

# Working with Form and Query String Data

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# Overview

## Handle HTTP-GET Request

```
1 package Demo.FiveEight.com;
2
3 import java.io.IOException;
4
5 /**
6  * @Override Implementation class UserInfServlet
7  */
8 @Override("/UserInfServlet")
9 public class UserInfServlet extends HttpServlet {
10     private static final long serialVersionUID = 1L;
11
12     /**
13      * See HttpServlet(HttpServlet)
14      */
15     public UserInfServlet() {
16         super();
17         // TODO Auto-generated constructor stub
18     }
19
20     /**
21      * See HttpServlet.doGet(HttpServletRequest request, HttpServletResponse response)
22      */
23     protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
24         // TODO Auto-generated method stub
25         response.setContentType("text/html");
26
27         PrintWriter out = response.getWriter();
28
29         out.println("<h3>Reading QueryString data using 'String getParameter(String name)' method : </h3>");
30
31         String firstName = request.getParameter("firstName");
32         String lastName = request.getParameter("lastName");
33
34         out.println("<div>");
35         out.println("<p>First Name : " + firstName + "</p>");
36         out.println("<p>Last Name : " + lastName + "</p>");
37         out.println("</div>");
38
39         out.println("<h3>Reading QueryString data using 'Enumeration getParameterNames()' method </h3>");
40
41         Enumeration<String> paramNames = request.getParameterNames();
42     }
43 }
```

# Overview

Handle HTTP-GET Request

Handle HTTP-POST Request

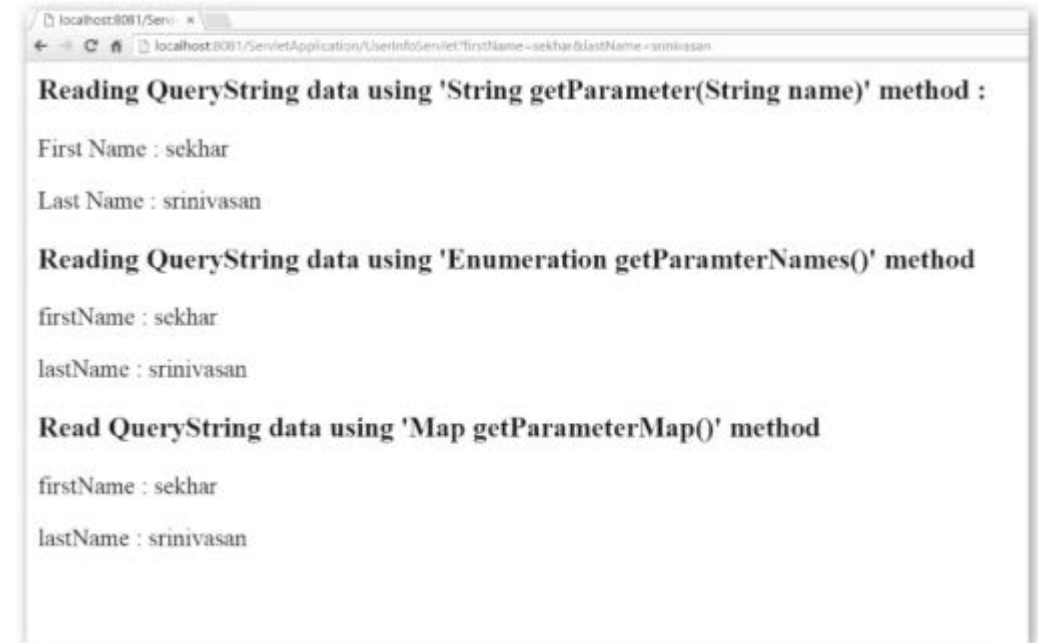
```
15 @WebServlet("/Register")
16 public class Register extends HttpServlet {
17     private static final long serialVersionUID = 1L;
18
19     /**
20      * @see HttpServlet#HttpServlet()
21      */
22     public Register() {
23         super();
24         // TODO Auto-generated constructor stub
25     }
26
27     /**
28      * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
29      */
30     protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
31         String username = request.getParameter("username");
32         String password = request.getParameter("password");
33         String gender = request.getParameter("gender");
34         String[] hobbies = request.getParameterValues("hobbies");
35         String country = request.getParameter("country");
36         String[] languages = request.getParameterValues("languages");
37
38         response.setContentType("text/html");
39         PrintWriter out = response.getWriter();
40         out.println("<div>");
41         out.println("<p>User name : " + username + "</p>");
42         out.println("<p>Password : " + password + "</p>");
43         out.println("<p>Sex : " + gender + "</p>");
44         out.println("<p>Hobbies : </p>");
45         for (int i = 0; i < hobbies.length; i++) {
46             out.println(hobbies[i] + "<br>");
47         }
48         out.println("<p>Country : " + country + "</p>");
49         out.println("<p>Languages Known : </p>");
50
51         for (int i = 0; i < languages.length; i++) {
52             out.println(languages[i] + "<br>");
53         }
54     }
55 }
56 }
```

# Overview

Handle HTTP-GET Request

Handle HTTP-POST Request

Handle QueryString Data



# Overview

Handle HTTP-GET Request

Handle HTTP-POST Request

Handle QueryString Data

Creating an HTML Page



The screenshot shows a web browser window with the title "Registration Form". The address bar displays "localhost:8081/ServletApplication/registrationForm.html". The form itself has a title "Registration Form" and contains the following fields and controls:

- User name :
- Password :
- Sex : ☐ Male ☐ Female
- Hobbies : ☐ Movies ☐ Music ☐ Sports
- Country :
- Languages Known :

At the bottom of the form are two buttons: "Register" and "Clear".

# Overview

Handle HTTP-GET Request

Handle HTTP-POST Request

Handle QueryString Data

Creating an HTML Page

Access HTML Page Form data from  
Servlet



A screenshot of a web browser window displaying a registration form. The browser's address bar shows the URL 'localhost:8081/ServletApplication/Register'. The form contains the following fields and values:

- User name : Sekhar
- Password : qwerty123#
- Sex : Male
- Hobbies :
  - Movies
  - Music
- Country : India
- Languages Known :
  - English
  - French
  - Hindi

# Why HttpServlet?

## GenericServlet

GenericServlet is Protocol Independent

Service method handles all Requests

Can handle only Simple Requests

Can't track Session data

## HttpServlet

Specially designed for HTTP-Protocol

Supports all HTTP-Verbs

-HTTP-GET,HTTP-POST,  
HTTP-PUT,HTTP-DELETE

```
public class HttpServletName extends HttpServlet
{
    protected void doGet (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doPost (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doDelete (HttpServletRequest request, HttpServletResponse response)
                             throws ServletException, IOException
    { }

    protected void doPut (HttpServletRequest request, HttpServletResponse response)
                          throws ServletException, IOException
    { }

}
```



```
public class HttpServletName extends HttpServlet
{
    protected void doGet (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doPost (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doDelete (HttpServletRequest request, HttpServletResponse response)
                             throws ServletException, IOException
    { }

    protected void doPut (HttpServletRequest request, HttpServletResponse response)
                          throws ServletException, IOException
    { }

}
```

```
public class HttpServletName extends HttpServlet
{
    protected void doGet (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doPost (HttpServletRequest request, HttpServletResponse response)
                           throws ServletException, IOException
    { }

    protected void doDelete (HttpServletRequest request, HttpServletResponse response)
                             throws ServletException, IOException
    { }

    protected void doPut (HttpServletRequest request, HttpServletResponse response)
                          throws ServletException, IOException
    { }

}
```

```
public class HttpServletName extends HttpServlet
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    protected void doGet (HttpServletRequest request, HttpServletResponse response)
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                           throws ServletException, IOException
    { }

    protected void doDelete (HttpServletRequest request, HttpServletResponse response)
                             throws ServletException, IOException
    { }

    protected void doPut (HttpServletRequest request, HttpServletResponse response)
                          throws ServletException, IOException
    { }

}
```

```
public class HttpServletName extends HttpServlet
{
    protected void doGet (HttpServletRequest request, HttpServletResponse response)
                        throws ServletException, IOException
    { }

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                        throws ServletException, IOException
    { }

    protected void doDelete (HttpServletRequest request, HttpServletResponse response)
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                        throws ServletException, IOException
    { }

}
```

# HttpServletRequest Variable Methods

For Accessing Form Data

`getParameter (String name)`

`getParameterValues (String name)`

`getParameterMap()`

`getParameterNames()`

Demo



Handling GET Method in Servlets

Demo



Handling Form Data Method in Servlets

# Handling POST Method in Servlets

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## GET

- Back Button / Reload Page is Harmless
- Requests can be bookmarked
- Requests can be Cached
- Parameter values will be maintained at the Browser's History
- Size of data is limited supports 2048 characters
- Supports only ASCII Characters
- Less Secured

## POST

- Data will be re-submitted and an alert is displayed
- Requests can't be book marked
- Cache is not supported
- Parameters are not saved in Browser's History
- No Size restrictions
- No Restrictions on type of data submitted
- Secured

# Summary



Handling GET Method in Servlets

Handling POST Method in Servlets

Handling Form Data Method in Servlets