

WEB TECHNOLOGY AND MOBILE APPLICATION  
REGISTRATION NUMBER: 231501102  
DEPT AND SECTION: AIML- "FA"  
SUBJECT CODE : AI234231

5) Write a Servlet to demonstrate the difference between HTTP GET and POST methods by creating a form and handling requests accordingly.

## AIM:

The aim of this project is to demonstrate the difference between the HTTP GET and POST methods by creating a form that submits data using both methods and handling the requests accordingly using a Java servlet. The servlet will capture the form data from both methods and display the submitted information to show how data is passed differently in each request type.

## ALGORITHM:

### Algorithm

1.  
Create an HTML form:
  - Design a simple HTML page with two forms.
  - One form should use the **GET** method, and the other should use the **POST** method.

- 

```
<!DOCTYPE html>
<html>
<head>
  <title>GET vs POST Demo</title>
</head>
<body>
  <h1>GET vs POST Methods Demonstration</h1>

  <form action="MyServlet" method="GET">
    <h3>GET Method</h3>
    <label for="name">Enter your name:</label>
    <input type="text" id="name" name="name" required>
    <input type="submit" value="Submit (GET)">
  </form>

  <form action="MyServlet" method="POST">
    <h3>POST Method</h3>
    <label for="email">Enter your email:</label>
    <input type="email" id="email" name="email" required>
    <input type="submit" value="Submit (POST)">
  </form>
</body>
</html>
```

2.

Create the Servlet (MyServlet.java):

- The servlet will handle both **GET** and **POST** requests using `doGet()` and `doPost()` methods.

- In doGet(), handle parameters sent through the URL (query string).
- In doPost(), handle parameters sent in the request body.
- 

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
```

```
public class MyServlet extends HttpServlet {
```

```
    // Handle GET request
```

```
    @Override
```

```
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
```

```
        response.setContentType("text/html");
```

```
        PrintWriter out = response.getWriter();
```

```
        // Retrieve parameters from the GET request
```

```
        String name = request.getParameter("name");
```

```
        out.println("<html><body>");
```

```
        out.println("<h2>GET Request Received</h2>");
```

```
        if (name != null && !name.isEmpty()) {
```

```
            out.println("<p>Your name is: " + name + "</p>");
```

```
        } else {
```

```
            out.println("<p>No name was provided in the GET request.</p>");
```

```
        }
```

```
        out.println("</body></html>");
```

```
    }
```

```

// Handle POST request
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();

    // Retrieve parameters from the POST request
    String email = request.getParameter("email");

    out.println("<html><body>");
    out.println("<h2>POST Request Received</h2>");

    if (email != null && !email.isEmpty()) {
        out.println("<p>Your email is: " + email + "</p>");
    } else {
        out.println("<p>No email was provided in the POST request.</p>");
    }

    out.println("</body></html>");
}
}

```

3.

**Configure the web.xml file:**

- Map the servlet to a URL pattern (/MyServlet) so that it can handle requests sent to that URL.
- 

```

<web-app xmlns="http://java.sun.com/xml/ns/javaee"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee

```

```
        http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
    version="3.0">

    <servlet>
        <servlet-name>MyServlet</servlet-name>
        <servlet-class>MyServlet</servlet-class>
    </servlet>

    <servlet-mapping>
        <servlet-name>MyServlet</servlet-name>
        <url-pattern>/MyServlet</url-pattern>
    </servlet-mapping>

</web-app>
```

## RESULT:

- **GET Request:** "GET Request Received: Your name is John" (Visible in the URL as <http://localhost:8080/MyServlet?name=John>)
- **POST Request:** "POST Request Received: Your email is john@example.com" (Data is sent in the body, not visible in the URL)

**OUTPUT:**