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Week-5 : **Simple applications to demonstrate Servlets**

Description:

Servlets are the Java programs that runs on the Java-enabled web server or application server. They are used to handle the request obtained from the web server, process the request, produce the response, then send response back to the web server.

Properties of Servlets :

- Servlets work on the server-side.
- Servlets are capable of handling complex requests obtained from web server.

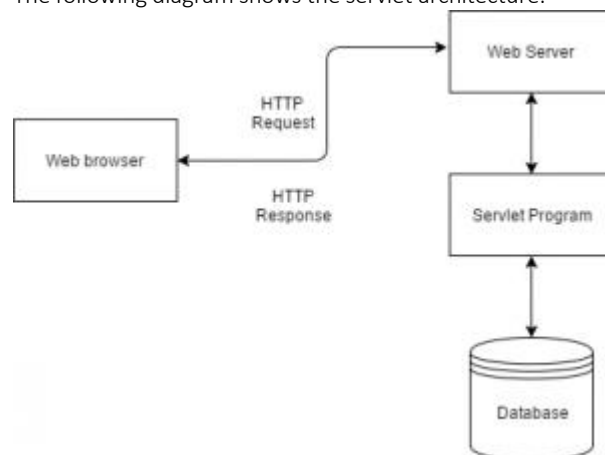
Execution of Servlets :

Execution of Servlets involves six basic steps:

1. The clients send the request to the web server.
2. The web server receives the request.
3. The web server passes the request to the corresponding servlet.
4. The servlet processes the request and generates the response in the form of output.
5. The servlet sends the response back to the web server.
6. The web server sends the response back to the client and the client browser displays it on the screen.

Servlet Architecture

The following diagram shows the servlet architecture:



Need For Server-Side Extensions

Code:

```
1. package com.srccodes.example;
2.
3. import java.io.IOException;
4. import java.io.PrintWriter;
5.
6. import javax.servlet.ServletException;
7. import javax.servlet.annotation.WebServlet;
8. import javax.servlet.http.HttpServlet;
9. import javax.servlet.http.HttpServletRequest;
10. import javax.servlet.http.HttpServletResponse;
11.
12. /**
13.  * Servlet implementation class HelloWorld
14.  */
15. @WebServlet("/HelloWorld")
```

```

16. public class HelloWorld extends HttpServlet {
17.     private static final long serialVersionUID = 1L;
18.
19.     /**
20.      * @see HttpServlet#HttpServlet()
21.      */
22.     public HelloWorld() {
23.         super();
24.         // TODO Auto-generated constructor stub
25.     }
26.
27.     /**
28.      * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
29.      */
30.     protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
31.         response.setContentType("text/html");
32.         PrintWriter printWriter = response.getWriter();
33.         printWriter.println("<h1>Hellsso World!</h1>");
34.     }
35.
36.     /**
37.      * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
38.      */
39.     protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
40.         // TODO Auto-generated method stub
41.     }
42.
43. }

```

Output:

