

## Exp 4: Java Servlets

AIM:

To create a web Servlets to show a message “HI User this is Servlet”

PROCEDURE:

### Step 1: Set Up a Dynamic Web Project

- Use **Eclipse IDE** or any Java EE-supported IDE.
- Create a **Dynamic Web Project**.
- Name it something like `HelloServletDemo`.

### Step 2: Create a Servlet Class

- Right-click on `src` > **New** > **Servlet**.
- Name the class `HelloServlet`.
- Specify the URL mapping, e.g., `/hello`.

### Step 3: Write the Servlet Code

- Inside the servlet class, override the `doGet()` method.
- Use `response.getWriter()` to print the message.

### Step 4: Run the Servlet

- Right-click the project > **Run As** > **Run on Server**.
- Open a browser and go to:  
`http://localhost:8080/HelloServletDemo/hello`

PROGRAM:

HelloServlet.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

// URL pattern: http://localhost:8080/HelloServletDemo/hello
@WebServlet("/hello")
public class HelloServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;
```

```

    protected void doGet(HttpServletRequest request, HttpServletResponse
response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<h2>Hi user, This is Servlet</h2>");
    }
}

```

## Web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<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">

    <display-name>HelloServletDemo</display-name>

    <!-- Optional if using @WebServlet -->

    <servlet>
        <servlet-name>HelloServlet</servlet-name>
        <servlet-class>HelloServlet</servlet-class>
    </servlet>

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

</web-app>

```

## Pom.xml

```

<project xmlns="http://maven.apache.org/POM/4.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">

```

```
<modelVersion>4.0.0</modelVersion>
<groupId>com.example</groupId>
<artifactId>HelloServletDemo</artifactId>
<version>1.0-SNAPSHOT</version>
<packaging>war</packaging>

<name>HelloServletDemo</name>

<properties>
  <maven.compiler.source>1.8</maven.compiler.source>
  <maven.compiler.target>1.8</maven.compiler.target>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
</properties>

<dependencies>
  <!-- Servlet API provided by the container (e.g., Tomcat) -->
  <dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>4.0.1</version>
    <scope>provided</scope>
  </dependency>
</dependencies>

<build>
  <finalName>HelloServletDemo</finalName>
  <plugins>
    <!-- Compiler Plugin -->
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-compiler-plugin</artifactId>
    </plugin>

    <!-- WAR Plugin -->
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-war-plugin</artifactId>
      <version>3.3.2</version>
      <configuration>
        <failOnMissingWebXml>>false</failOnMissingWebXml>
      </configuration>
    </plugin>
  </plugins>
</build>
</project>
```

OUTPUT:



RESULT:

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