

Exp 5: Java Servlets With Form

AIM:

To create a web Servlets to show a message passed in the Html form .

PROCEDURE:

Step 1: Create HTML Form

- Create an `index.html` file.
- Add a form with an input field (e.g., for the user's name).
- Set the form's `action` to the servlet's URL pattern (e.g., `/greet`).
- Set the `method` to `POST`.

Step 2: Create Java Servlet

- Define a Java class that extends `HttpServlet`.
- Override the `doPost()` method to handle form submission.
- Use `request.getParameter()` to extract input values.
- Use `response.getWriter()` to send a personalized greeting back to the user.

Step 3: Configure Servlet Mapping

- **Annotation-Based Mapping:** Add `@WebServlet("/greet")` to the servlet class.
- **XML-Based Mapping:** Define the servlet and its URL pattern in `web.xml`.

Step 4: Build and Deploy

- Compile the servlet with the correct `javax.servlet-api.jar` in your classpath.
- Package the `.class` files in the correct `WEB-INF/classes/` folder.
- Place the `index.html` in the root and `web.xml` in `WEB-INF/`.
- Deploy the entire folder or WAR file into Tomcat's `webapps/` directory.

PROGRAM:

HelloServlet.java

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

```

@WebServlet("/hello")
public class HelloWorldServlet extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse
response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        String name = request.getParameter("name");
        String dateOfBirth = request.getParameter("dob");

        if (name == null || dateOfBirth == null || dateOfBirth.length() < 10)
{
            out.println("<html><body><h2>Missing or invalid
input</h2></body></html>");
            return;
        }

        String yearString = dateOfBirth.substring(0, 4);
        int birthYear = Integer.parseInt(yearString);
        int age = 2025 - birthYear;

        out.println("<html><body><h1>Hello, " + name + "! You are " + age + "
now</h1></body></html>");
    }
}

```

Index.html

```

<!DOCTYPE html>
<html>
<head><title>Form</title></head>
<body>
    <h2>Enter Your Info</h2>
    <form action="hello" method="get">
        Name: <input type="text" name="name"><br><br>
        Date of Birth: <input type="date" name="dob"><br><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>

```

Web.xml

```
<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>HelloWorldServlet</servlet-name>
    <servlet-class>HelloWorldServlet</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>HelloWorldServlet</servlet-name>
    <url-pattern>/hello</url-pattern>
  </servlet-mapping>

</web-app>
```

Pom.xml

```
<dependency>
  <groupId>javax.servlet</groupId>
  <artifactId>javax.servlet-api</artifactId>
  <version>4.0.1</version>
  <scope>provided</scope>
</dependency>
```

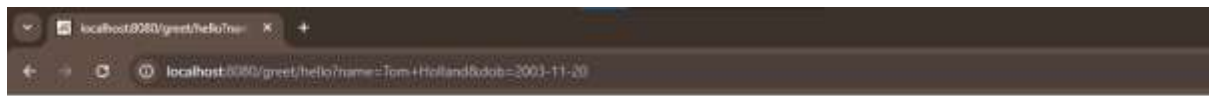
OUTPUT:



A screenshot of a web browser window. The address bar shows 'localhost:8080/greet/'. The page title is 'Form'. The main content area has the heading 'Enter Your Info'. Below the heading, there is a 'Name:' label followed by a text input field. Below that is a 'Date of Birth:' label followed by a date picker showing 'dd-mm-yyyy'. At the bottom is a 'Submit' button.



A screenshot of a web browser window. The address bar shows 'localhost:8080/greet/'. The page title is 'Form'. The main content area has the heading 'Enter Your Info'. Below the heading, there is a 'Name:' label followed by a text input field containing 'Tom Holland'. Below that is a 'Date of Birth:' label followed by a date picker showing '20-11-2003'. At the bottom is a 'Submit' button.



Hello, Tom Holland! You are 22 now

RESULT:

Thus the java servlet to show a text was executed successfully.