use getName() and getValue() methods to access each cookie and associated value.

DELETE COOKIES

- Read an already exsiting cookie and store it in Cookie object.

- Set cookie age as zero using setMaxAge() method to delete an existing cookie.

- Add this cookie back into response header.

SESSION OBJECTS

- For each user, the servlet can create an HttpSession object that is associated with that user only and can only be accessed by that particular user. The HttpSession object acts like a Hashtable into which you can store any number of key/object pairs. The HttpSession object is accessible from other servlets in the same application. To retrieve an object previously stored, you need only to pass the key to method getAttribute.

FILE UPLOAD

- The form method attribute should be set to POST method and GET method can not be used.

- The form enctype attribute should be set to multipart/form-data.

- The form action attribute should be set to a servlet file which would handle file uploading at backend server.