

EXPERIMENT – 3 JAVA SERVLET

WRITE A SERVLET PROGRAM THAT PRINTS HELLO WORLD WHEN ACCESSED THROUGH THE BROWSER

AIM:

TO WRITE A SERVLET PROGRAM THAT PRINTS HELLO WORLD WHEN ACCESSED THROUGH THE BROWSER

ALGORITHM:

Step 1: Create a Dynamic Web Project

1. Open Eclipse IDE or any preferred IDE.
2. Go to File > New > Dynamic Web Project.
3. Name the project (e.g., HelloWorldServlet).
4. Choose Apache Tomcat as the runtime server.
5. Click Finish.

Step 2: Create a Servlet Class

1. Right-click on the src folder.
2. Choose New > Servlet.
3. Name the class HelloWorld.
4. Make sure the class extends HttpServlet.
5. Add the `@WebServlet("/HelloWorld")` annotation to map the URL.

Step 3: Write Servlet Code

1. Inside the doGet() method, set the content type to text/html.
2. Use PrintWriter to print "Hello, World!" in HTML format.
3. Handle exceptions using throws ServletException, IOException.

Step 4: Fix Import Statements and Build

1. Correct import packages (jakarta.servlet.* for Jakarta EE or javax.servlet.* for older versions).
2. Save and build the project.

Step 5: Deploy to Apache Tomcat

1. Add the project to the Tomcat server from the Servers tab.
2. Start the Tomcat server.
3. Ensure the application is published successfully.

Step 6: Access the Servlet in a Browser

1. Open a browser.
2. Go to: `http://localhost:8080/YourProjectName/HelloWorld`
3. You should see : Hello, World!

Step 7: Troubleshoot if 404 Error Occurs

1. Check if the URL pattern is correct.
2. Confirm the project is deployed to the server.
3. Clean and rebuild the project if needed.
4. Make sure the server is running.

CODE:

1.HelloWorld.java

```
import jakarta.servlet.ServletException;
```

```
import jakarta.servlet.annotation.WebServlet;
```

```
import jakarta.servlet.http.HttpServlet;
```

```
import jakarta.servlet.http.HttpServletRequest;
```

```
import jakarta.servlet.http.HttpServletResponse;
```

```
import java.io.IOException;
```

```
import java.io.PrintWriter;
```

```
@WebServlet("/HelloWorld")
```

```
public class HelloWorld 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("<h1>Hello,World!</h1>");  
    }  
}
```

OUTPUT:

Hello,World!

RESULT: Thus the servlet program was successfully executed.